

ENVIRONMENTAL MONITORING REPORT

Project	REDI IRON ORE MINE
Location	Redi Village Vengurla Taluka, Sindudurg Dist Maharashtra
Client	MINERALS AND METALS
Office Address	P. O. Redi, Tal Vengurla, Sindhudurga 416517, Maharashtra (India)
Monitoring Month	April -2025

ENVIRONMENTAL LABORATORY

(Unit of Mineral Engineering Services LLP)

(Accredited by NABL & MOEF&CC Under E(P) Act 1986)

#948, 2nd Cross, Kammanahalli Main Road,

St Thomas Town Post,

Bangalore- 560 084, Karnataka

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TEST REPORT

Table No. 1

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals
Name of the Project : Redi Iron Ore Mine
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Particulars of sample collected : A1 - Core zone Within ML Area
Duration : 24 Hrs
Issue Date : 04.06.2025
Reference IS 5182 & Lab SOP

Date of Sampling	Report No	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
04.04.2025	N014225041	12	13	58	32	<20	<1
05.04.2025	N006625042	9	14	54	31	<20	<1
07.04.2025	N015325042	9	12	50	30	<20	<1
08.04.2025	N023125042	12	14	47	26	<20	<1
14.04.2025	N010025043	10	12	56	32	<20	<1
15.04.2025	N014525043	14	15	52	27	<20	<1
21.04.2025	N015725044	10	13	54	29	<20	<1
22.04.2025	N024725044	9	12	48	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	Report No	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
04.04.2025	N014225041	0.15	<0.1	<0.5	<0.5	0.35	26
05.04.2025	N006625042	0.19	<0.1	<0.5	<0.5	0.22	26
07.04.2025	N015325042	0.10	<0.1	<0.5	<0.5	0.25	20
08.04.2025	N023125042	0.17	<0.1	<0.5	<0.5	0.33	27
14.04.2025	N010025043	0.13	<0.1	<0.5	<0.5	0.20	20
15.04.2025	N014525043	0.11	<0.1	<0.5	<0.5	0.34	26
21.04.2025	N015725044	0.15	<0.1	<0.5	<0.5	0.25	22
22.04.2025	N024725044	0.17	<0.1	<0.5	<0.5	0.28	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
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Table No. 2

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals
Name of the Project : Redi Iron Ore Mine
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Particulars of sample collected : A2 - Redi village (Within 200m from the ML Area)
Duration : 24 Hrs
Issue Date : 04.06.2025
Reference IS 5182 & Lab SOP

Date of Sampling	Report No	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
04.04.2025	N013625041	11	13	55	28	<20	<1
05.04.2025	N006025042	10	12	47	25	<20	<1
07.04.2025	N014725042	9	11	54	26	<20	<1
08.04.2025	N022525042	8	12	57	32	<20	<1
14.04.2025	N009025043	10	12	50	27	<20	<1
15.04.2025	N013925043	9	13	46	25	<20	<1
21.04.2025	N014725044	12	16	52	30	<20	<1
22.04.2025	N024125044	10	12	45	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	Report No	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
04.04.2025	N013625041	0.21	<0.1	<0.5	<0.5	0.32	26
05.04.2025	N006025042	0.18	<0.1	<0.5	<0.5	0.35	24
07.04.2025	N014725042	0.11	<0.1	<0.5	<0.5	0.26	27
08.04.2025	N022525042	0.19	<0.1	<0.5	<0.5	0.22	22
14.04.2025	N009025043	0.19	<0.1	<0.5	<0.5	0.24	20
15.04.2025	N013925043	0.14	<0.1	<0.5	<0.5	0.28	22
21.04.2025	N014725044	0.12	<0.1	<0.5	<0.5	0.32	20
22.04.2025	N024125044	0.23	<0.1	<0.5	<0.5	0.22	27
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. Minerals and Metals
Name of the Project	: Redi Iron Ore Mine
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Particulars of sample collected	: A3 - Gaontala village
Duration	: 24 Hrs
Issue Date	: 04.06.2025
Reference	IS 5182 & Lab SOP

Date of Sampling	Report No	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
04.04.2025	N013825041	10	14	50	32	<20	<1
05.04.2025	N006225042	9	12	48	27	<20	<1
07.04.2025	N014925042	7	9	54	28	<20	<1
08.04.2025	N022725042	11	12	40	24	<20	<1
14.04.2025	N009225043	10	12	53	29	<20	<1
15.04.2025	N014125043	11	13	60	33	<20	<1
21.04.2025	N014925044	9	13	59	30	<20	<1
22.04.2025	N024325044	12	14	47	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	Report No	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
04.04.2025	N013825041	0.24	<0.1	<0.5	<0.5	0.29	21
05.04.2025	N006225042	0.22	<0.1	<0.5	<0.5	0.34	26
07.04.2025	N014925042	0.10	<0.1	<0.5	<0.5	0.36	20
08.04.2025	N022725042	0.21	<0.1	<0.5	<0.5	0.32	27
14.04.2025	N009225043	0.25	<0.1	<0.5	<0.5	0.31	25
15.04.2025	N014125043	0.15	<0.1	<0.5	<0.5	0.22	24
21.04.2025	N014925044	0.12	<0.1	<0.5	<0.5	0.36	28
22.04.2025	N024325044	0.19	<0.1	<0.5	<0.5	0.26	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. Minerals and Metals
Name of the Project : Redi Iron Ore Mine
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Particulars of sample collected : A4 - Kanyalwadi village
Duration : 24 Hrs
Issue Date : 04.06.2025
Reference IS 5182 & Lab SOP

Date of Sampling	Report No	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
04.04.2025	N013925041	14	18	55	30	<20	<1
05.04.2025	N006325042	11	12	46	28	<20	<1
07.04.2025	N015025042	12	14	53	26	<20	<1
08.04.2025	N022825042	10	11	45	25	<20	<1
14.04.2025	N009325043	9	10	50	22	<20	<1
15.04.2025	N014225043	9	11	47	28	<20	<1
21.04.2025	N015025044	11	13	62	33	<20	<1
22.04.2025	N024425044	10	14	57	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	Report No	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
04.04.2025	N013925041	0.11	<0.1	<0.5	<0.5	0.22	20
05.04.2025	N006325042	0.14	<0.1	<0.5	<0.5	<0.2	25
07.04.2025	N015025042	0.18	<0.1	<0.5	<0.5	0.26	22
08.04.2025	N022825042	0.11	<0.1	<0.5	<0.5	0.25	23
14.04.2025	N009325043	0.15	<0.1	<0.5	<0.5	0.22	20
15.04.2025	N014225043	0.21	<0.1	<0.5	<0.5	0.26	23
21.04.2025	N015025044	0.18	<0.1	<0.5	<0.5	0.28	22
22.04.2025	N024425044	0.13	<0.1	<0.5	<0.5	0.25	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

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Table No. 5

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals
Name of the Project : Redi Iron Ore Mine
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Particulars of sample collected : A5 - Shiroda village
Duration : 24 Hrs
Issue Date : 04.06.2025
Reference IS 5182 & Lab SOP

Date of Sampling	Report No	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
04.04.2025	N013725041	10	14	48	26	<20	<1
05.04.2025	N006125042	15	16	56	31	<20	<1
07.04.2025	N014825042	10	15	49	27	<20	<1
08.04.2025	N022625042	12	17	51	29	<20	<1
14.04.2025	N009125043	14	16	45	31	<20	<1
15.04.2025	N014025043	9	10	47	29	<20	<1
21.04.2025	N014825044	10	14	58	30	<20	<1
22.04.2025	N024225044	15	16	53	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	Report No	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
04.04.2025	N013725041	0.15	<0.1	<0.5	<0.5	0.28	21
05.04.2025	N006125042	0.13	<0.1	<0.5	<0.5	0.30	23
07.04.2025	N014825042	0.18	<0.1	<0.5	<0.5	0.34	25
08.04.2025	N022625042	0.13	<0.1	<0.5	<0.5	0.36	27
14.04.2025	N009125043	0.22	<0.1	<0.5	<0.5	0.32	28
15.04.2025	N014025043	0.19	<0.1	<0.5	<0.5	0.35	21
21.04.2025	N014825044	0.13	<0.1	<0.5	<0.5	0.33	24
22.04.2025	N024225044	0.16	<0.1	<0.5	<0.5	0.24	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. 6

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals

Name of the Project : Redi Iron Ore Mine

Sample Collected by : Environmental Laboratory
(Unit of Mineral Engineering Services LLP)

Particulars of sample collected : A6 - Near NIMCO Gate - Tivrewadi, Redi village

Duration : 24 Hrs

Issue Date : 04.06.2025

Reference IS 5182 & Lab SOP

Date of Sampling	Report No	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)
04.04.2025	N014025041	15	17	62	33
05.04.2025	N006425042	14	18	58	30
07.04.2025	N015125042	8	9	55	27
08.04.2025	N022925042	10	11	61	30
14.04.2025	N009425043	12	16	56	29
15.04.2025	N014325043	10	14	48	24
21.04.2025	N015125044	15	18	54	28
22.04.2025	N024525044	10	13	45	26
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs

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TEST REPORT

Table No. 7

AMBIENT AIR QUALITY

Name of the Client : M/s. Minerals and Metals					
Name of the Project : Redi Iron Ore Mine					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Particulars of sample collected : A7 - Near Primary School - sakalbhawadi Redi village					
Duration : 24 Hrs					
Issue Date : 04.06.2025					
Reference IS 5182 & Lab SOP					
Date of Sampling	Report No	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)
04.04.2025	N014125041	9	10	56	27
05.04.2025	N006525042	9	12	58	33
07.04.2025	N015225042	10	11	54	32
08.04.2025	N023025042	14	15	46	25
14.04.2025	N009525043	10	12	49	27
15.04.2025	N014425043	12	18	53	32
21.04.2025	N015225044	11	13	47	25
22.04.2025	N024625044	10	15	58	30
Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs

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Table No. 8

Fugitive Emission

Name of the Client	: M/s. Minerals and Metals						
Name of the Project	: Redi Iron Ore Mine						
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)						
Duration	: 08 Hrs						
Issue Date	: 04.06.2025						
Particulars of sample collected	Date of sample	Report No	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- Screening Plant	15.04.2025	N014625043	11	14	148	321	0.44
	22.04.2025	N024825044	10	12	162	388	0.38
FA2 - Haulage Road	15.04.2025	N014725043	12	15	175	396	0.28
	22.04.2025	N024925044	14	18	188	422	0.45
FA3 - Loading Area	15.04.2025	N014825043	13	16	135	354	0.22
	22.04.2025	N025025044	10	15	148	362	0.31
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							

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Note : This report is subject to the terms and conditions mentioned overleaf.



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Table No. 9

STATISTICAL AIR QUALITY DATA

Name of the Client : M/s. Minerals and Metals

Name of the Project : Redi Iron Ore Mine

Month : April, 2025

	A1 - Core zone Within ML Area				A2 - Redi village (Within 200m from the ML Area)				A3 - Gaontala 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.	9	12	47	26	8	11	45	24	7	9	40	24
10%	9	12	48	27	9	12	46	25	8	11	45	25
25%	9	12	50	28	9	12	47	25	9	12	48	27
50%	10	13	53	30	10	12	51	27	10	13	52	29
75%	12	14	55	31	10	13	54	29	11	13	55	31
98%	14	15	58	32	12	16	57	32	12	14	60	33
Max.	14	15	58	32	12	16	57	32	12	14	60	33
Avg.	11	13	52	29	10	13	51	27	10	12	51	29
SD	2	1	4	2	1	2	4	3	2	2	7	3
No. of obs	8				8				8			
	A4 - Kanyalwadi village				A5 - Shiroda village							
	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}				
Min.	9	10	45	22	9	10	45	26				
10%	9	11	46	24	10	13	46	27				
25%	10	11	47	26	10	14	48	29				
50%	11	13	52	28	11	16	50	29				
75%	11	14	56	30	14	16	54	30				
98%	14	17	61	33	15	17	58	31				
Max.	14	18	62	33	15	17	58	31				
Avg.	11	13	52	28	12	15	51	29				
SD	2	3	6	3	2	2	5	2				
No. of obs	8				8							

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TEST REPORT

Table No. 10

NOISE LEVEL DATA

Report No ; ELMES352504

Report No. : EMI/000000

Name of the Client	:	M/s. Minerals and Metals
Name of the Project	:	Redi Iron Ore Mine
Particulars of sample collected	:	Sound Levels
Sample Collected by	:	Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Date of sample collection	:	24.04.2025
Issue Date	:	03.05.2025
Sampling & Test Method	:	IS:9989

Code No.	Monitoring stations	Day L _{eq}	Night L _{eq}
Bufferzone			
N1	Redi village	48.1	39.8
N2	Bombdojiwajici wadi	49.2	41.1
N3	Gaontala village	47.5	39.6
N4	Kanyalwadi village	52.1	42.1
N5	Shiroda village	47.6	40.9
N6	Tiroda village	45.1	38.2

Permissible Limits of Ambient Noise Levels as per CPCB Guidelines			
Leq. Limit dB(A)			
		Day	Night
Residential area		55	45

Code No.	Monitoring stations	Day L _{eq}	Night L _{eq}
Bufferzone			
N7	Near NIMCO Gate - Tivrewadi, Redi village	63.0	42.4
N8	Near Primary School - sakalbhatwadi, Redi village	60.3	42.3

Permissible Limits of Ambient Noise Levels as per CPCB Guidelines			
Leq. Limit dB(A)			
		Day	Night
Commerecial area		65	55

Code No.	Monitoring stations	Day L _{eq}	Night L _{eq}
Corezone			
N9	Near Mine office	66.7	50.4

Permissible Limits of Ambient Noise Levels as per CPCB Guidelines			
Leq. Limit dB(A)			
		Day	Night
Industrial areas		75	70

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TEST REPORT

NOISE LEVEL DATA

Report No ; ELMES452504

Name of the Client	: M/s. Minerals and Metals		
Name of the Project	: Redi Iron Ore Mine		
Particulars of sample collected	: Sound Levels		
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)		
Date of sample collection	: 24.04.2025		
Issue Date	: 03.05.2025		
Sampling & Test Method	: IS:9989		
Code No.	Monitoring stations	Day L _{eq}	Remarks
Heavy Earth Moving Machineries			
N1	Excavator EC480DL	73.2	During operation outside 5mts distance
		65.3	During operation outside 10mts distance
N2	Dozer RD-0014	78.5	During operation outside 5mts distance
		74.6	During operation outside 10mts distance
Permissible limits as per ILO Code of Practice For Unprotected ear - 8 hrs working shift Warning limit - 85 dB(A) Danger limit - 90 dB(A) Worker not to be exposed for more than 115 dB(A) With ear protection - 130 dB(A) 'Impulse' or 120 dB(A) 'Fast' No entry when noise level exceeds 140 dB(A)			

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TEST REPORT

Table No. 11

Name of the Client		: M/s. Minerals and Metals		
Name of the Project		: Redi Iron Ore Mine		
Location		: Redi village, Vengurla taluka, Sindhudurg dist, Maharashtra		
Particulars of sample collected		: W1 - Pit water		
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services LLP)		
Date of sample collection		: 22.04.2025		
Report No		: M003925043		
Issue Date		: 04.06.2025		
Ref		: Environmental (P) Rules, 1986 SCHEDULE VI		
Sl. No.	Sample Code	W1	General Standards For Effluent Discharge of Environmental Pollutants	Method of Testing
	Parameters	Results		
1	Colour (Hazen Units), & Odour	3	—	IS:3025(part-4) and IS 3025 (Part-5)
2	Suspended Solids (mg/l),	20	100	IS 3025 (P-17) 2022
3	Particle size of suspended solids	Pass through 850 micron	Shall Pass through 850 micron	APHA 23rd edition
4	pH	7.17	5.5 to 9.0	IS 3025 (P-11) 2022
5	Temperature °C	28	Shall not exceed 5°C above the receiving water temp	IS 3025 (P-9) 1984 RA2022
6	Oil & Grase (mg/l), Max	<4.0	10	IS 3025 (P-39) 2021
7	Total Residual Chlorine (mg/l)	<0.1	1.0	IS 3025 (P-26) 2021
8	Ammonical Nitrogen (mg/l)	<0.1	50	IS 3025 (P-34) 1988 RA 2019
9	Total Kjeldahl Nitrogen (mg/l)	<0.1	100	IS 3025 (P-34) 1988 RA 2019
10	Free Ammonia as NH ₃ (mg/l)	<0.1	5.0	IS 3025 (P-34) 1988 RA 2019
11	BOD [3 days at 27°C] (mg/l)	<3	30	IS 3025 (P-44) 2014
12	COD (mg/l)	5.21	250	IS 3025 (P-58) 2006 RA2022
13	Arsenic as As (mg/l)	<0.01	0.2	APHA 3030K
14	Mercury as Hg (mg/l)	<0.001	0.01	APHA 3030K
15	Lead as Pb (mg/l)	<0.01	0.1	APHA 3030K
16	Cadmium as Cd (mg/l)	<0.01	2.0	APHA 3030K
17	Hexavalent Chromium as Cr ⁺⁶ (mg/l)	<0.03	0.1	IS 3025 (P-52) 2014
18	Total Chromium as Cr (mg/l)	<0.01	2.0	APHA 3030K
19	Copper as Cu (mg/l)	<0.05	3.0	APHA 3030K
20	Zinc as Zn (mg/l)	<0.05	5.0	APHA 3030K
21	Selenium as Se (mg/l)	<0.05	0.05	APHA 3030K
22	Nickel as Ni (mg/l)	<0.05	3.0	APHA 3030K
23	Cyanide as CN (mg/l)	<0.01	0.2	IS 3025 (P-27) Sec 1 2021
24	Fluoride as F (mg/l)	0.35	2.0	APHA 23rd Edition 4500F
25	Dissolved Phosphates as PO ₄ (mg/l)	<0.05	5.0	IS 2488 (P-31) Sec 1 2022
26	Sulphide as S (mg/l)	<0.01	2.0	IS 3025 (P-29) 2022
27	Phenolic Compounds as C ₆ H ₅ OH (mg/l)	<0.001	1.0	IS 3025 (P-43) Sec 1 2022
28	Manganese as Mn (mg/l)	<0.01	2	APHA 3030K
29	Iron as Fe (mg/l)	<0.05	3	APHA 3030K
30	Vanadium as V (mg/l)	<0.01	0.2	APHA 3030K
31	Nitrate Nitrogen (mg/l)	<1	10	IS 3025 (P-34) 1988 RA 2019

""END OF REPORT""

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TEST REPORT

Table No. 12

Name of the Client		: M/s. Minerals and Metals		
Name of the Project		: Redi Iron Ore Mine		
Location		: Redi village, Vengurla taluka; Sindhudurg dist, Maharashtra		
Particulars of sample collected		: W2 - Pit Discharge Water, W3 - Runoff water from dump		
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services LLP)		
Date of sample collection		: 22.04.2025		
Issue Date		: 03.05.2025		
Ref		: Environmental (P) Rules, 1986 SCHEDULE VI		
Report No		M004025043	-	
Sl. No.	Sample code	W2	W3	
	Parameters	Results		
1	Colour (Hazen Units), & Odour	1	No Runoff	
2	Suspended Solids (mg/l),	18		
3	Particle size of suspended solids	Pass through 850 micron		
4	pH	6.40		
5	Temperature ° C	28		
6	Oil & Grease (mg/l), Max	<1.0		
7	Total Residual Chlorine (mg/l)	<0.1		
8	Ammonical Nitrogen (mg/l)	<0.1		
9	Total Kjeldahl Nitrogen (mg/l)	<0.1		
10	Free Ammonia as NH ₃ (mg/l)	<0.1		
11	BOD [3 days at 27°C] (mg/l)	<3		
12	COD (mg/l)	4.85		
13	Arsenic as As (mg/l)	<0.01		
14	Mercury as Hg (mg/l)	<0.001		
15	Lead as Pb (mg/l)	<0.01		
16	Cadmium as Cd (mg/l)	<0.01		
17	Hexavalent Chromium as Cr ⁺⁶ (mg/l)	<0.03		
18	Total Chromium as Cr(mg/l)	<0.01		
19	Copper as Cu (mg/l)	<0.05		
20	Zinc as Zn (mg/l)	<0.05		
21	Selenium as Se (mg/l)	<0.05		
22	Nickel as Ni (mg/l)	<0.05		
23	Cyanide as CN (mg/l)	<0.01		
24	Fluoride as F (mg/l)	0.40		
25	Dissolved Phosphates as PO ₄ (mg/l)	<0.05		
26	Sulphide as S (mg/l)	<0.01		
27	Phenolic Compounds as C ₆ H ₅ OH (mg/l)	<0.001		
28	Manganese as Mn (mg/l)	<0.01		
29	Iron as Fe (mg/l)	<0.05		
30	Vanadium as V (mg/l)	<0.01		
31	Nitrate Nitrogen (mg/l)	<1		
		General Standards For Effluent Discharge of Environmental Pollutants		
		Method of Testing		
		--	IS:3025(part-4) and IS 3025 (Part-5)	
		100	IS 3025 (P-17) 2022	
		Shall Pass through 850 micron	APHA 23rd edition	
		5.5 to 9.0	IS 3025 (P-11) 2022	
		Shall not exceed 5° C above the receiving water temp	IS 3025 (P-9) 1984 RA2022	
		10	IS 3025 (P-39) 2021	
		1.0	IS 3025 (P-26) 2021	
		50	IS 3025 (P-34) 1988 RA 2019	
		100	IS 3025 (P-34) 1988 RA 2019	
		5.0	IS 3025 (P-34) 1988 RA 2019	
		30	IS 3025 (P-44) 2014	
		250	IS 3025 (P-58) 2006 RA2022	
		0.2	APHA 3030K	
		0.01	APHA 3030K	
		0.1	APHA 3030K	
		2.0	APHA 3030K	
		0.1	IS 3025 (P-52) 2014	
		2.0	APHA 3030K	
		3.0	APHA 3030K	
		5.0	APHA 3030K	
		0.05	APHA 3030K	
		3.0	APHA 3030K	
		0.2	IS 3025 (P-27) Sec 1 2021	
		2.0	APHA23rd Edition 4500F	
		5.0	IS 2488 (P-31) Sec 1 2022	
		2.0	IS 3025 (P-29) 2022	
		1.0	IS 3025 (P-43) Sec 1 2022	
		2	APHA 3030K	
		3	APHA 3030K	
		0.2	APHA 3030K	
		10	IS 3025 (P-34) 1988 RA 2019	

""END OF REPORT""

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TEST REPORT

Table No. 13

Table NO. 15

Name of the Client	: M/s. Minerals and Metals					
Name of the Project	: Redi Iron Ore Mine					
Location	Redi village, Vengurla taluka, Sindhudurg dist, Maharashtra State.					
Particulars of sample collected	: SW1 - Kanyal tank water, SW2 - Nallah water Near Kanyalwadi SW3- Near Hanuman temple Kanyalwadi village					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Date of sample collection	: 22.04.2025					
Issue Date	: 03.05.2025					
Ref : IS : 2296 Water Quality Standards						
Sl. No.	Report No	M004325043	M004425043	M004525043	Limits	Method of Testing
	Sample Code	SW1	SW2	SW3		
	Parameters	Results				
1	Colour (Hazen Units)	3	5	3	300	IS:3025(Part-4)2021
2	pH	7.45	6.70	6.54	6.5 to 8.5	IS:3025(Part-4)2021
3	Dissolved Oxygen (as O ₂), mg/l	5.4	5.5	5.4	Min 4	IS:3025(Part-11)2022
4	Biochemical Oxygen Demand (as O ₂), mg/l	<3	<3	<3	3	IS:3025(P-44) 2014
5	Total Coliform (MPN/100ml)	230	320	290	5000	IS:1622:1981
6	Total Dissolved Solids, (mg/l)	430	412	276	1500	IS:3025(Part-16)2023
7	Chloride (as Cl),mg/l	220.0	200	125	600	IS:3025(Part-32) ;1988RA2019
8	Sulphates as SO ₄ (mg/l)	22.0	20	16.5	400	IS:3025(P-24)Sec 1 2022
9	Nitrates (as NO ₃),mg/l	10.60	10.50	6.70	50	IS:3025(Part-34)1988 RA 2019
10	Fluoride (as F),mg/l	<0.1	<0.1	<0.1	1.5	APHA 23rd Edition 4500F
11	Copper (as Cu),mg/l	<0.005	<0.005	<0.005	1.5	IS:3025(Part-2) 2019
12	Iron (as Fe),mg/l	<0.005	<0.005	<0.005	50	IS:3025(P-2) 2019
13	Zinc (as Zn),mg/l	<0.005	<0.005	<0.005	15	IS:3025(P-2) 2019
14	Total Arsenic (as As), (mg/l)	<0.002	<0.002	<0.002	0.2	IS:3025(Part-37)
15	Lead (as Pb), mg/l	<0.005	<0.005	<0.005	0.1	IS:3025(P-2) 2019
16	Cadmium (as Cd), mg/l	<0.001	<0.001	<0.001	0.01	IS:3025(P-2) 2019
17	Hexavalent Chromium (as Cr ⁺⁶), mg/l	<0.03	<0.03	<0.03	0.05	IS:3025(P-52) 2014
18	Selenium (as Se), mg/l	<0.005	<0.005	<0.005	0.05	IS:3025(P-2) 2019
19	Cyanide (as CN), mg/l	<0.005	<0.005	<0.005	0.05	IS:3025(P-27) Sec 1 2021
20	Phenolic compounds (as C ₆ H ₅ OH),mg/l	<0.001	<0.001	<0.001	0.005	IS:3025(P-43)Sec 1 2022
21	Anionic detergents (as MBAS),mg/l	<0.1	<0.1	<0.1	1.0	IS:3025(Part-68)
Note : Class-C: Drinking water with conventional treatment followed by disinfection.						

Note : Class-C: Drinking water with conventional treatment followed by disinfection.

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TEST REPORT

Table No. 14

Table No. 1

Name of the Client	: M/s. Minerals and Metals					
Name of the Project	: Redi Iron Ore Mine					
Location	: Redi village , Vengurla taluka, Sindhudurg dist, MH					
Particulars of sample collected	: GW1 - Tiroda village open well, GW2 - Redi village open well					
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Date of sample collection	: 22.04.2025					
Date of sample receipt	: 23.04.2025					
Issue Date	: 03.05.2025					
Ref	: IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)					
Report No	M004625043	M004725043	Desirable Limits	Permissible Limits	Method of Testing	
Sl. No.	Parameters	Results				
		GW1				GW2
1	Colour (Hazen Units)	3	1	5	15	IS:3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-5) 2018
3	pH Value	6.66	6.53	6.5 to 8.5	6.5 - 8.5	IS:3025 (P-11) 2022
4	Taste	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P- 8)1984 RA 2017
5	Turbidity,NTU	<0.1	0.8	1	5	IS:3025 (P-10)1984 RA 2017
6	Total Dissolved Solids,mg/l	38.0	314.0	500	2000	IS:3025 (P-16)1984 RA2017
7	Aluminium (as Al)	<0.005	<0.005	0.03	0.2	IS:3025 (P-55) 2003 RA 2019
8	Ammonia (as total Ammonia -N),mg/l	<0.1	<0.1	0.5	0.5	IS:3025 (P-34) 1988 RA 2019
9	Anionic Detergents (as MBAS),mg/l	<0.1	<0.1	0.2	1.0	Annex K of Is:13428Amm 11 2022
10	Barium (as Ba), mg/l	<0.005	<0.005	0.7	0.7	IS:3025(P-2) 2019
11	Boron (as B), mg/l	<0.1	<0.1	0.5	2.4	IS:3025 (Part-57)2021
12	Calcium (as Ca),mg/l	4.8	20.0	75	200	IS:3025 (P-40)1991 RA 2019
13	Chloramines as C12	<0.1	<0.1	4	4	IS:3025(P-26) 2021
14	Chloride as Cl (mg/l)	15	120	250	1000	IS:3025 (P-32) 1988 RA 2019
15	Copper (as Cu),mg/l	<0.005	<0.005	0.05	1.5	IS:3025 (P-2)2019
16	Fluoride (as F),mg/l	<0.1	<0.1	1	1.5	IS:3025 (P-60) 2008 RA 2019
17	Residual, Free Chlorine,mg/l	<0.1	<0.1	0.2	1	IS:3025 (P-26) 2021
18	Iron (as Fe),mg/l	<0.005	<0.005	1.0	1.0	IS:3025 (Part-2) 2019
19	Magnesium (as Mg)mg/l	2.00	13.30	30	100	IS:3025 (P-46)1994 RA 2019
20	Manganese (as Mn),mg/l	<0.001	<0.001	0.1	0.3	IS:3025 (P-2) 2019
21	Mineral Oil,mg/l	<0.5	<0.5	1.0	1.0	Clause 6 of IS 3025 (P-39) 2021
22	Nitrates (as NO ₃),mg/l	<1	7.0	45	45	IS:3025 (P-34) 1988 RA 2019
23	Phenolics (as C ₆ H ₅ OH),mg/l	<0.001	<0.001	0.001	0.002	IS:3025 (P-43)Sec 1 2022
24	Selenium (as Se),mg/l	<0.005	<0.005	0.01	0.01	IS:3025(P-2) 2019
25	Silver (as Ag), mg/l	<0.005	<0.005	0.1	0.1	IS:3025(P-2) 2019
26	Sulphate (as SO ₄),mg/l	1.10	12.60	200	400	IS:3025 (P-24) Sec 1 2022
27	Sulphide (as H ₂ S) , mg/l	<0.01	<0.01	0.05	0.05	IS:3025 (P-29):1986 RA 2019
28	Total Alkalinity (as CaCO ₃) mg/l	16.0	90.0	200	600	IS:3025 (P-23):1986 RA 2019
29	Total Hardness (as CaCO ₃),mg/l	20.00	105.00	200	600	IS:3025 (P-21):2009 RA 2019
30	Zinc (as Zn),mg/l	<0.005	<0.005	5	15	IS:3025 (P-2) 2019
31	Cadmium (as Cd),mg/l	<0.001	<0.001	0.003	0.003	IS:3025 (P-2) 2019
32	Cyanide (as CN),mg/l	<0.01	<0.01	0.05	0.05	IS:3025 (P-27)Sec 1 2021
33	Lead (as Pb),mg/l	<0.005	<0.005	0.01	0.01	IS:3025 (P-2) 2019
34	Mercury (as Hg),mg/l	<0.0005	<0.0005	0.001	0.001	USPEA 200.7 Rev 4.4
35	Molybdenum (as Mo), mg/l	<0.001	<0.001	0.07	0.07	IS:3025 (P-2) 2019
36	Nickel (as Ni),mg/l	<0.001	<0.001	0.02	0.02	IS:3025 (P-2) 2019
37	Arsenic (as As),mg/l	<0.002	<0.002	0.01	0.01	IS:3025 (P-2) 2019
38	Total Chromium (as Cr),mg/l	<0.001	<0.001	0.05	0.05	IS:3025 (P-52) 2014
39	Escherichia coli/100ml	Not Detected	Not Detected	Shall not be detectable in any 100ml Sample		IS:15185:2016 RA 2021
40	Total Coliform /100ml	Not Detected	Not Detected			IS:15185:2016 RA 2021
41	Electrical Conductivity (µmhos/cm)	70	570	--	--	IS 3025 (P-14)
42	Water levels in well from surface (m)	6.40	3.90	--	--	--

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ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES LLP)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory
Recognised by MoEFCC(CPCB) under E(P) Act 1986 Recognition valid upto: 23.05.2028

TEST REPORT

Table No. 15

Name of the Client : M/s. Minerals and Metals
Name of the Project : Redi Iron Ore Mine
Location : Redi village, Vengurla taluka, Sindhudurg dist, MH
Particulars of sample collected : GW3 -Shiroda village open well, GW4 - Kanyalwadi village open well,
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Date of sample collection : 22.04.2025
Date of sample receipt : 23.04.2025
Issue Date : 04.06.2025
Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)

Sl. No.	Parameters	Report No		Desirable Limits	Permissible Limits	Method of Testing
		M004825043	M004925043			
		Results				
		GW3	GW4			
1	Colour (Hazen Units)	1	1	5	15	IS:3025 (P-4) 2021
2	Odour	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-5) 2018
3	pH Value	6.72	6.56	6.5 to 8.5	6.5 - 8.5	IS:3025 (P-11) 2022
4	Taste	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-8) 1984 RA 2017
5	Turbidity, NTU	0.8	<0.1	1	5	IS:3025 (P-10) 1984 RA 2017
6	Total Dissolved Solids, mg/l	232.0	180.0	500	2000	IS:3025 (P-16) 1984 RA 2017
7	Aluminium (as Al)	<0.005	<0.005	0.03	0.2	IS:3025 (P-55) 2003 RA 2019
8	Ammonia (as total Ammonia -N ₃), mg/l	<0.1	<0.1	0.5	0.5	IS:3025 (P-34) 1988 RA 2019
9	Anionic Detergents (as MBAS), mg/l	<0.1	<0.1	0.2	1.0	Annex K of IS:13428Amm 11 2022
10	Barium (as Ba), mg/l	<0.005	<0.005	0.7	0.7	IS:3025 (P-2) 2019
11	Boron (as B), mg/l	<0.1	<0.1	0.5	2.4	IS:3025 (Part-57) 2021
12	Calcium (as Ca), mg/l	22.0	8.0	75	200	IS:3025 (P-40) 1981 RA 2019
13	Chloramines as Cl ₂	<0.1	<0.1	4	4	IS:3025 (P-26) 2021
14	Chloride as Cl (mg/l)	50	90	250	1000	IS:3025 (P-32) 1988 RA 2019
15	Copper (as Cu), mg/l	<0.005	<0.005	0.05	1.5	IS:3025 (P-2) 2019
16	Fluoride (as F), mg/l	<0.1	<0.1	1	1.5	IS:3025 (P-60) 2008 RA 2019
17	Residual, Free Chlorine, mg/l	<0.1	<0.1	0.2	1	IS:3025 (P-26) 2021
18	Iron (as Fe), mg/l	<0.005	<0.005	1.0	1.0	IS:3025 (Part-2) 2019
19	Magnesium (as Mg), mg/l	13.30	5.83	30	100	IS:3025 (P-46) 1994 RA 2019
20	Manganese (as Mn), mg/l	<0.001	<0.001	0.1	0.3	IS:3025 (P-2) 2019
21	Mineral Oil, mg/l	<0.5	<0.5	1.0	1.0	Clause 6 of IS:3025 (P-39) 2021
22	Nitrates (as NO ₃), mg/l	5.6	8.5	45	45	IS:3025 (P-34) 1988 RA 2019
23	Phenolics (as C ₆ H ₅ OH), mg/l	<0.001	<0.001	0.001	0.002	IS:3025 (P-43) Sec 1 2022
24	Selenium (as Se), mg/l	<0.005	<0.005	0.01	0.01	IS:3025 (P-2) 2019
25	Silver (as Ag), mg/l	<0.005	<0.005	0.1	0.1	IS:3025 (P-2) 2019
26	Sulphate (as SO ₄), mg/l	18.00	13.00	200	400	IS:3025 (P-24) Sec 1 2022
27	Sulphide (as H ₂ S), mg/l	<0.01	<0.01	0.05	0.05	IS:3025 (P-29) 1986 RA 2019
28	Total Alkalinity (as CaCO ₃), mg/l	110.0	8.0	200	600	IS:3025 (P-23) 1986 RA 2019
29	Total Hardness (as CaCO ₃), mg/l	110.00	44.00	200	600	IS:3025 (P-21) 2009 RA 2019
30	Zinc (as Zn), mg/l	<0.005	<0.005	5	15	IS:3025 (P-2) 2019
31	Cadmium (as Cd), mg/l	<0.001	<0.001	0.003	0.003	IS:3025 (P-2) 2019
32	Cyanide (as CN), mg/l	<0.01	<0.01	0.05	0.05	IS:3025 (P-27) Sec 1 2021
33	Lead (as Pb), mg/l	<0.005	<0.005	0.01	0.01	IS:3025 (P-2) 2019
34	Mercury (as Hg), mg/l	<0.0005	<0.0005	0.001	0.001	USPEA 200.7 Rev 4.4
35	Molybdenum (as Mo), mg/l	<0.001	<0.001	0.07	0.07	IS:3025 (P-2) 2019
36	Nickel (as Ni), mg/l	<0.001	<0.001	0.02	0.02	IS:3025 (P-2) 2019
37	Arsenic (as As), mg/l	<0.002	<0.002	0.01	0.01	IS:3025 (P-2) 2019
38	Total Chromium (as Cr), mg/l	<0.001	<0.001	0.05	0.05	IS:3025 (P-52) 2014
39	Escherichia coli/100ml	Not Detected	Not Detected	Shall not be detectable in any 100ml Sample		IS:15185:2016 RA 2021
40	Total Coliform /100ml	Not Detected	Not Detected			IS:15185:2016 RA 2021
41	Electrical Conductivity (µmhos/cm)	430	330	--	--	IS:3025 (P-14)
42	Water levels in well from surface (m)	3.50	0.70	--	--	--

"END OF REPORT"


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Note : This report is subject to the terms and conditions mentioned overleaf.



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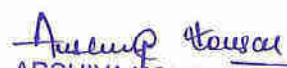
TEST REPORT

Table No. 16

Name of the Client	: M/s. Minerals and Metals				
Name of the Project	: Redi Iron Ore Mine				
Location	: Redi village, Vengurla taluka, Sindhudurg dist, MH				
Particulars of sample collected	: GW5 - Gaontala village open well, GW6 - Tap water (near mines office)				
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)				
Date of sample collection	: 22.04.2025				
Date of sample receipt	: 23.04.2025				
Issue Date	: 04.06.2025				
Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)					
Report No	M005025043	M005125043	Desirable Limits	Permissible Limits	Method of Testing
Sl. No.	Results				
	GW5	GW6			
1 Colour (Hazen Units)	1	1	5	15	IS:3025 (P-4) 2021
2 Odour	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-5) 2018
3 pH Value	6.60	7.65	6.5 to 8.5	6.5 - 8.5	IS:3025 (P-11) 2022
4 Taste	Agreeable	Agreeable	Agreeable	Agreeable	IS:3025 (P-8) 1984 RA 2017
5 Turbidity, NTU	0.7	<0.1	1	5	IS:3025 (P-10) 1984 RA 2017
6 Total Dissolved Solids, mg/l	76.0	130.0	500	2000	IS:3025 (P-16) 1984 RA 2017
7 Aluminium (as Al)	<0.005	<0.005	0.03	0.2	IS:3025 (P-55) 2003 RA 2019
8 Ammonia (as total Ammonia -N), mg/l	<0.1	<0.1	0.5	0.5	IS:3025 (P-34) 1988 RA 2019
9 Anionic Detergents (as MBAS), mg/l	<0.1	<0.1	0.2	1.0	Annex K of IS:13428Amm 11 2022
10 Barium (as Ba), mg/l	<0.005	<0.005	0.7	0.7	IS:3025(P-2) 2019
11 Boron (as B), mg/l	<0.1	<0.1	0.5	2.4	IS:3025 (Part-57) 2021
12 Calcium (as Ca), mg/l	4.00	8.81	75	200	IS:3025 (P-40) 1991 RA 2019
13 Chloramines as Cl ₂	<0.1	<0.1	4	4	IS:3025(P-26) 2021
14 Chloride as Cl (mg/l)	35	55	250	1000	IS:3025 (P-32) 1988 RA 2019
15 Copper (as Cu), mg/l	<0.005	<0.005	0.05	1.5	IS:3025 (P-2) 2019
16 Fluoride (as F), mg/l	<0.1	<0.1	1	1.5	IS:3025 (P-60) 2008 RA 2019
17 Residual, Free Chlorine, mg/l	<0.1	<0.1	0.2	1	IS:3025 (P-26) 2021
18 Iron (as Fe), mg/l	<0.005	<0.005	1.0	1.0	IS:3025 (Part-2) 2019
19 Magnesium (as Mg), mg/l	2.43	5.83	30	100	IS:3025 (P-46) 1994 RA 2019
20 Manganese (as Mn), mg/l	<0.001	<0.001	0.1	0.3	IS:3025 (P-2) 2019
21 Mineral Oil, mg/l	<0.5	<0.5	1.0	1.0	Clause 6 of IS 3025 (P-39) 2021
22 Nitrates (as NO ₃), mg/l	2.8	5.7	45	45	IS:3025 (P-34) 1988 RA 2019
23 Phenolics (as C ₆ H ₅ OH), mg/l	<0.001	<0.001	0.001	0.002	IS:3025 (P-43) Sec 1 2022
24 Selenium (as Se), mg/l	<0.005	<0.005	0.01	0.01	IS:3025(P-2) 2019
25 Silver (as Ag), mg/l	<0.005	<0.005	0.1	0.1	IS:3025(P-2) 2019
26 Sulphate (as SO ₄), mg/l	4.80	6.00	200	400	IS:3025 (P-24) Sec 1 2022
27 Sulphide (as H ₂ S), mg/l	<0.01	<0.01	0.05	0.05	IS:3025 (P-29) 1986 RA 2019
28 Total Alkalinity (as CaCO ₃), mg/l	10.0	32.0	200	600	IS:3025 (P-23) 1986 RA 2019
29 Total Hardness (as CaCO ₃), mg/l	20.00	46.00	200	600	IS:3025 (P-21) 2009 RA 2019
30 Zinc (as Zn), mg/l	<0.005	<0.005	5	15	IS:3025 (P-2) 2019
31 Cadmium (as Cd), mg/l	<0.001	<0.001	0.003	0.003	IS:3025 (P-2) 2019
32 Cyanide (as CN), mg/l	<0.01	<0.01	0.05	0.05	IS:3025 (P-27) Sec 1 2021
33 Lead (as Pb), mg/l	<0.005	<0.005	0.01	0.01	IS:3025 (P-2) 2019
34 Mercury (as Hg), mg/l	<0.0005	<0.0005	0.001	0.001	USPEA 200.7 Rev 4.4
35 Molybdenum (as Mo), mg/l	<0.001	<0.001	0.07	0.07	IS:3025 (P-2) 2019
36 Nickel (as Ni), mg/l	<0.001	<0.001	0.02	0.02	IS:3025 (P-2) 2019
37 Arsenic (as As), mg/l	<0.002	<0.002	0.01	0.01	IS:3025 (P-2) 2019
38 Total Chromium (as Cr), mg/l	<0.001	<0.001	0.05	0.05	IS:3025 (P-52) 2014
39 Escherichia coli/100ml	Not Detected	Not Detected	Shall not be detectable in any 100ml Sample		IS:15185:2016 RA 2021
40 Total Coliform /100ml	Not Detected	Not Detected			IS:15185:2016 RA 2021
41 Electrical Conductivity (µmhos/cm)	140	240	--	--	IS 3025 (P-14)
42 Water levels in well from surface (m)	11.80	--	--	--	--

"END OF REPORT"


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TEST REPORT

Name of the Client	: M/s. Minerals and Metals			
Name of the Project	: Redi Iron Ore Mine			
Particulars of sample collected	: STP1 - Sewage Treatment Plant			
Date of sample collection	: 22.04.2025			
Report no	: M005225043			
Issue Date	: 03.05.2025			
Ref	: Schedule -1 Sl.No-2 of CTO			
Sl. No.	Sample code	STP1	Standards	Method of Testing
	Parameters	Results		
1	pH	7.52	-	IS 3025 (P-11) 2022
2	Biochemical Oxygen Demand BOD ₅ 27 ⁰ C, mg/l	5.32	<30	IS 3025 (Part 44) 2023
3	Total Suspended Solids, at 105 ⁰ C, mg/l	22	<50	IS 3025 (P-17) 2022
4	Chemical Oxygen Demand (COD) (mg/l)	56	<100	IS 3025 (Part 58) 2023


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