

ENVIRONMENTAL MONITORING REPORT

Project	Ramanadurga Iron Ore Mine ML NO. 2141
Location	Dharmapura Village, Sandur Taluk, Ballari District, Karnataka
Client	M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd.,
Office Address	D. No. 462, SMIORE Colony, Near Fire Station, Kudligi Road Sandur – 583119, Bellary, Karnataka
Monitoring Month	September-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. Sri. Kumaraswamy Mineral Exports Pvt. Ltd					
Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)					
Location : Dharmapura Village, Sandur Taluk, Ballari District, Karnataka					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station : AI - Dharmapura					
Duration : 24 Hrs					
Issue date : 03.10.2025					
Sampling & Test Method : IS : 5182 & Lab SOP					
Date of Sampling	Report No	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)
03.09.2025	N002725091	8	10	34	29
04.09.2025	N009125091	6	9	37	21
12.09.2025	N001025093	7	12	38	18
13.09.2025	N006525093	11	14	56	28
15.09.2025	N012025093	13	10	45	25
16.09.2025	N017625093	10	13	40	22
24.09.2025	N021625094	7	10	45	24
25.09.2025	N024725094	9	13	40	20
NAAQS Limits for Industrial , Residential, Rural and other Areas		80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs

Arshiya Housar
ARSHIYA HOUSAR
Dy TM - 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)					
Location : Dharmapura Village, Sandur Taluk, Ballari District, Karnataka					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station : All - Yeshwanthanagar					
Duration : 24 Hrs					
Issue date : 03.10.2025					
Sampling & Test Method : IS : 5182 & Lab SOP					
Date of Sampling	Report No	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)
05.09.2025	N015725091	8	11	37	21
06.09.2025	N002525092	9	10	43	24
08.09.2025	N008725092	10	10	51	26
09.09.2025	N014625092	12	11	49	24
19.09.2025	N000925094	9	12	55	27
20.09.2025	N006425094	10	11	46	23
22.09.2025	N011825094	6	13	34	21
23.09.2025	N016825094	7	11	43	26
NAAQS 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)					
Location : Dharmapura Village, Sandur Taluk, Ballari District, Karnataka					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station : AIII - Sushila Nagar village					
Duration : 24 Hrs					
Issue date : 03.10.2025					
Sampling & Test Method : IS : 5182 & Lab SOP					
Date of Sampling	Report No	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)
03.09.2025	N002925091	9	10	51	28
04.09.2025	N009325091	12	11	49	26
10.09.2025	N018325092	9	12	38	19
11.09.2025	N021025092	9	11	46	24
17.09.2025	N022125093	9	13	53	29
18.09.2025	N024325093	11	15	55	30
24.09.2025	N021825094	7	10	40	23
25.09.2025	N024925094	9	11	32	24
NAAQS 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)					
Location : Dharmapura Village, Sandur Taluk, Ballari District, Karnataka					
Sample Collected by : Environmental Laboratory (Unit of Mineral Engineering Services LLP)					
Code & Station : AIV - Sandur Town					
Duration : 24 Hrs					
Issue date : 03.10.2025					
Sampling & Test Method : IS : 5182 & Lab SOP					
Date of Sampling	Report No	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)
03.09.2025	N003025091	10	13	56	28
04.09.2025	N009425091	14	18	58	32
10.09.2025	N018425092	11	14	48	24
11.09.2025	N021125092	9	13	53	26
17.09.2025	N022225093	10	11	50	27
18.09.2025	N024425093	9	12	47	26
24.09.2025	N021925094	13	15	39	16
25.09.2025	N025025094	12	14	40	23
NAAQS 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)				
Location	: Dharmapura Village, Sandur Taluk, Ballari District, Karnataka				
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)				
Code & Station	: AV - Core zone Within ML Area				
Duration	: 24 Hrs				
Issue date	: 03.10.2025				
Sampling & Test Method	: IS : 5182 & Lab SOP				
Date of Sampling	Report No	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)
03.09.2025	N003125091	7	10	42	20
04.09.2025	N009525091	10	13	45	26
10.09.2025	N018525092	12	19	38	17
11.09.2025	N021225092	8	10	34	17
17.09.2025	N022325093	9	13	45	25
18.09.2025	N024525093	8	11	52	28
24.09.2025	N022025094	8	12	42	24
25.09.2025	N025125094	9	11	47	26
NAAQS 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)	
Location	: Dharmapura Village, Sandur Taluk, Ballari District, Karnataka	
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)	
Code & Station	: FE1 - Loading point	
Duration	: 08 Hrs	
Issue date	: 03.10.2025	
Date of sample	Report No	Particulate mater ($\mu\text{g}/\text{m}^3$)
10.09.2025	N018625092	355
17.09.2025	N022425093	275

Code & Station	: FE2 - Crushing & Screening	
Duration	: 08 Hrs	
Date of sample	Report No	Particulate mater ($\mu\text{g}/\text{m}^3$)
11.09.2025	N021325092	221
18.09.2025	N024625093	385

Code & Station	: FE3 - Dumping point	
Duration	: 08 Hrs	
Date of sample	Report No	Particulate mater ($\mu\text{g}/\text{m}^3$)
10.09.2025	N018725092	368
17.09.2025	N022525093	157

Code & Station	: FE4 - Haulage Road	
Duration	: 08 Hrs	
Date of sample	Report No	Particulate mater ($\mu\text{g}/\text{m}^3$)
11.09.2025	N021425092	226
18.09.2025	N024725093	375
Ref	: Environmental (Protection) Rules, 2010 (Sixth Amendment)	
Permissible limits for Fugitive Emissions	Particulate mater ($\mu\text{g}/\text{m}^3$) 600 $\mu\text{g}/\text{m}^3$	

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Table No. 7

STATISTICAL AIR QUALITY DATA

Name of the Client : M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd												
Name of the Project : Ramanadurga Iron Ore Mine (ML No. 2141)												
Month : September, 2025												
	AI - Dharmapura				AII - Yeshwanthanagar				AIII - 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	34	18	6	10	34	21	7	10	32	19
10%	7	9	36	19	7	11	36	21	8	10	36	22
25%	7	10	38	21	8	11	42	23	9	11	40	24
50%	9	11	40	23	9	11	45	24	9	12	48	25
75%	10	13	45	26	10	12	50	26	10	13	52	28
98%	13	14	54	29	12	17	54	27	12	15	55	30
Max.	13	14	56	29	12	18	55	27	12	15	55	30
Avg.	9	11	42	23	9	12	45	24	9	12	46	25
SD	2	2	7	4	2	3	7	2	2	2	8	4
No. of obs	8				8				8			
	AIV - Sandur Town				AV - 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	39	16	7	10	34	17				
10%	9	12	40	21	8	10	37	17				
25%	10	13	45	24	8	11	41	19				
50%	11	14	49	26	9	12	44	25				
75%	12	14	54	27	9	13	46	26				
98%	14	18	58	31	12	18	51	28				
Max.	14	18	58	32	12	19	52	28				
Avg.	11	14	49	25	9	12	43	23				
SD	2	2	7	5	2	3	6	4				
No. of obs	8				8							

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Table No.8

Name of the Client	: M/s. Sri. Kumaraswamy Mineral Exports Pvt. Ltd
Name of the Project	: Ramanadurga Iron Ore Mine (ML No. 2141)
Location	: Dharmapura Village, Sandur Taluk, Ballari District, Karnataka
Sample Collected by	: Environmental Laboratory (Unit of Mineral Engineering Services LLP)
Nature of sample	: Surface water
Sample Location	: SW1 - Nari Halla Up Stream water, SW2 - Nari Halla Down Stream water
Date of sample collection	: 11.09.2025
Date of sample receipt	: 12.09.2025
Issue Date	: 03.10.2025
Ref : IS : 2296 Water Quality Standards	

Report No		M006725092	M006825092	Limits	Method of Testing
Sample Code		SW1	SW2		
Sl.No.	Parameters	Results			
1	Colour (Hazen Units)	10	10	300	IS 3025 (Part 4) 2021
2	pH	7.68	7.73	6.5 to 8.5	IS 3025 (Part 11) 2022
3	Dissolved Oxygen (as O ₂), mg/l	5.20	5.30	Min 4	IS 3025 (Part 38):1989 RA 2019
4	Biochemical Oxygen Demand (as O ₂), mg/l	<3	<3	Max 3	IS 3025 (Part 44) 2023
5	Total Coliform (MPN/100ml)	93	78	5000	IS 15185 2016 RA 2021
6	Total Dissolved Solids, (mg/l)	450	460	1500	IS 3025 (Part 16) 2023
7	Chloride (as Cl),mg/l	100.0	110.0	600	IS 3025 (Part 32) :1988 RA 2019
8	Sulphates as SO ₄ (mg/l)	60.0	64.0	400	APHA (24th Edition) :4110B
9	Nitrates (as NO ₃),mg/l	20.00	26.00	50	IS 3025 (Part 34-Sec1) 2023
10	Fluoride (as F),mg/l	0.66	0.70	1.5	IS 3025 (Part 60-Sec1) 2023
11	Copper (as Cu),mg/l	<0.0005	<0.0005	1.5	IS 3025 (Part 65) 2022
12	Iron (as Fe),mg/l	<0.005	<0.005	50	IS 3025 (Part 65) 2022
13	Zinc (as Zn),mg/l	<0.005	<0.005	15	IS 3025 (Part 65) 2022
14	Total Arsenic (as As), (mg/l)	<0.0005	<0.0005	0.2	IS 3025 (Part 65) 2022
15	Lead (as Pb), mg/l	<0.0005	<0.0005	0.1	IS 3025 (Part 65) 2022
16	Cadmium (as Cd), mg/l,	<0.0005	<0.0005	0.01	IS 3025 (Part 65) 2022
17	Hexavalent Chromium (as Cr ⁺⁶), mg/l,	<0.03	<0.03	0.05	IS 3025 (Part 52):2019 RA 2023
18	Selenium (as Se), mg/l	<0.0005	<0.0005	0.05	IS 3025 (Part 65) 2022
19	Cyanide (as CN), mg/l,	<0.01	<0.01	0.05	IS 3025 (Part 27/Sec1) 2021
20	Phenolic compounds (as C ₆ H ₅ OH),mg/l	<0.001	<0.001	0.005	IS 3025 (Part 43/Sec1) 2022
21	Anionic detergents (as MBAS),mg/l	<0.1	<0.1	1.0	IS 3025 (Part 68) 2023

Note : Class-2 Drinking water with conventional treatment followed by disinfection.

"END OF REPORT"

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