

ENVIRONMENTAL MONITORING REPORT

October, 2024

PROJECT: RAMANADURGA IRON ORE MINE

**ML NO. 2141
Dharmapura Village
Sandur Taluk, Ballari District,
Karnataka**

Lessee

M/S. Sri. KUMARASWAMY MINERAL EXPORTS PVT. LTD.,

**D. No. 462, SMIORE Colony,
Near Fire Station, Kudligi Road
SANDUR - 583119
BELLARY, 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,**

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TEST REPORT

Table No. 1

AMBIENT AIR QUALITY

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd					
Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)					
Station at & Code : A - I, Dharmapura					
Duration : 24 Hrs					
Issue date : 02.11.2024					
Reference IS 5182 & Lab SOP					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter	
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)
04.10.2024	N/24/10/2-0047	7	13	38	18
05.10.2024	N/24/10/2-0121	8	11	45	25
09.10.2024	N/24/10/3-0082	10	12	48	26
10.10.2024	N/24/10/3-0133	9	11	28	20
14.10.2024	N/24/10/4-0019	11	13	30	22
15.10.2024	N/24/10/4-0066	10	12	32	19
23.10.2024	N/24/10/5-0099	6	9	45	24
24.10.2024	N/24/10/5-0133	10	12	55	28
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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Table No. 2

AMBIENT AIR QUALITY

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd					
Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)					
Station at & Code : A - II, Yeshwanthanagar					
Duration : 24 Hrs					
Issue date : 02.11.2024					
Reference IS 5182 & Lab SOP					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter	
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)
04.10.2024	N/24/10/2-0037	11	14	48	25
05.10.2024	N/24/10/2-0112	9	11	51	27
07.10.2024	N/24/10/2-0187	7	9	42	26
08.10.2024	N/24/10/3-0009	9	10	58	33
18.10.2024	N/24/10/4-0171	10	12	48	25
19.10.2024	N/24/10/4-0236	11	13	50	26
21.10.2024	N/24/10/5-0010	9	11	56	29
22.10.2024	N/24/10/5-0060	11	13	48	25
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. 3

AMBIENT AIR QUALITY

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd					
Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)					
Station at & Code : A - III, Sushila Nagar village					
Duration : 24 Hrs					
Issue date : 02.11.2024					
Reference IS 5182 & Lab SOP					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter	
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)
01.10.2024	N/24/10/2-0003	9	11	53	29
03.10.2024	N/24/10/2-0017	11	12	47	25
09.10.2024	N/24/10/3-0116	12	15	40	22
10.10.2024	N/24/10/3-0163	7	11	55	28
14.10.2024	N/24/10/4-0035	6	9	44	21
15.10.2024	N/24/10/4-0079	9	10	41	23
23.10.2024	N/24/10/5-0119	10	12	43	23
24.10.2024	N/24/10/5-0153	12	18	49	25
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. 4

AMBIENT AIR QUALITY

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd					
Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)					
Station at & Code : A - IV Sandur Town					
Duration : 24 Hrs					
Issue date : 02.11.2024					
Reference IS 5182 & Lab SOP					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter	
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)
04.10.2024	N/24/10/2-0060	11	14	45	24
05.10.2024	N/24/10/2-0134	9	12	36	20
07.10.2024	N/24/10/2-0204	10	14	47	24
08.10.2024	N/24/10/3-0026	9	12	53	30
16.10.2024	N/24/10/4-0109	12	16	37	18
17.10.2024	N/24/10/4-0147	14	18	38	22
23.10.2024	N/24/10/5-0108	12	13	49	26
24.10.2024	N/24/10/5-0142	9	11	39	21
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. 5

AMBIENT AIR QUALITY

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd					
Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)					
Station at & Code : A - V Core zone Within ML Area					
Duration : 24 Hrs					
Issue date : 02.11.2024					
Reference IS 5182 & Lab SOP					
Date of Sampling	Lab Code	Sulphur Dioxide (SO ₂), µg/m ³	Nitrogen Dioxide (NO ₂), µg/m ³	Particulate Matter	
				PM ₁₀ , (µg/m ³)	PM _{2.5} , (µg/m ³)
01.10.2024	N/24/10/2-0004	11	15	57	28
03.10.2024	N/24/10/2-0018	13	16	51	26
09.10.2024	N/24/10/3-0117	9	11	49	24
10.10.2024	N/24/10/3-0164	12	18	53	27
14.10.2024	N/24/10/4-0036	6	9	45	26
15.10.2024	N/24/10/4-0080	10	12	38	21
23.10.2024	N/24/10/5-0120	9	11	50	29
24.10.2024	N/24/10/5-0154	12	14	54	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. 6

Fugitive Emission

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd		
Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)		
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)		
Station at & Code : A - VI, Loading point		
Duration : 08 Hrs		
Issue date : 02.11.2024		
Date of sample	Lab Code	Particulate mater ($\mu\text{g}/\text{m}^3$)
01.10.2024	N/24/10/2-0005	254
09.10.2024	N/24/10/3-0118	312

Station at & Code : A - VII, Crushing & Screening		
Duration : 08 Hrs		
Date of sample	Lab Code	Particulate mater ($\mu\text{g}/\text{m}^3$)
03.10.2024	N/24/10/2-0019	425
10.10.2024	N/24/10/3-0165	368

Station at & Code : A - VIII, Dumping point		
Duration : 08 Hrs		
Date of sample	Lab Code	Particulate mater ($\mu\text{g}/\text{m}^3$)
01.10.2024	N/24/10/2-0006	394
09.10.2024	N/24/10/3-0119	428

Station at & Code : A - IX, Haulage Road		
Duration : 08 Hrs		
Date of sample	Lab Code	Particulate mater ($\mu\text{g}/\text{m}^3$)
03.10.2024	N/24/10/2-0020	425
10.10.2024	N/24/10/3-0166	356
Ref : Environmental (Protection) Rules, 2010 (Sixth Amendment)		
Particulate mater ($\mu\text{g}/\text{m}^3$)		
Permissible limits for Fugitive Emissions 600 $\mu\text{g}/\text{m}^3$		

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Table No. 7

STATISTICAL AIR QUALITY DATA

Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd

Month : October, 2024

Station Code : A - I, Dharmapura					A - II, Yeshwanthanagar				A - III, Sushila Nagar 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.	6	9	28	18	7	9	42	25	6	9	40	21
10%	7	10	29	19	8	10	46	25	7	10	41	22
25%	8	11	32	20	9	11	48	25	9	11	43	23
50%	10	12	42	23	10	12	49	26	10	12	46	24
75%	10	12	46	25	11	13	52	28	11	13	50	26
98%	11	13	54	28	11	14	58	32	12	18	55	29
Max.	11	13	55	28	11	14	58	33	12	18	55	29
Avg.	9	12	40	23	10	12	50	27	10	12	47	25
SD	2	1	10	4	1	2	5	3	2	3	6	3
No. of obs	8				8				8			
Station Code : A - IV Sandur Town					A - V Core zone Within ML Area							
	SO ₂	NO ₂	PM ₁₀	PM _{2.5}	SO ₂	NO ₂	PM ₁₀	PM _{2.5}				
Min.	9	11	36	18	6	9	38	21				
10%	9	12	37	19	8	10	43	23				
25%	9	12	38	21	9	11	48	26				
50%	11	14	42	23	11	13	51	27				
75%	12	15	48	25	12	15	53	28				
98%	14	18	52	29	13	18	57	30				
Max.	14	18	53	30	13	18	57	30				
Avg.	11	14	43	23	10	13	50	26				
SD	2	2	6	4	2	3	6	3				
No. of obs	8				8							

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Table No. 8

Table No. 01

Name of the Client	: M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd
Name of the Project	: Ramanadurga Iron Ore Mine (ML No. 2141)
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services)
Particulars of sample collected	: SW1 - Nari Halla Up Stream water, SW2 - Nari Halla Down Stream water
Date of sample collection	: 09.10.2024
Issue Date	: 29.10.2024
Ref:IS : 2296, 1982 Class C Norms (Stream Water Standards)	

Lab Code		N/24/10/2-0242	N/24/10/2-0243	Limits For Stream Water Standards	Method of Testing
Sl.No.	Parameters	Results			
		SW1	SW2		
1	Colour (Hazen Units), Max	10	10	300	IS:3025(Part-4)2021
2	pH	7.35	7.40	6.5 to 8.5	IS:3025(Part-11)2022
3	Dissolved Oxygen (as O ₂), mg/l, Max	5.4	5.5	Min 4	IS:3025(Part-38)1989RA 2019
4	Oil & Grease, mg/l	<0.1	<0.1	0.1	IS:3025(Part 39)2021
5	Total Dissolved Solids (mg/l), Max	236	242	1500	IS:3025(Part-16)2023
6	Nitrates (as NO ₃),mg/l, Max	15.60	14.80	50	IS:3025(Part-34)1988 RA 2019
7	Anionic detergents (as MBAS),mg/l, Max	<0.1	<0.1	1.0	IS:3025(Part-68)
8	Copper (as Cu),mg/l, Max	<0.005	<0.005	1.5	IS:3025(Part-2) 2019
9	Chloride (as Cl),mg/l, Max	55.0	60	600	IS:3025(Part-32) ;1988RA2019
10	Fluoride (as F),mg/l, Max	0.75	0.80	1.5	APHA 23rd Edition 4500F
11	Iron (as Fe),mg/l, Max	<0.005	<0.005	50	IS:3025(P-2) 2019
12	Phenolic compounds (as C ₆ H ₅ OH),mg/l, Max	<0.001	<0.001	0.005	IS:3025(P-43)Sec 1 2022
13	Selenium (as Se), mg/l, Max	<0.005	<0.005	0.05	IS:3025(P-2) 2019
14	Sulphates as SO ₄ (mg/l), Max	34.0	40	400	IS:3025(P-24)Sec 1 2022
15	Zinc (as Zn),mg/l, Max	<0.005	<0.005	15	IS:3025(P-2) 2019
16	Cadmium (as Cd), mg/l, Max	<0.001	<0.001	0.01	IS:3025(P-2) 2019
17	Cyanides (as CN), mg/l, Max	<0.01	<0.01	0.05	IS:3025(P-27) Sec 1 2021
18	Lead (as Pb) mg/l, Max	<0.005	<0.005	0.1	IS:3025(P-2) 2019
19	Total Arsenic as As (mg/l), Max	<0.002	<0.002	0.2	IS:3025(P-2) 2019
20	Hexavalent Chromium (as Cr ⁺⁶), mg/l, Max	<0.03	<0.03	0.05	IS:3025(P-52) 2014
21	Biochemical Oxygen Demand (as O ₂), mg/l	<3.0	<3.0	3	IS:3025(P-44) 2014
22	Total Coliform (MPN/100ml)	210	250	5000	IS:1622:1981

"END OF REPORT"


BINU MANI

T.M. - Microbiology

Govt. Analyst / Authorised Signatory


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TEST REPORT

Table No. 9

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd
 Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)
 Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)
 Particulars of sample collected : GW1 - Dharmapura bore water, GW2 - Yeshwanthanagar bore water
 Date of sample collection : 05.10.2024
 Issue Date : 29.10.2024
 Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)

Sl. No.	Parameters	Results		Desirable Limits	Permissible Limits	Method of Testing
		GW1	GW2			
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	8.32	7.25	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, Max	2.40	1.1	1	5	IS:3025 (P-10)1984 RA2017
6	Electrical Conductivity (µmhos/cm)	1050.0	2400.0	--	--	IS 3025 (P-14)
7	Total Dissolved Solids, mg/l, Max	590.0	1400.0	500	2000	IS:3025 (P-16)1984 RA2017
8	Aluminium (as Al), Max	<0.005	<0.005	0.03	0.2	IS:3025 (P-55)2003 RA2019
9	Ammonia (as total Ammonia -N), mg/l, Max	<0.1	<0.1	0.5	0.5	IS:3025 (P-34)1988 RA2019
10	Anionic Detergents (as MBAS), mg/l, Max	<0.1	<0.1	0.2	1.0	Annex K of Is:13428Amm 11 2022
11	Barium (as Ba), mg/l, Max	<0.005	<0.005	0.7	0.7	IS:3025(P-2)2019
12	Boron (as B), mg/l, Max	<0.1	<0.1	0.5	2.4	IS:3025 (Part-57)2021
13	Calcium (as Ca), mg/l, Max	68.10	140.2	75	200	IS:3025 (P-40)1991 RA 2019
14	Copper (as Cu), mg/l, Max	<0.005	<0.005	0.05	1.5	IS:3025 (P-2)2019
15	Chloride as Cl (mg/l), mg/l, Max	150.00	400.0	250	1000	IS:3025 (P-32)1988 RA 2019
16	Fluoride (as F), mg/l, Max	0.73	0.62	1	1.5	IS:3025 (P-60)2008 RA 2019
17	Residual, Free Chlorine, mg/l, Max	<0.1	<0.1	0.2	1	IS:3025 (P-26)2021
18	Chloramines as Cl ₂ , Max	<0.1	<0.1	4	4	IS:3025(P-26)2021
19	Iron (as Fe), mg/l, Max	<0.005	<0.005	1.0	1.0	IS:3025 (Part-2)2019
20	Magnesium (as Mg), mg/l, Max	51.00	65.6	30	100	IS:3025 (P-46)1994 RA 2019
21	Manganese (as Mn), mg/l, Max	<0.001	<0.001	0.1	0.3	IS:3025 (P-2)2019
22	Mineral Oil, mg/l, Max	<0.5	<0.5	1.0	1.0	Clause 6 of IS 3025 (P-39) 2021
23	Nitrates (as NO ₃), mg/l, Max	19.60	35.6	45	45	IS:3025 (P-34) 1988 RA 2019
24	Phenolics (as C ₆ H ₅ OH), mg/l, Max	<0.001	<0.001	0.001	0.002	IS:3025 (P-43)Sec 1 2022
25	Selenium (as Se), mg/l	<0.005	<0.005	0.01	0.01	IS:3025(P-2)2019
26	Silver (as Ag), mg/l, Max	<0.005	<0.005	0.1	0.1	IS:3025(P-2)2019
27	Molybdenum (as Mo), mg/l, Max	<0.001	<0.001	0.07	0.07	IS:3025 (P-2)2019
28	Sulphates (as SO ₄), mg/l, Max	76.00	140.0	200	400	IS:3025 (P-24) Sec 1 2022
29	Sulphide (as H ₂ S), mg/l, Max	<0.01	<0.01	0.05	0.05	IS:3025 (P-29):1986 RA 2019
30	Alkalinity (as CaCO ₃), mg/l, Max	240.0	560.0	200	600	IS:3025 (P-23):1986 RA 2019
31	Total Hardness (as CaCO ₃), mg/l, Max	380.0	580.0	200	600	IS:3025 (P-21):2009 RA 2019
32	Zinc (as Zn), mg/l, Max	<0.005	<0.005	5	15	IS:3025 (P-2) 2019
33	Cadmium (as Cd), mg/l, Max	<0.001	<0.001	0.003	0.003	IS:3025 (P-2)2019
34	Cyanide (as CN), mg/l, Max	<0.01	<0.01	0.05	0.05	IS:3025 (P-27)Sec 1 2021
35	Lead (as Pb), mg/l, Max	<0.005	<0.005	0.01	0.01	IS:3025 (P-2)2019
36	Mercury (as Hg), mg/l, Max	<0.0005	<0.0005	0.001	0.001	USPEA 200.7 Rev 4.4
37	Nickel (as Ni), mg/l, Max	<0.001	<0.001	0.02	0.02	IS:3025 (P-2) 2019
38	Arsenic (as As), mg/l, Max	<0.002	<0.002	0.01	0.01	IS:3025 (P-2)2019
39	Total Chromium (as Cr), mg/l, Max	<0.001	<0.001	0.05	0.05	IS:3025 (P-52)2014
40	Escherichia coli/100ml	Not Detected	Not Detected	Shall not be detectable in any 100ml Sample		IS:15185:2016 RA 2021
41	Total Coliform /100ml	Not Detected	Not Detected			IS:15185:2016 RA 2021

"END OF REPORT"

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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 23.05.2025

TEST REPORT

Table No. 10

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd
 Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)
 Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services)
 Particulars of sample collected : GW3 -Sushilanagar village Bore well water, GW4 - Drinking water Near Mine Office
 Date of sample collection : 09.10.2024
 Issue Date : 29.10.2024
 Ref : IS:10500-2012 Norms Amendment - 4 (Drinking Water Standards)

Sl. No.	Parameters	Results		Desirable Limits	Permissible Limits	Method of Testing
		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	6.81	7.23	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, Max	0.9	0.2	1	5	IS:3025 (P-10)1984 RA2017
6	Electrical Conductivity (µmhos/cm)	1350.0	500.0	--	--	IS 3025 (P-14)
7	Total Dissolved Solids,mg/l, Max	760.0	280.0	500	2000	IS:3025 (P-16)1984 RA2017
8	Aluminium (as Al), Max	<0.005	<0.005	0.03	0.2	IS:3025(P-2)2019
9	Ammonia (as total Ammonia -N),mg/l, Max	<0.1	<0.1	0.5	0.5	IS:3025 (P-34)1988 RA2019
10	Anionic Detergents (as MBAS),mg/l, Max	<0.1	<0.1	0.2	1.0	IS:3025(Part-68)
11	Barium (as Ba), mg/l, Max	<0.005	<0.005	0.7	0.7	IS:3025(P-2)2019
12	Boron (as B), mg/l, Max	<0.1	<0.1	0.5	2.4	IS:3025 (Part-57)2021
13	Calcium (as Ca),mg/l, Max	60.23	40.22	75	200	IS:3025 (P-40)1991 RA 2019
14	Copper (as Cu),mg/l, Max	<0.005	<0.005	0.05	1.5	IS:3025 (P-2)2019
15	Chloride as Cl (mg/l),mg/l, Max	248.00	122.00	250	1000	IS:3025 (P-32)1988 RA 2019
16	Fluoride (as F),mg/l, Max	0.60	<0.1	1	1.5	APHA 4500F
17	Residual, Free Chlorine,mg/l, Max	<0.1	<0.1	0.2	1	IS:3025 (P-26)2021
18	Chloramines as C12, Max	<0.1	<0.1	4	4	IS:3025(P-26)2021
19	Iron (as Fe),mg/l, Max	<0.005	<0.005	1.0	1.0	IS:3025 (Part-2)2019
20	Magnesium (as Mg),mg/l, Max	20.25	6.88	30	100	IS:3025 (P-46)1994 RA 2019
21	Manganese (as Mn),mg/l, Max	<0.001	<0.001	0.1	0.3	IS:3025 (P-2)2019
22	Mineral Oil,mg/l, Max	<0.5	<0.5	1.0	1.0	IS 3025 (P-39) 2021
23	Nitrates (as NO ₃),mg/l, Max	21.00	5.62	45	45	IS:3025 (P-34) 1988 RA 2019
24	Phenolics (as C ₆ H ₅ OH),mg/l, Max	<0.001	<0.001	0.001	0.002	IS:3025 (P-43)Sec 1 2022
25	Selenium (as Se),mg/l	<0.005	<0.005	0.01	0.01	IS:3025(P-2)2019
26	Silver (as Ag), mg/l, Max	<0.005	<0.005	0.1	0.1	IS:3025(P-2)2019
27	Molybdenum (as Mo), mg/l, Max	<0.001	<0.001	0.07	0.07	IS:3025 (P-2)2019
28	Sulphates (as SO ₄),mg/l, Max	90.50	38.23	200	400	IS:3025 (P-24) Sec 1 2022
29	Sulphide (as H ₂ S) , mg/l, Max	<0.01	<0.01	0.05	0.05	IS:3025 (P-29):1986 RA 2019
30	Alkalinity (as CaCO ₃) mg/l, Max	160.0	55.00	200	600	IS:3025 (P-23):1986 RA 2019
31	Total Hardness (as CaCO ₃),mg/l,Max	260.0	130.0	200	600	IS:3025 (P-21):2009 RA 2019
32	Zinc (as Zn),mg/l, Max	<0.005	<0.005	5	15	IS:3025 (P-2) 2019
33	Cadmium (as Cd),mg/l, Max	<0.001	<0.001	0.003	0.003	IS:3025 (P-2)2019
34	Cyanide (as CN),mg/l, Max	<0.01	<0.01	0.05	0.05	IS:3025 (P-27)Sec 1 2021
35	Lead (as Pb),mg/l, Max	<0.005	<0.005	0.01	0.01	IS:3025 (P-2)2019
36	Mercury (as Hg),mg/l, Max	<0.0005	<0.0005	0.001	0.001	USPEA 200.7 Rev 4.4
37	Nickel (as Ni),mg/l, Max	<0.001	<0.001	0.02	0.02	IS:3025 (P-2) 2019
38	Arsenic (as As),mg/l, Max	<0.002	<0.002	0.01	0.01	IS:3025 (P-2)2019
39	Total Chromium (as Cr),mg/l, Max	<0.001	<0.001	0.05	0.05	IS:3025 (P-2) 2019
40	Escherichia coli/100ml	Not Detected	Not Detected	Shall not be detectable in any 100ml Sample		IS:15185:2016 RA 2021
41	Total Coliform /100ml)	Not Detected	Not Detected			IS:15185:2016 RA 2021

"END OF REPORT"

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TEST REPORT

NOISE LEVEL DATA

Table No. 11

Report No : ELMES329410

Name of the Client		: M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd					
Name of the Project		: Ramanadurga Iron Ore Mine (ML No. 2141)					
Particulars of sample collected		: Sound Levels					
Sample Collected by		: Environmental Laboratory (Unit of Mineral Engineering Services)					
Date of sample collection		: 07.10.2024					
Issue Date		: 02.11.2024					
Sampling & Test Method		: IS:9989					
Code No.	Monitoring stations	Day			Night		
		L _{min}	L _{eq}	L _{max}	L _{min}	L _{eq}	L _{max}
Bufferzone							
N1	Dharmapura	37.0	50.4	54.9	34.6	40.0	44.2
N2	Yeshwanthanagar	36.4	49.8	54.2	35.0	40.5	45.0
N3	Bavihalli village	38.0	52.8	57.3	34.6	41.4	45.2
Corezone							
N4	Core zone Near Mines office	37.0	47.8	55.0	34.6	41.1	47.0
N5	Loading Area	39.0	55.5	68.0	During operation		
N6	Dumping Area	41.0	59.7	75.0	During operation		
Permissible Limits of Ambient Noise Levels as per CPCB Guidelines							
		Leq. Limit dB(A)					
		Day	Night				
Industrial areas		75	70				
Commerecial area		65	55				
Residential area		55	45				
Silence area		50	40				

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