

Format No. EME/LAB/Format 7.8/TR

**Quarter October- November- December 2022**

**Test Report**

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

Issue Date:12/12/2022

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

**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 <sub>2</sub> )	µg/M <sup>3</sup>	12.5	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	15.3	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	61.9	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	32.8	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.6	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.310	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.9	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	BDL	≤ 20	APHA - AAS

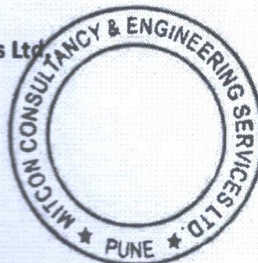
**REMARKS/OBSERVATIONS:**

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

For MITCON Consultancy & Engineering Services Ltd

*Kudambari*  
Checked By

(Mrs.Kadambari Deshmukh)



*(Signature)*  
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  M/s MOIL LIMITED,  Tirodi Manganese Mines L1=254.593 Ha Site, Dist- Balaghat (M.P)	Reference No.	MITCON/2022- 23/December/12256/5
	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
	Test Location	Near Mine 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 <sub>2</sub> )	µg/M <sup>3</sup>	12.4	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	16.0	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	56.4	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	26.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.2	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.324	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.6	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	BDL	≤ 20	APHA - AAS

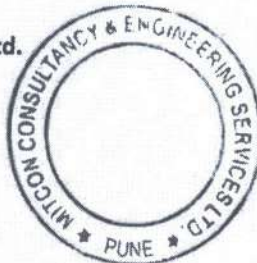
**REMARKS/OBSERVATIONS:**

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

For MITCON Consultancy & Engineering Services Ltd.

*Kudambari*  
Checked By

(Mrs.Kadambari Deshmukh)



*(Signature)*  
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  M/s MOIL LIMITED,  Tirodi Manganese Mines L1=254.593 Ha Site, Dist- Balaghat (M.P).	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

**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 <sub>2</sub> )	µg/M <sup>3</sup>	11.6	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	14.6	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	55.8	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	25.4	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.4	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.286	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.6	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	BDL	≤ 20	APHA - AAS

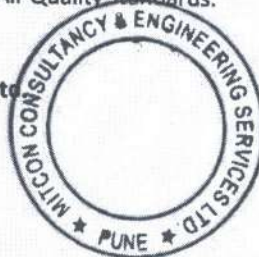
**REMARKS/OBSERVATIONS:**

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

For MITCON Consultancy & Engineering Services Ltd

*Kuparuleh*  
Checked By

(Mrs.Kadambari Deshmukh)



*[Signature]*

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  M/s MOIL LIMITED,  Tirodi Manganese Mines L1=254.593 Ha Site, Dist- Balaghat (M.P).	Reference No.	MITCON/2022- 23/December/12256/7
	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
	Test Location	Near Guest House
	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 hrs.(Avg)	Wind Direction
30	30	13	50	1440	0.0	5.0 km/	E

**RESULT**

Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO <sub>2</sub> )	µg/M <sup>3</sup>	10.8	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	14.0	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	49.5	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	23.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	2.6	≤100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.180	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	2.8	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	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 Ltd

Checked By  
*Kudambari*

(Mrs.Kadambari Deshmukh)



*Dr. Sandeep*

Authorized Signatory

Dr. Sandeep Jadhav

Senior vice president

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**MITCON Consultancy & Engineering Services Ltd.**

Environment Management and Engineering Division

(Environmental Laboratory)

Agriculture College Campus, Next to DIC office, Shivaji Nagar, Pune. 411 005,

Ph. No. 66289405/400, email: emelab@mitconindia.com

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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	Reference No.	MITCON/2022-23/December/12256/8
M/s MOIL LIMITED,  Tirodi Manganese Mines L1=254.593 Ha Site, Dist:-Balaghat (M.P).	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

**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 <sub>2</sub> )	µg/M <sup>3</sup>	11.0	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	14.8	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	51.3	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	24.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	2.9	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.210	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.0	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	BDL	≤ 20	APHA - AAS

**REMARKS/OBSERVATIONS:**

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

For MITCON Consultancy &amp; Engineering Services Ltd

*Kadambari*  
Checked By

(Mrs.Kadambari Deshmukh)



*Sandeep*  
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	Reference No.	MITCON/2022-23/December/12257/3
M/s MOIL LIMITED,  Tirodi Manganese Mines L2=37.090 Ha Site, Dist:-Balaghat (M.P)	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
	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	Rainfall (mm)	Wind Velocity hrs.(Avg)	Wind Direction
30	30	13	50	1440	0.0	5.0 km/	E

RESULT

Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO <sub>2</sub> )	µg/M <sup>3</sup>	11.2	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	15.0	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	58.6	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	27.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.3	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.310	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.4	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	BDL	≤ 20	APHA - AAS

REMARKS/OBSERVATIONS:

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

For MITCON Consultancy &amp; Engineering Services Ltd.

Kudambari  
Checked By

(Mrs.Kadambari Deshmukh)



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

<b>Client's Name &amp; Address</b>	<b>Reference No.</b>	<b>MITCON/2022-23/December/12257/4</b>
<b>M/s MOIL LIMITED,</b> Tirodi Manganese Mines L2=37.090 Ha Site, Dist- Balaghat (M.P).	<b>Date of Monitoring</b>	03/12/2022
	<b>Type of Monitoring</b>	Ambient Air
	<b>Test Location</b>	Near Dumping area
	<b>Monitoring Done By</b>	MITCON
	<b>Date of Analysis</b>	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 <sub>2</sub> )	µg/M <sup>3</sup>	11.9	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	17.2	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	61.3	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	29.8	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.5	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.320	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.8	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	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 Ltd.

*Kadambari*  
Checked By  
(Mrs.Kadambari Deshmukh)



*Sandeep Jadhav*  
Authorized Signatory  
Dr. Sandeep Jadhav  
Senior vice president

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Environment Management and Engineering Division

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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  M/s MOIL LIMITED,  Tirodi Manganese Mines North Railway Siding, Dist:- Balaghat (M.P).	Reference No.	MITCON/2022-23/December/12259/3
	Date of Monitoring	03/12/2022
	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/ hrs.(Avg)	E

**RESULT**

Sr. No.	Description	Unit	Results	CPCB standard	Test Method
01	Sulphur Dioxide (SO <sub>2</sub> )	µg/M <sup>3</sup>	10.8	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	14.9	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	57.8	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	26.3	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.4	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.320	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.8	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	BDL	≤ 20	APHA - AAS

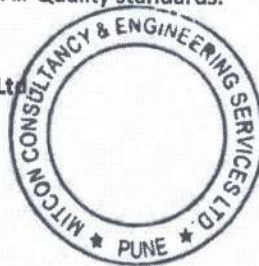
**REMARKS/OBSERVATIONS:**

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

For MITCON Consultancy &amp; Engineering Services Ltd.

*Kadambari*  
Checked By

(Mrs.Kadambari Deshmukh)



*Sandeep*  
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/12259

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022-23/December/12259/4
M/s MOIL LIMITED,  Tirodi Manganese Mines North Railway Siding, Dist:- Balaghat (M.P).	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Air
	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 <sub>2</sub> )	µg/M <sup>3</sup>	12.1	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	15.5	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	63.0	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	31.5	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.6	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.340	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	4.0	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	BDL	≤ 20	APHA - AAS

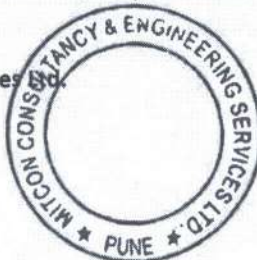
**REMARKS/OBSERVATIONS:**

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

For MITCON Consultancy & Engineering Services Ltd.

*Kadambari*  
Checked By

(Mrs.Kadambari Deshmukh)



*Sandeep Jadhav*

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/12260

Issue Date:12/12/2022

<b>Client's Name &amp; Address</b>	<b>Reference No.</b>	MITCON/2022-23/December/12260/3
M/s MOIL LIMITED,  Tirodi Manganese Mines South Railway Siding, Dist:- Balaghat (M.P).	<b>Date of Monitoring</b>	03/12/2022
	<b>Type of Monitoring</b>	Ambient Air
	<b>Test Location</b>	South Railway Siding office
	<b>Monitoring Done By</b>	MITCON
	<b>Date of Analysis</b>	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 <sub>2</sub> )	µg/M <sup>3</sup>	11.6	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	16.2	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	58.0	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	29.5	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.6	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.295	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.8	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	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 Ltd

*K. D. Deshmukh*  
Checked By

(Mrs.Kadambari Deshmukh)



*[Signature]*  
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/12260

Issue Date:12/12/2022

<b>Client's Name &amp; Address</b>	<b>Reference No.</b>	MITCON/2022-23/December/12260/4
M/s MOIL LIMITED,  Tirodi Manganese Mines South Railway Siding, Dist:- Balaghat (M.P).	<b>Date of Monitoring</b>	03/12/2022
	<b>Type of Monitoring</b>	Ambient Air
	<b>Test Location</b>	End of South Railway siding
	<b>Monitoring Done By</b>	MITCON
	<b>Date of Analysis</b>	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 <sub>2</sub> )	µg/M <sup>3</sup>	11.2	≤80	IS 5182(Part 2)
02	Oxides of Nitrogen (NO <sub>2</sub> )	µg/M <sup>3</sup>	15.4	≤ 80	IS 5182(Part 6)
03	Particulate Matter PM <sub>10</sub> micron	µg/M <sup>3</sup>	56.9	≤ 100	IS 5182 (Part 23)
04	Particulate Matter PM <sub>2.5</sub> micron	µg/M <sup>3</sup>	27.0	≤ 60	USEPA 40 CFRCH
05	Ozone (O <sub>3</sub> )	µg/M <sup>3</sup>	3.6	≤ 100	IS 5182
06	Lead (Pb)	µg/M <sup>3</sup>	BDL	≤ 1.0	APHA - AAS
07	Carbon Monoxide (CO)	mg/M <sup>3</sup>	0.310	≤ 2.0	IS 5182
08	Ammonia (NH <sub>3</sub> )	µg/M <sup>3</sup>	3.7	≤ 400	APHA - 401
09	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/M <sup>3</sup>	BDL	≤ 5	IS 5182
10	Benzo(a)Pyrene (BaP)	ng/ M <sup>3</sup>	BDL	≤ 1	IS 5182
11	Arsenic (As)	ng/ M <sup>3</sup>	BDL	≤ 6	APHA - AAS
12	Nickel (Ni)	ng/ M <sup>3</sup>	BDL	≤ 20	APHA - AAS

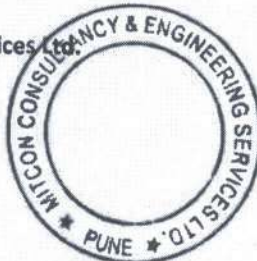
**REMARKS/OBSERVATIONS:**

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

For MITCON Consultancy & Engineering Services Ltd.

*K.D. Deshmukh*  
Checked By

(Mrs.Kadambari Deshmukh)



*[Signature]*  
Authorized Signatory  
Dr. Sandeep Jadhav  
Senior vice president

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Ph. No. 66289405/400, email: emelab@mitconindia.com

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**Quarter October- November- December 2022****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,  Tirodi Manganese Mines L3=4.419 Ha Site, Dist- Balaghat (M.P).	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Noise
	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.

  
Checked By  
(Mrs. Kadambari Deshmukh)



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

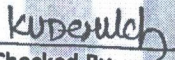
**READINGS**

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:**

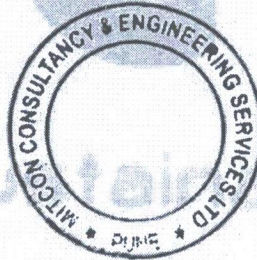
Limits: The Madhya Pradesh Pollution Control Board has prescribe 75 dB (A) as an upper limit of Noise Level during daytime.

For MITCON Consultancy & Engineering Services Ltd.



Checked By

(Mrs. Kadambari Deshmukh)



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

**READINGS**


Sr. No.	Test Location	Unit	Readings
01	Near Sampling Room	dB(A)	58.0
02	Near Dumping Area	dB(A)	67.3

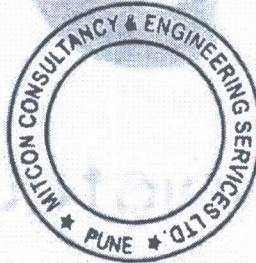
**REMARKS / OBSERVATIONS:**


**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.

  
Checked By  
(Mrs. Kadambari Deshmukh)



  
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/12259

Issue Date:12/12/2022

Client's Name & Address	Reference No.	MITCON/2022-23/December/12259/5
M/s MOIL LIMITED, Tirodi Manganese Mines North Railway Siding, Dist:- Balaghat (M.P).	Date of Monitoring	03/12/2022
	Type of Monitoring	Ambient Noise
	Monitoring Done By	MITCON

**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

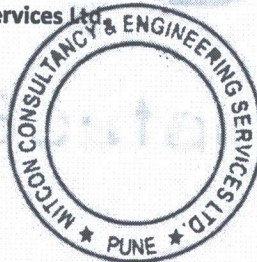
**REMARKS / OBSERVATIONS:**

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

For MITCON Consultancy &amp; Engineering Services Ltd.

Checked By

(Mrs. Kadambari Deshmukh)



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/12260

Issue Date:12/12/2022

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

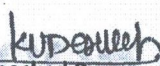
READINGS

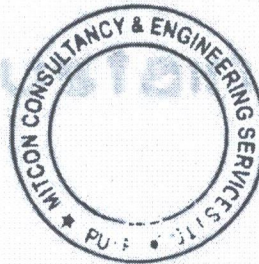
Sr. No.	Test Location	Unit	Readings
01	South Railway Siding office	dB(A)	56.9
02	End of South Railway siding	dB(A)	54.0


**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.

  
Checked By  
(Mrs. Kadambari Deshmukh)



  
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/12258

Issue Date:12/12/2022

Client's Name & Address	Sample Details	
M/s MOIL LIMITED,  Tirodi Manganese Mines L3=4.419 Ha Site, Dist- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12258/1
	Name of Sample	Ground Water
	Sample Details	Near Pit office 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	7.23	-	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	Manganese 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/l	< 1	APHA 4500 F- D 4-90 to 4-91 23rd Ed 2017
11	Chloride as Cl	30.34	mg/l	≤ 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)

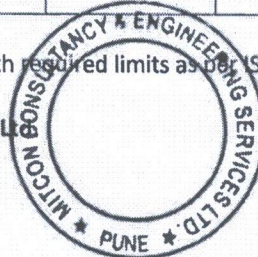
**REMARKS / OBSERVATIONS:**

- The above water sample is complying with required limits as per IS 10500:2012.

For MITCON Consultancy &amp; Engineering Services Ltd

Kupeshubh  
Checked By

(Mrs. Kadambari Deshmukh)



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,  Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12256/1
	Name of Sample	Ground Water
	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: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	295.1	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	147.55	mg/l	≤ 200	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	Manganese 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/l	< 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 4-91 23rd Ed 2017
11	Chloride as Cl	32.20	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	16.01	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	4.20	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)

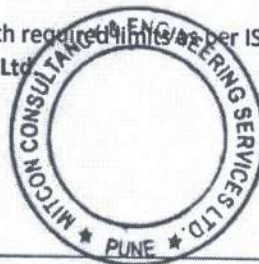
**REMARKS / OBSERVATIONS:**

- The above water sample is complying with required limits as per IS 10500:2012.

For MITCON Consultancy & Engineering Services Ltd

Checked By *Kadambari*

(Mrs. Kadambari Deshmukh)



Authorized Signatory

(Dr. Sandeep Jadhav)  
 Senior Vice President

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**MITCON Consultancy & Engineering Services Ltd.**

Environment Management and Engineering Division

(Environmental Laboratory)

Agriculture College Campus, Next to DIC office, Shivaji Nagar, Pune. 411 005,

Ph. No. 66289405/400, email: emelab@mitconindia.com

• ISO 45001:2018 (OHSAS) Certified Laboratory.

• MoEF &amp; CC recognized laboratory



Solutions for Sustainable Tomorrow

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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,  Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12256/2
	Name of Sample	Waste Water
	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
	Analysis Start Date	05/12/2022
	End Date of Analysis	12/12/2022

**ANALYSIS RESULTS**

Sr. No.	Characteristic	Results	Unit	Permissible Limit as per Consent Condition	Test Methods
01	pH at 25°C	7.21	-	5.5 to 9.0	APHA 4500 H+ A, 4-95, 23rd Ed. 2017
02	Dissolved Oxygen	3.4	mg/l	--	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 &amp; Engineering Services Ltd.

Kudesteh  
Checked By  
(Mrs. Kadambari Deshmukh)



(Signature)  
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,  Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12256/3
	Name of Sample	Ground water
	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**

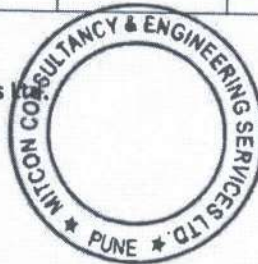
Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.23	-	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	< 5.0	mg/l	N.S	APHA 2540 D, 2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	≤ 1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	277.5	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
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	Manganese 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/l	< 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 4-91 23rd Ed 2017
11	Chloride as Cl	29.4	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	16.3	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	4.34	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:**

For MITCON Consultancy & Engineering Services

Checked By *K. Deshmukh*

(Mrs. Kadambari Deshmukh)



*(Signature)*

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,  Tirodi Manganese Mines L1=254.593 Ha Site, Dist:- Balaghat (M.P)		Sample Code	MITCON/2022-23/December/12256/4
		Name of Sample	Ground Water
		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**

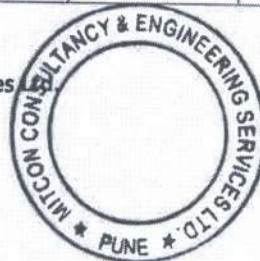
Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.12		6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	< 5.0	mg/l	N.S	APHA 2540 D, 2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	≤ 1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	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
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	Manganese 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/l	< 1	APHA 4500 F- D 4-90 to 4-91 23rd 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	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	4.53	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:**

For MITCON Consultancy & Engineering Services

Checked By *Kadambari Deshmukh*

(Mrs. Kadambari Deshmukh)



*Dr. Sandeep Jadhav*  
 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,  Tirodi Manganese Mines L2=37.090 Ha Site, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12257/1
	Name of Sample	Ground Water
	Sample Details	Near Sampling Room 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	7.19	-	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	Magnesium as Mg	15.41	mg/l	≤ 30	APHA 3500 Mg B, 3-86, 23rd Ed. 2017
08	Manganese 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/l	< 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 4-91 23rd 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-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	4.02	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)

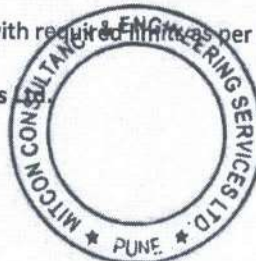
**REMARKS / OBSERVATIONS:**

- The above water sample is complying with required limits as per IS 10500:2012.

For MITCON Consultancy & Engineering Services

Checked By

(Mrs. Kadambari Deshmukh)



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,  Tirodi Manganese Mines L2=37.090 Ha Site, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12257/2
	Name of Sample	Ground water
	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**

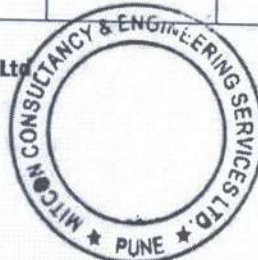
Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.10	-	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	< 5.0	mg/l	N.S	APHA 2540 D, 2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	≤ 1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	312.1	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	156.07	mg/l	≤ 200	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	Manganese 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/l	< 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 4-91 23rd Ed 2017
11	Chloride as Cl	30.01	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	14.01	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	4.01	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:**

For MITCON Consultancy & Engineering Services Ltd

Checked By *Kadambari*

(Mrs. Kadambari Deshmukh)



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/12259

Issue Date:12/12/2022

Client's Name & Address	Sample Details	
M/s MOIL LIMITED,  Tirodi Manganese Mines North Railway Siding, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12259/1
	Name of Sample	Ground Water
	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**

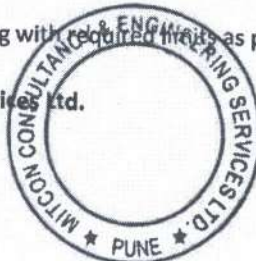
Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.12	-	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	8.0	mg/l	N.S	APHA 2540 D, 2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1.0	NTU	≤ 1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	296.3	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	148.15	mg/l	≤ 200	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	Manganese 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/l	< 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 4-91 23rd Ed 2017
11	Chloride as Cl	31.01	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	15.45	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	3.01	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 required limits as per IS 10500:2012.

For MITCON Consultancy & Engineering Services Ltd.

Checked By  
 (Mrs. Kadambari Deshmukh)



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/12259

Issue Date:12/12/2022

Client's Name & Address	Sample Details	
M/s MOIL LIMITED,  Tirodi Manganese Mines North Railway Siding, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12259/2
	Name of Sample	Ground water
	Sample Details	End of 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	7.23	-	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	≤ 1	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	Manganese 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/l	<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 4-91 23rd 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 -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	4.31	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	Agreeable	Agreeable	Agreeable	IS: 3025 Part-5 (Rev.1, RA 2012)

**REMARKS / OBSERVATIONS:**

For MITCON Consultancy & Engineering Services Ltd

*Kadambari*  
 Checked By

(Mrs. Kadambari Deshmukh)



*(Signature)*

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/12260

Issue Date:12/12/2022

Client's Name & Address	Sample Details	
M/s MOIL LIMITED,  Tirodi Manganese Mines South Railway Siding, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12260/1
	Name of Sample	Ground Water
	Sample Details	South 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	7.07	-	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	12.0	mg/l	N.S	APHA 2540 D, 2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1	NTU	≤ 1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	212.4	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO3	106.7	mg/l	≤ 200	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	Manganese 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/l	< 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 4-91 23rd Ed 2017
11	Chloride as Cl	27.23	mg/l	≤ 250	APHA 4500 Cl, B, 4-75 to 4-76, 23rd Ed 2017
12	Sulphate as SO4	12.12	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	4.01	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 required limits as per IS 10500:2012.

For MITCON Consultancy & Engineering Services Ltd.

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

Client's Name & Address	Sample Details	
M/s MOIL LIMITED,  Tirodi Manganese Mines South Railway Siding, Dist:- Balaghat (M.P)	Sample Code	MITCON/2022-23/December/12260/2
	Name of Sample	Ground water
	Sample Details	End of South 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

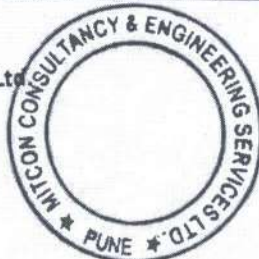
Sr. No.	Parameters	Results	Unit	Limits as per IS 10500:2012	Test Methods
01	pH at 25C	7.24	-	6.5 to 8.5	APHA 4500 H+, A, 4-95, 23rd Ed 2017
02	Total suspended solids	14.0	mg/l	N.S	APHA 2540 D, 2-70 to 2-71 23rd ed 2017
03	Turbidity	< 1	NTU	≤ 1	IS: 3025 Part-10 (R.A : 2002)
04	Total Dissolved Solids	241.2	mg/l	≤ 500	APHA 2540 C, 2-69 to 2-70, 23rd Ed 2017
05	Total Hardness as CaCO <sub>3</sub>	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	Manganese as mn	< 0.1	mg/l	< 0.1	APHA 3111 B, 3-18 to 3-21 23rd Ed. 2017
09	Total Alkalinity as CaCO <sub>3</sub>	100.5	Mg/l	< 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 4-91 23rd 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 SO <sub>4</sub>	14.23	mg/l	≤ 200	APHA 4500 -SO <sub>4</sub> -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 NO <sub>3</sub>	4.5	mg/l	≤ 45	APHA 4500 NO <sub>3</sub> -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:

For MITCON Consultancy &amp; Engineering Services Ltd.

K. D. Deshmukh  
Checked By

(Mrs. Kadambari Deshmukh)



Authorized Signatory  
(Dr. Sandeep Jadhav)  
Senior Vice President

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