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Test Report

Report Number : MITCON/2022-23/December/12258

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022- 23/December/12258/2
M/s MOIL LIMITED, Tirodi Manganese Mines L3=4.419 Ha Site, Dist:- Balaghat (M.P)	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
	Test Location	Near Pit Office
	Monitoring Done By	MITCON
	Date of Analysis	05/12/2022

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/ hrs.(Avg)	E

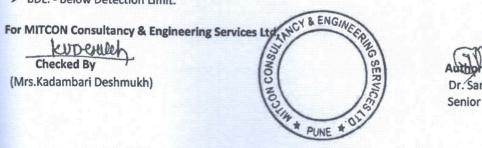
RESULT

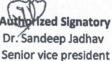
Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	μg/M ³	12.5	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO ₂)	µg/M³	15.3	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM10 micron	µg/M³	61.9	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM2.5 micron	μg/M ³	32.8	≤ 60	USEPA 40 CFRCH
05	Ozone (O3)	μg/M ³	3.6	≤ 100	IS 5182
06	Lead (Pb)	μg/M³	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M ³	0.310	≤ 2.0	IS 5182
08	Ammonia (NH ₃)	μg/M ³	3.9	≤ 400	APHA - 401
09	Benzene (C6H6)	μg/M ³	BDL	≤5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M ³	BDL	≤1	IS 5182
11	Arsenic (As)	ng/ M ³	BDL	≤6	APHA - AAS
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS

REMARKS/OBSERVATIONS:

> All above results are within National Ambient Air Quality standards.

BDL: - Below Detection Limit.





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Test Report

Report Number : MITCON/2022-23/Decembr/12256

Client's Name & Address	Issue Date:12/12/2022			
	Reference No.	MITCON/2022- 23/December/12256/5		
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022		
	Type of Monitoring	Ambient Air		
Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P)	Test Location	Near Mine Office		
Dalagnat (M.P)	Monitoring Done By	MITCON		
	Date of Analysis	05/12/2022		

OBSERVATION

RESULT

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	ity Duration (mm)	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	12		In Min			
	50	13	50	1440	0.0	5.0 km/ hrs (Avg)	E

Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	µg/M ³	12.4	≤80	in preserve
02	Oxides of Nitrogen (NO ₂)	µg/M ³	16.0		IS 5182(Part 2)
03	Particulate Matter PM10 micron	and the second s		≤ 80	IS 5182(Part 6)
04	Particulate Matter PM	µg/M ³	56.4	≤ 100	IS 5182 (Part 23)
05	Particulate Matter PM2.5 micron	μg/M ³	26.0	≤ 60	USEPA 40 CFRCH
and the second s	Ozone (O ₃)	μg/M ³	3.2	≤ 100	IS 5182
06	Lead (Pb)	μg/M ³	BDL	≤ 1.0	
.07	Carbon Monoxide (CO)	mg/M ³	0.324	Active days and the second	APHA - AAS
08	Ammonia (NH3)	μg/M ³	Contraction of the second	≤ 2.0	IS 5182
09	Benzene (C6H6)	and the second se	3.6	≤ 400	APHA - 401
10		μg/M ³	BDL	≤5	IS 5182
11	Benzo(a)Pyrene (BaP)	ng/ M ³	BDL	≤1	IS 5182
	Arsenic (As)	ng/ M ³	BDL	≤6	
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS APHA - AAS

REMARKS/OBSERVATIONS:

> All above results are within National Ambient Air Quality standards.

BDL: - Below Detection Limit.

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Authorized Signatory Dr. Sandeep Jadhav Senior vice president

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Test Report

Report Number : MITCON/2022-23/Decembr/12256

	Issue Date:12/12/2022
Reference No.	MITCON/2022- 23/December/12256/6
Date of Monitoring	03/12/2022
Type of Monitoring	Ambient Air
Test Location	Officer Colony
Monitoring Done By	MITCON
Date of Analysis	05/12/2022
	Date of Monitoring Type of Monitoring Test Location Monitoring Done By

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/	E

ALC: NO		STREET, ST.		A STATE OF THE OWNER	
Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	µg/M ³	11.6	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO ₂)	μg/M ³	14.6	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM10 micron	µg/M ³	55.8	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM2.5 micron	μg/M ³	25.4	≤ 60	USEPA 40 CFRCH
05	Ozone (O3)	µg/M ³	3.4	≤ 100	IS 5182
06	Lead (Pb)	μg/M ³	BDL	≤ 1.0	
07	Carbon Monoxide (CO)	mg/M ³	0.286	≤ 2.0	APHA - AAS
08	Ammonia (NH3)	μg/M ³	3.6	≤ 400	IS 5182
09	Benzene (C6H6)	µg/M ³	BDL	≤5	APHA - 401
10	Benzo(a)Pyrene (BaP)	ng/M ³	BDL	≤1	IS 5182
11	Arsenic (As)	ng/ M ³	BDL	≤6	IS 5182
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS APHA - AAS

REMARKS/OBSERVATIONS:

- > All above results are within National Ambient Air Quality standards.

For MITCON Consultancy & Engineering Services Lta

(Mrs.Kadambari Deshmukh)

Authorized Signatory Dr. Sandeep Jadhav Senior vice president

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Report Number : MITCON/2022-23/Decembr/12256

All		Issue Date: 12/12/2022
Client's Name & Address	Reference No.	MITCON/2022- 23/December/12256/7
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P).	Test Location	Near Guest House
Dalagnat (M.F).	Monitoring Done By	MITCÓN
	Date of Analysis	05/12/2022

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/	E
					hrs.(Avg)	-117-1	

Electron		RESULT		AND THE OWNER	
Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	µg/M ³	10.8	≤80	
02	Oxides of Nitrogen (NO ₂)	µg/M ³	14.0	\$ 80	IS 5182(Part 2)
03	Particulate Matter PM10 micron	µg/M ³	49.5	≤ 100	IS 5182(Part 6) IS 5182 (Part 23)
04	Particulate Matter PM2.5 micron	µg/M³	23.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O3)	μg/M ³	2.6	≤ 100	IS 5182
06	Lead (Pb)	µg/M ³	BDL	≤ 1.0	
07	Carbon Monoxide (CO)	mg/M ³	0.180		APHA - AAS
08	Ammonia (NH ₃)	µg/M ³	2.8	≤ 2,0	IS 5182
09	Benzene (C ₆ H ₆)		A DECEMBER OF	≤ 400	APHA - 401
10	Benzo(a)Pyrene (BaP)	μg/M ³	BDL	≤5	IS 5182
11		ng/ M ³	BDL	≤1	IS 5182
	Arsenic (As)	ng/ M ³	BDL	≤6	APHA - AAS
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS

REMARKS/OBSERVATIONS:

> All above results are within National Ambient Air Quality standards.

BDL: - Below Detection Limit.

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Authorized Signatory Dr. Sandeep Jadhav Senior vice president

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Report Number : MITCON/2022-23/Decembr/12256

Issue Date:12/12/2022

Reference No.	MITCON/2022- 23/December/12256/8
Date of Monitoring	03/12/2022
Type of Monitoring	Ambient Air
Test Location	Near Tirodi Village
Monitoring Done By	MITCON
Date of Analysis	05/12/2022
	Date of Monitoring Type of Monitoring Test Location Monitoring Done By

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/	E
						hrs.(Avg)	

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		-			A CONTRACTOR
Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	μg/M ³	11.0	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO ₂)	µg/M ³	14.8	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM10 micron	µg/M ³	51.3	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM2.5 micron	µg/M ³	24.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O3)	μg/M ³	2.9	≤ 100	IS 5182
06	Lead (Pb)	μg/M ³	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M ³	0.210	≤ 2.0	IS 5182
08	Ammonia (NH3)	µg/M ³	3.0	≤ 400	APHA - 401
09	Benzene (C ₆ H ₆)	µg/M ³	BDL	≤5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/M ³	BDL	≤1	IS 5182
11	Arsenic (As)	ng/M ³	BDL	≤6	APHA - AAS
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS

REMARKS/OBSERVATIONS:

- All above results are within National Ambient Air Quality standards.
- BDL: Below Detection Limit.

For MITCON Consultancy & Engineering Services Ltg

KUDenleh **Checked By** (Mrs.Kadambari Deshmukh)



zed Signatory Author Dr. Sendeep Jadhav Senior vice president

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Test Report

Report Number : MITCON/2022-23/December/12257

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022- 23/December/12257/3
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
Tirodi Manganese Mines L2=37.090 Ha Site, Dist:- Balaghat (M.P)	Test Location	Near Sampling Room
	Monitoring Done By	MITCON
	Date of Analysis	05/12/2022

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfali (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/	E
	1.2		RESULT	1		hrs.(Avg)	

Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	µg/M ³	11.2	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO ₂)	µg/M ³	15.0	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM10 micron	μg/M ³	58.6	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM2.5 micron	μg/M ³	27.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O3)	μg/M ³	3.3	≤ 100	IS 5182
06	Lead (Pb)	μg/M ³	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M ³	0.310	≤ 2.0	IS 5182
08	Ammonia (NH ₃)	μg/M ³	3.4	≤ 400	APHA - 401
09	Benzene (C ₆ H ₆)	µg/M ³	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/M ³	BDL	<u>≤1</u>	IS 5182
11	Arsenic (As)	ng/M ³	BDL	<u>≤6</u>	APHA - AAS
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS APHA - AAS

REMARKS/OBSERVATIONS:

- All above results are within National Ambient Air Quality standards.
 BDL: Below Detection Limit.

For MITCON Consultancy & Engineering Service

KUDEHLLE **Checked By** (Mrs.Kadambari Deshmukh)



Authorized Signatory Ør. Sandeep Jadhav Senior vice president

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Test Report

Report Number : MITCON/2022-23/December/12257

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022- 23/December/12257/4
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
Tirodi Manganese Mines L2=37.090 Ha Site, Dist:-	Type of Monitoring	Ambient Air
Balaghat (M.P).	Test Location	Near Dumping area
	Monitoring Done By	MITCON
	Date of Analysis	05/12/2022

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/ hrs.(Avg)	E

			RESULT	J.	MA
Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	µg/M ³	11.9	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO ₂)	μg/M ³	17.2	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM10 micron	µg/M ³	61.3	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM2.5 micron	µg/M ³	29.8	≤ 60	USEPA 40 CFRCH
05	Ozone (O3)	μg/M ³	3.5	≤ 100	IS 5182
06	Lead (Pb)	µg/M ³	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M ³	0.320	≤ 2.0	IS 5182
08	Ammonia (NH ₃)	µg/M ³	3.8	≤ 400	APHA - 401
09	Benzene (C6H6)	µg/M ³	BDL	≤5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M ³	BDL	≤1	IS 5182
11	Arsenic (As)	ng/ M ³	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS

REMARKS/OBSERVATIONS:

> All above results are within National Ambient Air Quality standards. TANCY & ENGINE

BDL: - Below Detection Limit.

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TITLOUI **Checked By**

(Mrs.Kadambari Deshmukh)

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Test Report

Report Number : MITCON/2022-23/December/12259

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022- 23/December/12259/3
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
Tirodi Manganese Mines North Railway Siding, Dist:- Balaghat (M.P).	Type of Monitoring	Ambient Air
	Test Location	North Railway Siding office
	Monitoring Done By	MITCON
	Date of Analysis	05/12/2022

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/	E
		1.			0.0	hrs (Avg)	E

Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	μg/M ³	10.8	≤80	IC E193/Dart 21
02	Oxides of Nitrogen (NO ₂)	µg/M ³	14.9	≤80	IS 5182(Part 2) IS 5182(Part 6)
03	Particulate Matter PM10 micron	μg/M ³	57.8	≤ 100	IS 5182 (Part 6)
04	Particulate Matter PM2.5 micron	μg/M ³	26.3	560	USEPA 40 CFRCH
05	Ozone (O3)	µg/M ³	3.4	≤ 100	
06	Lead (Pb)	µg/M ³	BDL	≤ 1.0	IS 5182
07	Carbon Monoxide (CO)	mg/M ³	0.320	\$ 2.0	APHA - AAS
08	Ammonia (NH ₃)	μg/M ³	3.8		IS 5182
09	Benzene (C6H6)	μg/M ³	BDL	≤400	APHA - 401
10	Benzo(a)Pyrene (BaP)	ng/ M ³	BDL	≤5	IS 5182
11	Arsenic (As)	ng/ M ³	and the second	<u>≤1</u>	IS 5182
12	Nickel (Ni)	ng/ M ³	BDL	<u>≤6</u> ≤20	APHA - AAS

REMARKS/OBSERVATIONS:

- > All above results are within National Ambient Air Quality standards. ANCY & ENGINEER
- BDL: Below Detection Limit.

For MITCON Consultancy & Engineering Services Lt

KUDEHUCH Checked By

(Mrs.Kadambari Deshmukh)

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uth ized Signatory Dr. Sandeep Jadhav Senior vice president

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Test Report

Report Number : MITCON/2022-23/December/12259

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022- 23/December/12259/4
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
Tirodi Manganese Mines North Railway Siding, Dist:- Balaghat (M.P).	Test Location	End of North Railway siding
	Monitoring Done By	MITCON
	Date of Analysis	05/12/2022

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/ hrs.(Avg)	E

RESULT								
Sr. No.	Description	Unit	Results	CPCB standard	Test Method			
01	Sulphur Dioxide (SO ₂)	μg/M ³	12.1	≤80	IS 5182(Part 2)			
02	Oxides of Nitrogen (NO ₂)	μg/M ³	15.5	≤ 80	IS 5182(Part 6)			
03	Particulate Matter PM10 micron	µg/M³	63.0	≤ 100	IS 5182 (Part 23)			
04	Particulate Matter PM2.5 micron	µg/M³	31.5	≤ 60	USEPA 40 CFRCH			
05	Ozone (O₃)	μg/M ³	3.6	≤ 100	IS 5182			
06	Lead (Pb)	μg/M ³	BDL	≤ 1.0	APHA - AAS			
07	Carbon Monoxide (CO)	mg/M ³	0.340	≤ 2.0	IS 5182			
08	Ammonia (NH ₃)	µg/M ³	4.0	≤ 400	APHA - 401			
09	Benzene (C ₆ H ₆)	μg/M ³	BDL	≤5	IS 5182			
10	Benzo(a)Pyrene (BaP)	ng/ M ³	BDL	≤1	IS 5182			
11	Arsenic (As)	ng/ M ³	BDL	≤6	APHA - AAS			
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS			

REMARKS/OBSERVATIONS:

All above results are within National Ambient Air Quality standards.

BDL: - Below Detection Limit.

For MITCON Consultancy & Engineering Service

Checked By (Mrs.Kadambari Deshmukh)



Authorized Signatory Dr. Sandeep Jadhav Senior vice president

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Format No. EME/LAB/Format 7.8/TR

Quarter October- November- December 2022

Test Report

Report Number : MITCON/2022-23/December/12260

Issue Date:12/12/2022

Reference No.	MITCON/2022- 23/December/12260/3
Date of Monitoring	03/12/2022
Type of Monitoring	Ambient Air
Test Location	South Railway Siding office
Monitoring Done By	MITCON
Date of Analysis	05/12/2022
	Date of Monitoring Type of Monitoring Test Location Monitoring Done By

OBSERVATION

DECUNT

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/ hrs (Avg)	E

No.InterventionInterventionCPCB standardTest Meth01Sulphur Dioxide (SO2) $\mu g/M^3$ 11.6 ≤ 80 IS 5182(Par02Oxides of Nitrogen (NO2) $\mu g/M^3$ 16.2 ≤ 80 IS 5182(Par03Particulate Matter PM10 micron $\mu g/M^3$ 58.0 ≤ 100 IS 5182 (Par04Particulate Matter PM2.5 micron $\mu g/M^3$ 29.5 ≤ 60 USEPA 40 CF05Ozone (O3) $\mu g/M^3$ 3.6 ≤ 100 IS 518206Lead (Pb) $\mu g/M^3$ BDL ≤ 1.0 APHA - AA07Carbon Monoxide (CO)mg/M³0.295 ≤ 2.0 IS 518208Ammonia (NH3) $\mu g/M^3$ BDL ≤ 5 IS 518210Benzene (C6H6) $\mu g/M^3$ BDL ≤ 5 IS 518211Arsenic (As) ng/M^3 BDL ≤ 1 IS 518212Nickel (Ni) ng/M^3 BDL ≤ 6 APHA - AA	Sr.	Description	Unit	Results	CPCB standard	
02 Oxides of Nitrogen (NO ₂) $\mu g/M^3$ 16.2 ≤ 80 IS \$182(Particulate Matter PM _{10 micron} 03 Particulate Matter PM _{10 micron} $\mu g/M^3$ 58.0 ≤ 100 IS \$182(Particulate Matter PM _{2.5 micron} 04 Particulate Matter PM _{2.5 micron} $\mu g/M^3$ 29.5 ≤ 60 USEPA 40 CF 05 Ozone (O ₃) $\mu g/M^3$ 3.6 ≤ 100 IS \$182 06 Lead (Pb) $\mu g/M^3$ BDL ≤ 1.0 APHA - AA 07 Carbon Monoxide (CO) mg/M ³ 0.295 ≤ 2.0 IS \$182 08 Ammonia (NH ₃) $\mu g/M^3$ 3.8 ≤ 400 APHA - AA 09 Benzene (C ₆ H ₆) $\mu g/M^3$ BDL ≤ 5 IS \$182 10 Benzo(a)Pyrene (BaP) ng/M ³ BDL ≤ 1 IS \$182 11 Arsenic (As) ng/M ³ BDL ≤ 6 APHA - AA	No.			Nesuns	CPCB standard	Test Method
02 Oxides of Nitrogen (NO2) $\mu g/M^3$ 16.2 ≤ 80 IS 5182(Particulate 03 Particulate Matter PM10 micron $\mu g/M^3$ 58.0 ≤ 100 IS 5182 (Particulate 04 Particulate Matter PM2.5 micron $\mu g/M^3$ 29.5 ≤ 60 USEPA 40 CF 05 Ozone (O3) $\mu g/M^3$ 3.6 ≤ 100 IS 5182 (Particulate 06 Lead (Pb) $\mu g/M^3$ 3.6 ≤ 100 IS 5182 07 Carbon Monoxide (CO) $m g/M^3$ 0.295 ≤ 2.0 IS 5182 08 Ammonia (NH3) $\mu g/M^3$ 3.8 ≤ 4000 APHA - A0 09 Benzene (C6H6) $\mu g/M^3$ BDL ≤ 5 IS 5182 10 Benzo(a)Pyrene (BaP) $n g/M^3$ BDL ≤ 1 IS 5182 11 Arsenic (As) $n g/M^3$ BDL ≤ 1 IS 5182 12 Nickel (Ni) $n g/M^3$ BDL ≤ 6 APHA - AA	01		µg/M ³	11.6	<80	IS 5192/Part 21
03 Particulate Matter PM _{10 micron} $\mu g/M^3$ 58.0 ≤ 100 IS 5182 (Particulate Matter PM _{2.5 micron} 04 Particulate Matter PM _{2.5 micron} $\mu g/M^3$ 29.5 ≤ 60 USEPA 40 CF 05 Ozone (O ₃) $\mu g/M^3$ 3.6 ≤ 100 IS 5182 06 Lead (Pb) $\mu g/M^3$ BDL ≤ 1.0 APHA - AA 07 Carbon Monoxide (CO) mg/M ³ 0.295 ≤ 2.0 IS 5182 08 Ammonia (NH ₃) $\mu g/M^3$ 3.8 ≤ 400 APHA - 40 09 Benzene (C ₆ H ₆) $\mu g/M^3$ BDL ≤ 5 IS 5182 10 Benzo(a)Pyrene (BaP) ng/M ³ BDL ≤ 1 IS 5182 11 Arsenic (As) ng/M ³ BDL ≤ 1 IS 5182 12 Nickel (Ni) $\pi a/M^3$ BDL ≤ 6 APHA - AA	02	Oxides of Nitrogen (NO ₂)		Contraction of the second s		IS 5182(Part 6)
04 Particulate Matter PM _{2.5 mlcron} $\mu g/M^3$ 29.5 ≤ 60 USEPA 40 CF 05 Ozone (O ₃) $\mu g/M^3$ 3.6 ≤ 100 IS 5182 06 Lead (Pb) $\mu g/M^3$ BDL ≤ 1.0 APHA - AA 07 Carbon Monoxide (CO) mg/M ³ 0.295 ≤ 2.0 IS 5182 08 Ammonia (NH ₃) $\mu g/M^3$ 3.8 ≤ 400 APHA - 40 09 Benzene (C ₆ H ₆) $\mu g/M^3$ BDL ≤ 5 IS 5182 10 Benzo(a)Pyrene (BaP) ng/M ³ BDL ≤ 1 IS 5182 11 Arsenic (As) ng/M ³ BDL ≤ 6 APHA - AA	03	Particulate Matter PM10 micron	µg/M ³	58.0	≤ 100	IS 5182 (Part 23)
05 Ozone (O ₃) $\mu g/M^3$ 3.6 100 $05PA 40 CP$ 06 Lead (Pb) $\mu g/M^3$ BDL ≤ 100 IS 5182 07 Carbon Monoxide (CO) mg/M^3 0.295 ≤ 2.0 IS 5182 08 Ammonia (NH ₃) $\mu g/M^3$ 3.8 ≤ 400 APHA - AA 09 Benzene (C ₆ H ₆) $\mu g/M^3$ BDL ≤ 5 IS 5182 10 Benzo(a)Pyrene (BaP) ng/M^3 BDL ≤ 5 IS 5182 11 Arsenic (As) ng/M^3 BDL ≤ 6 APHA - AA 12 Nickel (Ni) ng/M^3 BDL ≤ 6 APHA - AA	04	Particulate Matter PM2.5 mlcron	ug/M ³	29.5	< 60	
06 Lead (Pb) $\mu g/M^3$ BDL ≤ 1.0 APHA - AA 07 Carbon Monoxide (CO) mg/M ³ 0.295 ≤ 2.0 IS 5182 08 Ammonia (NH ₃) $\mu g/M^3$ 3.8 ≤ 400 APHA - AA 09 Benzene (C ₆ H ₆) $\mu g/M^3$ BDL ≤ 5 IS 5182 10 Benzo(a)Pyrene (BaP) ng/M ³ BDL ≤ 1 IS 5182 11 Arsenic (As) ng/M ³ BDL ≤ 6 APHA - AA 12 Nickel (Ni) $p g/M^3$ BDL ≤ 6 APHA - AA	05	Ozone (O3)				
07 Carbon Monoxide (CO) mg/M ³ 0.295 ≤ 2.0 IS 5182 08 Ammonia (NH ₃) $\mu g/M^3$ 3.8 ≤ 400 APHA - 40 09 Benzene (C ₆ H ₆) $\mu g/M^3$ BDL ≤ 5 IS 5182 10 Benzo(a)Pyrene (BaP) ng/M ³ BDL ≤ 1 IS 5182 11 Arsenic (As) ng/M ³ BDL ≤ 6 APHA - AA 12 Nickel (Ni) $p \pi / M^3$ BDL ≤ 6 APHA - AA	06	Lead (Pb)				
08 Ammonia (NH ₃) $\mu g/M^3$ 3.8 ≤ 400 APHA - 40 09 Benzene (C ₆ H ₆) $\mu g/M^3$ BDL ≤ 5 IS 5182 10 Benzo(a)Pyrene (BaP) ng/M ³ BDL ≤ 1 IS 5182 11 Arsenic (As) ng/M ³ BDL ≤ 6 APHA - AA 12 Nickel (Ni) ng/M ³ BDL ≤ 6 APHA - AA	07	Carbon Monoxide (CO)	And the second se	the second s	the second s	
09Benzene (C_6H_6) $\mu g/M^3$ BDL ≤ 5 IS 518210Benzo(a)Pyrene (BaP)ng/M^3BDL ≤ 1 IS 518211Arsenic (As)ng/M^3BDL ≤ 6 APHA - AA12Nickel (Ni)ng/M³BDL ≤ 6 APHA - AA	08	Ammonia (NH3)	the second s			
10 Benzo(a)Pyrene (BaP) ng/ M³ BDL ≤ 1 IS 5162 11 Arsenic (As) ng/ M³ BDL ≤ 1 IS 5182 12 Nickel (Ni) ng/ M³ BDL ≤ 6 APHA - AA	09	Benzene (C6H6)				And the second se
11Arsenic (As)ng/ M^3 BDLS 1IS 518212Nickel (Ni)ng/ M^3 BDL ≤ 6 APHA - AA	10	Benzo(a)Pyrene (BaP)		Million and an and a second		
12 Nickel (Ni) BOL S6 APHA - AA	11		and the second se			
	12	Nickel (Ni)	ng/ M ³	BDL		APHA - AAS APHA - AAS

REMARKS/OBSERVATIONS:

- > All above results are within National Ambient Air Quality stands
- ➢ BDL: Below Detection Limit.

For MITCON Consultancy & Engineering Services U

Checked By

(Mrs.Kadambari Deshmukh)

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Authorized Signatory Dr. Sandeep Jadhav Senior vice president

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Solutions for Sustainable Tomorrow

Test Report

Report Number : MITCON/2022-23/December/12260

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022- 23/December/12260/4
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
Tirodi Manganese Mines South Railway Siding, Dist:- Balaghat (M.P).	Test Location	End of South Railway siding
	Monitoring Done By	MITCON
	Date of Analysis	05/12/2022

OBSERVATION

Ambient Temp. °C	Dry Bulb Temp. °C	Wet Bulb Temp. °C	Relative Humidity % RH	Sampling Duration In Min	Rainfall (mm)	Wind Velocity	Wind Direction
30	30	13	50	1440	0.0	5.0 km/ hrs.(Avg)	E

2 10 10 10 10 10 10 10 10 10 10 10 10 10		RESULT	123-	and the second	
Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO ₂)	μg/M ³	11.2	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO ₂)	µg/M ³	15.4	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM10 micron	µg/M ³	56.9	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM2.5 micron	μg/M ³	27.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O3)	μg/M ³	3.6	≤ 100	IS 5182
06	Lead (Pb)	μg/M ³	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M ³	0.310	≤ 2.0	IS 5182
08	Ammonia (NH ₃)	μg/M ³	3.7	≤ 400	APHA - 401
09	Benzene (C ₆ H ₆)	μg/M ³	BDL	≤5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M ³	BDL	<u>≤1</u>	IS 5182
11	Arsenic (As)	ng/ M ³	BDL	≤6	APHA - AAS
12	Nickel (Ni)	ng/ M ³	BDL	≤ 20	APHA - AAS

REMARKS/OBSERVATIONS:

> All above results are within National Ambient Air Quality standards.

BDL: - Below Detection Limit.

For MITCON Consultancy & Engineering Services CONIC KUD-eoule **Checked By** (Mrs.Kadambari Deshmukh) CON

Authorized Signatory Dr. Sandeep Jadhav Senior vice president

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Test Report

Report Number : MITCON/2022-23/December/12258

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022-23/December/12258/3
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Noise
Tirodi Manganese Mines L3=4.419 Ha Site, Dist:- Balaghat (M.P).	Monitoring Done By	MITCON

READINGS

Sr. No.	Test Location	Unit	Readings	
01	Near Pit Office	dB(A)	61.3	

REMARKS / OBSERVATIONS:

Limits: The Madhya Pradesh Pollution Control Board has prescribe 75 dB (A) as an upper limit of Noise Level during daytime.

For MITCON Consultancy & Engineering Services Ltd.

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Authonized Signatory Dr. Sandeep Jadhav (Senior Vice President)

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Test Report

Report Number : MITCON/2022-23/Decembr/12256

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022-23/December/12256/9
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Noise
Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P).	Monitoring Done By	MITCON

READINGS

Sr. No.	Test Location	Unit	Readings	
01	Mine Office Premises	dB(A)	58.9	
02	Dumper Loader	dB(A)	71 3	
03	Jack hammer Drill Machine	dB(A)	71.8	
04	Near Excavator	dB(A)	71.3	

REMARKS / OBSERVATIONS:

Limits: The Madhya Pradesh Pollution Control Board has prescribe 75 dB (A) as an upper limit of Noise Level during daytime.

For MITCON Consultancy & Engineering Services Ltd.

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Checked By (Mrs. Kadambari Deshmukh)



Authorized Signatory Dr. Sandeep Jadhav (Senior Vice President)

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Test Report

Report Number : MITCON/2022-23/December/12257

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022-23/December/12257/5
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Noise
Tirodi Manganese Mines L2=37.090 Ha Site, Dist:-	Monitoring Done By	MITCON
Balaghat (M.P).		

READINGS

58.0
67.3

REMARKS / OBSERVATIONS:

Limits:

The Madhya Pradesh Pollution Control Board has prescribe 75 dB (A) as an upper limit of Noise Level during daytime.

For MITCON Consultancy & Engineering Services Ltd.

<u>Kuperuleh</u> Checked By (Mrs. Kadambari Deshmukh)



Signatory Authorized Dr. Sandeep Jadhav (Senior Vice President)

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Test Report

Report Number : MITCON/2022-23/December/12259

Issue Date:12/12/2022

Reference No.	MITCON/2022-23/December/12259/5
Date of Monitoring	03/12/2022
Type of Monitoring	Ambient Noise
Monitoring Done By	MITCON
	Date of Monitoring Type of Monitoring

READINGS

Sr. No.	Test Location	Unit	Readings	
01	North Railway Siding office	dB(A)	56.7	
02	End of North Railway siding	dB(A)	59.0	

REMARKS / OBSERVATIONS:

Limits: The Madhya Pradesh Pollution Control Board has prescribe 75 dB (A) as an upper limit of Noise Level during daytime.

For MITCON Consultancy & Engineering Services Lto & ENGINEER

kuperile **Checked By** (Mrs. Kadambari Deshmukh)



Authorized Signatory Dr. Sandeep Jadhav (Senior Vice President)

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Test Report

Report Number : MITCON/2022-23/December/12260

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022-23/December/12260/5
M/s MOIL LIMITED,	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Noise
Tirodi Manganese Mines South Railway Siding, Dist:- Balaghat (M.P).	Monitoring Done By	MITCON

READINGS

Sr. No.	Test Location	Unit	Readings
01	South Railway Siding office	dB(A)	56.9
02	End of South Railway siding	dB(A)	54.0

REMARKS / OBSERVATIONS:

Limits: The Madhya Pradesh Pollution Control Board has prescribe 75 dB (A) as an upper limit of Noise Level during daytime.

For MITCON Consultancy & Engineering Services Ltd.

4 Denlle Checked By

(Mrs. Kadambari Deshmukh)



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Solutions for Sustainable Tomorrow

Test Report

Report Number : MITCON/2022-23/December/12258

Issue Date:12/12/2022

Client's Name & Address	Sample Details		
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12258/1	
	Name of Sample	Ground Water	
Tirodi Manganese Mines L3=4.419 Ha Site, Dist:-	Sample Details	Near Pit office Water supply	
Balaghat (M.P)	Container Details	1 lit plastic can	
	Sample Collected By	MITCON	
	Method of sampling	IS 3025(Part I)	
	Sample Collected On	03/12/2022	
	Date of Sample Receipt	05/12/2022	
	Analysis Start Date	05/12/2022	
	End Date of Analysis	12/12/2022	

ANALYSIS RESULTS

Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.23	-	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	< 5.0	mg/l	N.S	APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	≤1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	277.9	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	138.95	mg/l	≤200	APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	34.73	mg/l	≤ 75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	17.36	mg/l	≤ 30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	118.95	Mg/l	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/I	<1	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
11	Chloride as Cl	30.34	mg/l	s 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	16.12	mg/l	≤ 200	APHA 4500 - SO4 E, 4-199 TO 4-200, 23rd Ed 2017
13	Iron as Fe	< 0.05	mg/l	≤ 0.3	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
14	Nitrate as NO3	4.23	mg/l	≤45	APHA 4500 NO3-B,4-127 23rd Ed 2017
15	E.coli	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
16	Total Coliform	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
17	colour	< 5	HZ	≤ 5	IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Agreeable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

REMARKS / OBSERVATIONS:

 The above water sample is complying with resulted limits as
MITCON Consultance 8 5-1 \$ 10500:2012.

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For MITCON Consultancy & Engineering Services kurdenllah **Checked By**

(Mrs. Kadambari Deshmukh)

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Signatory Authori (Dr.Sandeep Jadhav) Senior Vice President

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Quarter October- November- December 2022

Solutions for Sustainable Tomorrow

Test Report

Report Number : MITCON/2022-23/Decembr/12256

Client's Name & Address	1	Issue Date:12/12/2022
		Sample Details
M/s MOIL LIMITED,	Sample Code	MITCON/2022- 23/December/12256/1
Tirodi Manganese Mines L1=254.593 Ha Site,	Name of Sample	Ground Water
Dist:- Balaghat (M.P)	Sample Details	Open Dugwell No. 3
	Container Details	1 lit plastic can
	Sample Collected By	MITCON
	Method of sampling	IS 3025(Part I)
	Sample Collected On	03/12/2022
	Date of Sample Receipt	05/12/2022
	Analysis Start Date	05/12/2022
	End Date of Analysis	12/12/2022

ANALYSIS RESULTS

Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.23		6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	< 5	mg/l	N.S	APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	<1	NTU	\$1	IS 2025 Part 10 (0.1 - 2005)
04	Total Dissolved Solids	295.1	mg/l	\$ 500	IS: 3025 Part-10 (R.A : 2002)
05	Total Hardness as CaCO3	147.55	mg/l	≤200	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017 APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	36.88	mg/l	≤ 75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	18.44	mg/l	\$ 30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	127.55	Mg/I	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/I	<1	ADVA 4500 F. D.4 004+ 4 0402 J. T. HANNE
11	Chloride as Cl	32.20	mg/l	≤ 250	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
12	Sulphate as SO4	16.01	mg/l	≤ 200	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
13	Iron as Fe	< 0.05	mg/l	≤0.3	APHA 4500 -SO4 -E, 4-199 TO 4-200, 23rd Ed 2017
14	Nitrate as NO3	4.20	mg/l	<u>≤45</u>	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
15	E.coli	Absent	MPN/100ml	Absent	APHA 4500 NO3-B,4-127 23rd Ed 2017
16	Total Coliform	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
17	colour	<5	HZ		IS: 1622 (R.A : 2014)
			112	≤ 5	IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Agreeable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

REMARKS / OBSERVATIONS:

The above water sample is complying with required in the per IS 10500:2012.

For MITCON Consultancy & Engineering Services Ltd

(Mrs. Kadambari Deshmukh)

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Authorized Signatory (Dr.Sandeep Jadhav) Senior Vice President

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Quarter October- November- December 2022

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Test Report

Report Number : MITCON/2022-23/Decembr/12256

Issue Date:12/12/2022

Client's Name & Address		Sample Details	
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12256/2	
	Name of Sample	Waste Water	
Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P)	Sample Details	Mine discharge water Block No. A-B Pit	
	Container Details	1 lit plastic can	
	Sample Collected By	MITCON	
	Method of sampling	IS 3025(Part I)	
	Sample Collected On	03/12/2022	
	Date of Sample Receipt	05/12/2022 05/12/2022	
	Analysis Start Date		
	End Date of Analysis	12/12/2022	

Sr. No.	Characteristic	Results	Unit	Permissible Limit as per Consent Condition	Test Methods
01	pH at 25°C	7.21	1.0	5.5 to 9.0	APHA 4500 H+ A, 4-95, 23rd Ed. 2017
02	Dissolved Oxygen	3.4	mg/l	Are sale	IS: 3025 Part 38
03	Chemical Oxygen Demand	65.0	mg/l	250	APHA 5220 C,5-20 to 5-21 23rd Ed 2017
04	Biochemical Oxygen	21.4	mg/l	30	IS :3025 (Part 44)
05	Total suspended solids	27.7	mg/l	100	APHA 2540 D,2-70 to 2-71 23rd Ed 2017
06	Oil and grease	< 5.0	mg/l	10	APHA 5520 B,5-42 to 5-43 23rd Ed 2017
07	Manganese	0.28	mg/l	2	APHA 3111 B,3-18 to 3-21 23rd Ed 2017

REMARKS / OBSERVATIONS:

For MITCON Consultancy & Engineering Services Ltd

Checked By (Mrs. Kadambari Deshmukh)

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Authorized Signatory (Dr.Sandeep Jadhav) Senior Vice President

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Test Report

Report Number : MITCON/2022-23/Decembr/12256

Client's Name & Address	1	Issue Date:12/12/2022			
		Sample Details			
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12256/3			
	Name of Sample	Ground water			
Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P)	Sample Details	Officer colony water supply			
	Container Details	1 lit plastic can			
	Sample Collected By	MITCON			
	Method of sampling	IS 3025(Part I)			
	Sample Collected On	03/12/2022			
	Date of Sample Receipt	05/12/2022			
	Analysis Start Date	05/12/2022			
	End Date of Analysis	12/12/2022			

ANALYSIS RESULTS

No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.23		6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	< 5.0	mg/l	N.S	APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	s1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	277.5	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	138.5	mg/l	≤200	APHA 2340 C ,2-48 to 2-50,23rd Ed 2017 APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	34.65	mg/l	≤ 75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	17.32	mg/l	≤ 30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	118.6	Mg/I	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/I	<1	ADMA AFOO F D COOL A DIOD A DIOD
11	Chloride as Cl	29.4	mg/l	≤ 250	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
12	Sulphate as SO4	16.3	mg/l	≤ 200	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
13	Iron as Fe	<0.05	mg/l	≤ 0.3	APHA 4500 SO4E, 4-199 TO 4-200, 23rd Ed 2017
14	Nitrate as NO3	4.34	mg/l	\$45	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
15	E.coli	Absent	MPN/100ml	Absent	APHA 4500 NO3-B,4-127 23rd Ed 2017
16	Total Coliform	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
17	colour	< 5	HZ	≤5	IS: 1622 (R.A : 2014)
•				20	IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Agreeable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

REMARKS / OBSERVATIONS:

Mrs. Kadambari Deshmukh)

2 Authorized Signatory (Dr. Sandeep Jadhav) Senior Vice President

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Quarter October- November- December 2022

Test Report

Report Number : MITCON/2022-23/Decembr/12256

		Issue Date:12/12/2022		
Client's Name & Address	Sample Details			
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12256/4		
	Name of Sample	Ground Water		
Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P)	Sample Details	Staff Quarter water supply		
	Container Details	1 lit plastic can		
	Sample Collected By	MITCON		
	Method of sampling	IS 3025(Part I)		
	Sample Collected On	03/12/2022		
	Date of Sample Receipt	05/12/2022		
	Analysis Start Date	05/12/2022		
	End Date of Analysis	12/12/2022		

ANALYSIS RESULTS

Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.12	*	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	< 5.0	mg/l	N.S	APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	≤1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	241.4	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	120.7	mg/l	≤200	APHA 2340 C, 2-48 to 2-50, 23rd Ed 2017 APHA 2340 C ,2-48 to 2-50, 23rd Ed 2017
06	Calcium as Ca	30.17	mg/l	≤ 75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	15.08	mg/l	≤ 30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	100.8	Mg/l	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10 🖉	Fluoride as F	< 0.1	Mg/I	<1	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
11	Chloride as Cl	34.4	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	17.67	mg/l	≤ 200	
13	Iron as Fe	< 0.05	mg/l	≤0.3	APHA 4500 -SO4E, 4-199 TO 4-200, 23rd Ed 2017
14	Nitrate as NO3	4.53	mg/l	≤45	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
15	E.coli	Absent	MPN/100ml	Absent	APHA 4500 NO3-B,4-127 23rd Ed 2017
16	Total Coliform	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
17	colour	<5	HZ	≤ 5	IS: 1622 (R.A : 2014) IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Agreeable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

REMARKS / OBSERVATIONS:

For MITCON Consultancy & Engineering Services kup enlos CON **Checked By** NO

(Mrs. Kadambari Deshmukh)

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Authorized Signatory (Dr.Sandeep Jadhav) Senior Vice President

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Quarter October- November- December 2022

Test Report

Report Number : MITCON/2022-23/December/12257

Issue Date:12/12/2022

Client's Name & Address	Sample Details		
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12257/1	
	Name of Sample	Ground Water	
Tirodi Manganese Mines L2=37.090 Ha Site,	Sample Details	Near Sampling Room Water supply	
Dist:- Balaghat (M.P)	Container Details	1 lit plastic can	
	Sample Collected By	MITCON	
	Method of sampling	IS 3025(Part I)	
	Sample Collected On	03/12/2022	
	Date of Sample Receipt	05/12/2022	
	Analysis Start Date	05/12/2022	
	End Date of Analysis	12/12/2022	

ANALYSIS RESULTS

Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.19		6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	< 5.0	mg/l	N.S	APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	≤1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	246.7	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	123.37	mg/l	≤200	APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	30.83	mg/l	≤ 75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magneslum as Mg	15.41	mg/l	≤ 3 0	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	103.35	Mg/I	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/l	<1	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
11	Chloride as Cl	30.15	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	15.23	mg/l	≤ 200	APHA 4500 – SO4E, 4-199 TO 4-200, 23rd Ed 2017
13	Iron as Fe	< 0.05	mg/l	≤0.3	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
14	Nitrate as NO3	4.02	mg/l	\$45	APHA 4500 NO3-B,4-127 23rd Ed 2017 (using AAS)
15	E.coli	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
16	Total Coliform	Absent	MPN/100ml	Absent	
17	colour	<5	HZ	≤ 5	IS: 1622 (R.A : 2014) IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Agreeable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

REMARKS / OBSERVATIONS:

The above water sample is complying with required fiftheres per IS 10500:2012.

For MITCON Consultancy & Engineering Services

(Mrs. Kadambari Deshmukh)

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uthorized Signatory (Dr.Sandeep Jadhav) Senior Vice President

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Test Report

Report Number : MITCON/2022-23/December/12257

Issue Date:12/12/2022

Client's Name & Address	Sample Details		
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12257/2	
	Name of Sample	Ground water	
Tirodi Manganese Mines L2=37.090 Ha Site, Dist:- Balaghat (M.P)	Sample Details	Near Dumping area water supply	
	Container Details	1 lit plastic can	
	Sample Collected By	MITCON	
	Method of sampling	IS 3025(Part I)	
	Sample Collected On	03/12/2022	
	Date of Sample Receipt	05/12/2022	
	Analysis Start Date	05/12/2022	
	End Date of Analysis	12/12/2022	

ANALYSIS RESULTS

01		Results	Unit	Limits as per IS 10500:2012	Test Methods
Contraction of the local data	pH at 25C	7.10	- P.O	6.5 to 8.5	ADUA 4500 HIL & 4 OF DD. IF LOOK
02	Total suspended solids	< 5.0	mg/l	N.S	APHA 4500 H+, A, 4-95, 23rd Ed 2017 APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	\$1	
04	Total Dissolved Solids	312.1	mg/l	≤ 500	IS: 3025 Part-10 (R.A : 2002)
05	Total Hardness as CaCO3	156.07	mg/l	≤200	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017 APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	39.01	mg/l	≤ 75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	19.50	mg/l	≤ 30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	136.05	Mg/I	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/I	<1	
11	Chloride as Cl	30.01	mg/l	≤ 250	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
12	Sulphate as SO4	14.01	mg/l	≤ 200	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
13	Iron as Fe	<0.05	mg/l	<u>≤ 0.3</u>	APHA 4500 - SO4 E, 4-199 TO 4-200, 23rd Ed 2017
14	Nitrate as NO3	4.01	mg/l		APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
15	E.coli	Absent	MPN/100ml	Absent	APHA 4500 NO3-B,4-127 23rd Ed 2017
16	Total Coliform	Absent	MPN/100ml	and the second se	IS: 1622 (R.A : 2014)
17	colour	<5	HZ	Absent	IS: 1622 (R.A : 2014)
			112	≤5	IS: 3025 Part-4 (Rev.1, RA 2012)
	odour S / OBSERVATIONS CON Consultancy & CODC: UCC Consultancy & CODC: Consultancy & CODC: CODC: COD	Agreeable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

REMARKS / OBSERVATIONS:

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Quarter October- November- December 2022

Test Report

Report Number : MITCON/2022-23/December/12259

Issue Date:12/12/2022

Client's Name & Address	Sample Details		
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12259/1	
	Name of Sample	Ground Water	
Tirodi Manganese Mines North Railway Siding, Dist:- Balaghat (M.P)	Sample Details	North Railway siding water supply	
	Container Details	1 lit plastic can	
	Sample Collected By	MITCON	
	Method of sampling	IS 3025(Part I)	
	Sample Collected On	03/12/2022	
	Date of Sample Receipt	05/12/2022	
	Analysis Start Date	05/12/2022	
	End Date of Analysis	12/12/2022	

ANALYSIS RESULTS

Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.12	-	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	8.0	mg/l	N.S	APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	\$1	IS TOTEL VIEW AND
04	Total Dissolved Solids	296.3	mg/l	≤ 500	IS: 3025 Part-10 (R.A : 2002)
05	Total Hardness as CaCO3	148.15	mg/l	≤200	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017 APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	37.03	mg/l	≤ 75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	18.51	mg/l	≤30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	128.15	Mg/I	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/I	4	
11	Chloride as Cl	31.01	mg/l	≤ 250	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
12	Sulphate as SO4	15.45	mg/l	≤ 200	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
13	Iron as Fe	< 0.05	mg/l	≤ 0.3	APHA 4500 -SO4E, 4-199 TO 4-200, 23rd Ed 2017
14	Nitrate as NO3	3.01	mg/l	<u>≤0.5</u> ≤45	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
15	E.coli	Absent	MPN/100ml	Absent	APHA 4500 NO3-B,4-127 23rd Ed 2017
16	Total Coliform	Absent	MPN/100ml		IS: 1622 (R.A : 2014)
17	colour	<5	HZ	Absent	IS: 1622 (R.A : 2014)
		-3	HZ I	≤5	IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Aggreable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

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REMARKS / OBSERVATIONS:

The above water sample is complying with required thinks as per IS 10500:2012. . NG

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For MITCON Consultancy & Engineering Services NO

(Mrs. Kadambari Deshmukh)

ed Signatory (Or:Sandeep Jadhav) Senior Vice President

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Test Report

Report Number : MITCON/2022-23/December/12259

Issue Date:12/12/2022

Client's Name & Address	Sample Details		
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12259/2	
	Name of Sample	Ground water	
Tirodi Manganese Mines North Railway Siding,	Sample Details	End of North railway siding water supply	
Dist:- Balaghat (M.P)	Container Details	1 lit plastic can	
	Sample Collected By	MITCON	
	Method of sampling	IS 3025(Part I)	
	Sample Collected On	03/12/2022	
	Date of Sample Receipt	05/12/2022	
	Analysis Start Date	05/12/2022	
	End Date of Analysis	12/12/2022	

ANALYSIS RESULTS

Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.23	+	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	12.9	mg/l	N.S	APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	s1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	341.2	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	170.6	mg/l	≤200	APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	42.64	mg/l	≤75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	21.3	mg/l	≤ 30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	136.2	Mg/I	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/l	<1	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
11	Chloride as Cl	31.42	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	17.12	mg/l	≤ 200	APHA 4500 -SO4E, 4-199 TO 4-200, 23rd Ed 2017
13	Iron as Fe	< 0.05	mg/l	≤ 0.3	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
14	Nitrate as NO3	4.31	mg/l	≤45	APHA 4500 NO3-B,4-127 23rd Ed 2017
15	E.coli	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
16	Total Coliform	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
17	colour	< 5	HZ	≤ 5	IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Aggreable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

For MITCON Consultancy & Engineering Services Ltd

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Authorized Signatory (Dr. Sandeep Jadhav) Senior Vice President

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Solutions for Sustainable Tomorrow

Environment Management and Engineering Division (Environmental Laboratory)

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ISO 45001:2018 (OHSAS)Certified Laboratory.

MoEF & CC recognized laboratory

Format No. EME/LAB/Format 7.8/TR

Quarter October- November- December 2022

Solutions for Sustainable Tomorrow

Test Report

Report Number : MITCON/2022-23/December/12260

Issue Date:12/12/2022

Client's Name & Address	Sample Details			
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12260/1		
	Name of Sample	Ground Water		
Tirodi Manganese Mines South Railway Siding,	Sample Details	South Railway siding water supply		
Dist:- Balaghat (M.P)	Container Details	1 lit plastic can		
	Sample Collected By	MITCON		
	Method of sampling	IS 3025(Part I)		
	Sample Collected On	03/12/2022		
	Date of Sample Receipt	05/12/2022		
	Analysis Start Date	05/12/2022		
	End Date of Analysis	12/12/2022		

ANALYSIS RESULTS

Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.07	-	6.5 to 8.5	APHA 4500 HL A 4 05 33-4 54 543
02	Total suspended solids	12.0	mg/l	N.S	APHA 4500 H+, A, 4-95, 23rd Ed 2017 APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	<1	NTU	\$1	IC DOOD A LAD IN A
04	Total Dissolved Solids	212.4	mg/l	≤ 500	IS: 3025 Part-10 (R.A : 2002)
05	Total Hardness as CaCO3	106.7	mg/l	≤200	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017 APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	26.5	mg/l	≤75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	13.8	mg/l	≤30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	89.3	Mg/I	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/l	<1	
11	Chloride as Cl	27.23	mg/l	≤ 250	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
12	Sulphate as SO4	12.12	mg/l	≤ 200	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
13	Iron as Fe	< 0.05	mg/l	≤ 0.3	APHA 4500 -SO4E, 4-199 TO 4-200, 23rd Ed 2017
14	Nitrate as NO3	4.01	mg/l	<u>5</u>	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
15	E.coli	Absent	MPN/100ml	Absent	APHA 4500 NO3-B,4-127 23rd Ed 2017
16	Total Coliform	Absent	MPN/100ml		IS: 1622 (R.A : 2014)
17	colour	<5	HZ	Absent	IS: 1622 (R.A : 2014)
			12	≤ 5	IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Aggreable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

REMARKS / OBSERVATIONS:

The above water sample is complying with required in the sper IS 10500:2012. . ERING

For MITCON Consultancy & Engineering Services Checked By CON CON

(Mrs. Kadambari Deshmukh)

Authori ed Signatory (Dr.Sandeep Jadhav) Senior Vice President

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Quarter October- November- December 2022

Solutions lo: Sustainable Tomorrow

Test Report

Report Number : MITCON/2022-23/December/12260

Issue Date:12/12/2022

Client's Name & Address	Sample Details		
M/s MOIL LIMITED,	Sample Code	MITCON/2022-23/December/12260/2	
	Name of Sample	Ground water	
Tirodi Manganese Mines South Railway Siding,	Sample Details	End of South railway siding water supply	
Dist:- Balaghat (M.P)	Container Details	1 lit plastic can	
	Sample Collected By	MITCON	
	Method of sampling	IS 3025(Part I)	
	Sample Collected On	03/12/2022	
	Date of Sample Receipt	05/12/2022	
	Analysis Start Date	05/12/2022	
	End Date of Analysis	12/12/2022	

ANALYSIS RESULTS

Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.24		6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	14.0	mg/l	N.S	APHA 2540 D,2-70 to 2-71 23rd ed 2017
03	Turbidity	<1	NTU	s1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	241.2	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	120.5	mg/l	≤200	APHA 2340 C ,2-48 to 2-50,23rd Ed 2017
06	Calcium as Ca	30.12	mg/l	≤75	APHA 3500 Ca B , 3-69 to 3-70 , 23rd Ed. 2017
07	Magnesium as Mg	15.06	mg/l	≤ 30	APHA 3500 Mg B, 3-86 , 23rd Ed. 2017
08	Mangnese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as Caco3	100.5	Mg/I	<200	APHA 2320 B ,2-37 to 2-39 23rd Ed 2017
10	Fluoride as F	< 0.1	Mg/l	A <1	APHA 4500 F- D 4-90 to 4-9123rd Ed 2017
11	Chloride as Cl	30.4	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	14.23	mg/l	≤200	APHA 4500 – SO4 - E, 4-199 TO 4-200, 23rd Ed 2017
13	Iron as Fe	< 0.05	mg/l	≤ 0.3	APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 APHA 3111 B, 3-18 TO 3-21, 23rd Ed 2017 (using AAS)
14	Nitrate as NO3	4.5	mg/l	\$45	APHA 4500 NO3-B,4-127 23rd Ed 2017 (dsing AAS)
15	E.coli	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
16	Total Coliform	Absent	MPN/100ml	Absent	IS: 1622 (R.A : 2014)
17	colour	< 5	HZ	≤ 5	IS: 3025 Part-4 (Rev.1, RA 2012)
18	odour	Aggreable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

REMARKS / OBSERVATIONS:

For MITCON Consultancy & Engineering Services Lte Standard & Engin



zed Signatory Author (Dr. Sandeep Jadhav) Senior Vice President

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