



# Mahabal Enviro Engineers Pvt. Ltd.

Engineers, Consultants, Environmental Monitoring Laboratory & Contractors

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

Opp. Patel Petrol Pump, Chhindwara Road, Koradi, Dist.Nagapur-441111

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## Ambient Air Quality Monitoring Report

<b>Report No.:</b> ME-NGO4357-200411-SA-RIPL-AMRAVATI		<b>Date:</b> 11.04.2020	
<b>Name and address of Customer</b>	RATTANINDIA POWER LIMITED Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901	<b>Order Reference:</b>	
		SO No. 3382017462 Dt.16.08.2019	
<b>Sample Description/Type</b>	Ambient Air Quality Monitoring	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	1) Near Site Office 2) Terrace of WTP Plant 3) Terrace of Bachelor Guest House	<b>Sample Quantity/Packing</b>	Filter Paper (PM <sub>10</sub> ): 3 X 3 No. Filter Paper (PM <sub>2.5</sub> ): 1 X 3 No. SO <sub>2</sub> : 30mL X18 No. PVC Bottle NO <sub>2</sub> : 30mL X18 No. PVC Bottle NH <sub>3</sub> : 10 mL X72 No. PVC Bottle O <sub>3</sub> : 10 mL X 72 No. PVC Bottle 3 X 6 No. Charcoal Tubes 3 X 3 No. Gas Bladder
<b>Date of Sampling</b>	18.03.2020 to 19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	As per Method reference		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Receipt of Sample</b>	11.04.2020

Parameter	Unit	Result	#NAAQM Standard	Method Reference
<b>Location</b>	1) Near Site Office		<b>Duration of Survey:</b> 24 hours	
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)</b>				
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	9.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	13.0	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	69	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	27	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30
Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<19.6	180	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.31-34

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Parameter	Unit	Result	#NAAQM Standard	Method Reference
Lead (as Pb)	µg/m <sup>3</sup>	<0.02	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Carbon Monoxide (CO)	mg/m <sup>3</sup>	1.29	4.0	IS 5182 (Part 10):1999 RA 2003
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	<20	400	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.35-39
Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	1.24	5.0	IS 5182 (Part 11): 2006
Benzo (a) Pyrene (Particulate phase only)	ng/m <sup>3</sup>	<0.5	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.40-47
Arsenic (as As)	ng/m <sup>3</sup>	0.38	6.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Nickel (as Ni)	ng/m <sup>3</sup>	3.15	20.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
<b>Location</b>	2) Terrace of WTP Plant			<b>Duration of Survey:</b> 24 hours
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	13.8	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	15.8	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	62	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	25	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30
Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<19.6	180	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.31-34
Lead (as Pb)	µg/m <sup>3</sup>	<0.02	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Carbon Monoxide (CO)	mg/m <sup>3</sup>	1.25	4.0	IS 5182 (Part 10):1999 RA 2003
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	<20	400	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.35-39
Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	1.14	5.0	IS 5182 (Part 11): 2006
Benzo(a)Pyrene (Particulate phase only)	ng/m <sup>3</sup>	<0.5	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.40-47
Arsenic (as As)	ng/m <sup>3</sup>	0.46	6.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55

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Parameter	Unit	Result	#NAAQM Standard	Method Reference
Nickel (as Ni)	ng/m <sup>3</sup>	<3	20.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
<b>Location</b>	3) Terrace of Bachelor Guest House			<b>Duration of Survey:</b> 24 hours
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	12.9	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	18.5	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	67	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	24	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30
Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<19.6	180	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.31-34
Lead (as Pb)	µg/m <sup>3</sup>	<0.02	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Carbon Monoxide (CO)	mg/m <sup>3</sup>	1.29	4.0	IS 5182 (Part 10): 1999 RA 2003
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	23.1	400	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.35-39
Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	1.28	5.0	IS 5182 (Part 11): 2006
Benzo(a)Pyrene (Particulate phase only)	ng/m <sup>3</sup>	<0.5	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.40-47
Arsenic (as As)	ng/m <sup>3</sup>	0.39	6.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Nickel (as Ni)	ng/m <sup>3</sup>	3.10	20.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
<b>Remarks:</b> TWA - Time Weighted Average., #- NAAQS specified as: 24h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead and Ammonia; 1h. TWA in case of Carbon Monoxide and Ozone; Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel.				

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FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
Kishor C. Yeole

**BRANCH MANAGER**



Note:

1. The result listed refers only to the tested sample(s) and applicable parameter(s).
2. This report is not to be reproduced except in full, without written approval of the laboratory.



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## Ambient Air Quality Monitoring Report

<b>Report No.:</b> ME-NGO4360-200411-SA-RIPL-AMRAVATI		<b>Date:</b> 11.04.2020	
<b>Name and address of Customer</b>	RATTANINDIA POWER LIMITED Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901	<b>Order Reference:</b>	
		SO No. 3382017462 Dt.16.08.2019	
<b>Sample Description/Type</b>	Ambient Air Quality Monitoring	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	1) Village Kapustalani 2) Village Dawargaon 3) Village Wagholi Gate	<b>Sample Quantity/Packing</b>	Filter Paper (PM <sub>10</sub> ): 3 X 3 No. Filter Paper (PM <sub>2.5</sub> ): 1 X 3 No. SO <sub>2</sub> : 30mL X18 No. PVC Bottle NO <sub>2</sub> : 30mL X18 No. PVC Bottle NH <sub>3</sub> : 10 mL X72 No. PVC Bottle O <sub>3</sub> : 10 mL X 72 No. PVC Bottle 3 X 6 No. Charcoal Tubes 3 X 3 No. Gas Bladder
<b>Date of Sampling</b>	19.03.2020 to 20.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	As per Method reference		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Receipt of Sample</b>	11.04.2020

Parameter	Unit	Result	#NAAQM Standard	Method Reference
<b>Location</b>	1) Village Kapustalani		<b>Duration of Survey:</b> 24 hours	
<b>Discipline: Chemical Testing; Product Group: Atmospheric Pollution (Ambient Air)</b>				
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	10.1	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	14.4	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	59	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	22	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30
Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<19.6	180	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.31-34
Lead (as Pb)	µg/m <sup>3</sup>	<0.02	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55

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*Report No. 04360 Cont...*

Parameter	Unit	Result	#NAAQM Standard	Method Reference
Carbon Monoxide (CO)	mg/m <sup>3</sup>	1.11	4.0	IS 5182 (Part 10): 1999 RA 2003
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	<20	400	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.35-39
Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	1.08	5.0	IS 5182 (Part 11): 2006
Benzo (a) Pyrene (Particulate phase only)	ng/m <sup>3</sup>	<0.5	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.40-47
Arsenic (as As)	ng/m <sup>3</sup>	0.51	6.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Nickel (as Ni)	ng/m <sup>3</sup>	<3	20.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
<b>Location</b>	2) Village Dawargaon			<b>Duration of Survey:</b> 24 hours
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	9.2	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	17.9	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	64	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	27	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30
Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<19.6	180	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.31-34
Lead (as Pb)	µg/m <sup>3</sup>	<0.02	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Carbon Monoxide (CO)	mg/m <sup>3</sup>	1.22	4.0	IS 5182 (Part 10): 1999 RA 2003
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	<20	400	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.35-39
Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	1.14	5.0	IS 5182 (Part 11): 2006
Benzo(a)Pyrene (Particulate phase only)	ng/m <sup>3</sup>	<0.5	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.40-47
Arsenic (as As)	ng/m <sup>3</sup>	0.42	6.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Nickel (as Ni)	ng/m <sup>3</sup>	<3	20.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55

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*Report No.04360 Cont...*

Parameter	Unit	Result	#NAAQM Standard	Method Reference
<b>Location</b>	3) Village Wagholi Gate			<b>Duration of Survey:</b> 24 hours
Sulphur Dioxide (SO <sub>2</sub> )	µg/m <sup>3</sup>	11.9	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.1-6
Nitrogen Dioxide (NO <sub>2</sub> )	µg/m <sup>3</sup>	15.1	80	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.7-10
Particulate Matter (size less than 10µm) or PM <sub>10</sub>	µg/m <sup>3</sup>	63	100	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.11-14
Particulate Matter (size less than 2.5µm) or PM <sub>2.5</sub>	µg/m <sup>3</sup>	25	60	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.15-30
Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	<19.6	180	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.31-34
Lead (as Pb)	µg/m <sup>3</sup>	<0.02	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Carbon Monoxide (CO)	mg/m <sup>3</sup>	0.98	4.0	IS 5182 (Part 10): 1999 RA 2003
Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	<20	400	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.35-39
Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	1.06	5.0	IS 5182 (Part 11): 2006
Benzo(a)Pyrene (Particulate phase only)	ng/m <sup>3</sup>	<0.5	1.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.40-47
Arsenic (as As)	ng/m <sup>3</sup>	0.44	6.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
Nickel (as Ni)	ng/m <sup>3</sup>	4.8	20.0	CPCB Guidelines for the Measurement of Ambient Air Pollutants, Volume I, 2012-13, Page No.48-55
<b>Remarks:</b> TWA - Time Weighted Average., #- NAAQS specified as: 24h. TWA in case of Sulphur Dioxide, Nitrogen Dioxide, PM <sub>10</sub> , PM <sub>2.5</sub> , Lead and Ammonia; 1h. TWA in case of Carbon Monoxide and Ozone; Annual TWA in case of Benzene, Benzo (a) Pyrene, Arsenic and Nickel..				

ULR- TC748720000004136F

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FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.


 Kishor C. Yeole

**BRANCH MANAGER**


Note:

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## Water Sample Analysis Report

<b>Report No.:</b> ME-NG04370-200409-SA-RIPL-AMRAVATI		<b>Date:</b> 09.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Ground Water/Grab	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Well Water Kapustalani Village	<b>Sample Quantity/Packing</b>	2 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500mL X 1 No. Glass Bottle
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS: 3025(Part I):1987 RA 2003; APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40;		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	09.04.2020

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
<b>Discipline: Chemical Testing; Product Group: Water (Ground Water)</b>						
1	Colour	Hazen	<1	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.3	1 Max.	5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2130-B, 2-13
5	pH	-	8.2	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-H <sup>+</sup> -B, 4-95
6	Residual Free Chlorine	mg/L	<0.05	0.2 Min.	1.0 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl G, 4-72
7	Total Dissolved Solids	mg/L	579	500 Max.	2000 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1(1999-12)
8	Total Suspended Solids	mg/L	<5	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 2540-D, 2-69
9	Alkalinity Total (as CaCO <sub>3</sub> )	mg/L	304	200 Max.	600 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1

ULR- TC748720000004146P



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Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	348	200 Max.	600 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2340-C, 2-48
11	Chloride (as Cl)	mg/L	70.5	250 Max.	1000 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl-B, 4-75
12	Sulphate (as SO <sub>4</sub> )	mg/L	38.9	200 Max.	400 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> -E, 4-199
13	Nitrate (as NO <sub>3</sub> )	mg/L	32.1	45 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> , E 4-131
14	Calcium (as Ca)	mg/L	68.1	75 Max.	200 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Ca-B, 3-69
15	Magnesium (as Mg)	mg/L	43.3	30 Max.	100 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Mg- B, 3-86
16	Fluoride (as F)	mg/L	0.44	1 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-F, D, 4-90
17	Boron (as B)	mg/L	<0.1	0.5 Max.	2.4 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-B B, 4-27
18	Dissolved Oxygen	mg/L	7.1	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 4500-O, B & C, 4-144, 4-146
19	*Oil and Grease	mg/L	N.D.	-	-	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
20	*Cyanide (as CN)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
21	*Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	N.D.	0.001 Max.	0.002 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 5530- B & C, 5-49, 5-50
<b>Residues in water (Trace metal Element)</b>						
22	Iron (as Fe)	mg/L	0.312	0.3 Max.	No relaxation.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
23	Manganese (as Mn)	mg/L	<0.04	0.1 Max.	0.3 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20 AAS Method
24	Aluminium (as Al)	mg/L	<0.025	0.03 Max.	0.2 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Al-B, 3-63
25	Cadmium (as Cd)	mg/L	N.D.	0.003Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
26	Chromium Total (as Cr)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
27	Copper (as Cu)	mg/L	<0.04	0.05 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20

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Report No.04370 cont...

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
28	Lead (as Pb)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
29	Zinc (as Zn)	mg/L	0.014	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
30	Arsenic (as As)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3114-C, 3-40
31	Mercury (as Hg)	mg/L	N.D.	0.001Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3112-B, 3-25
32	*Selenium (as Se)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3500-C, 3-95
<b>Remarks:</b> N.D.: Not Detected <b>Remarks:</b> The tests marked with an * are not accredited by NABL						

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
 Kishor C. Yeole  
**BRANCH MANAGER**



Note:

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# Mahabal Enviro Engineers Pvt. Ltd.

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## Water Sample Analysis Report

<b>Report No.:</b> ME-NG04369-200409-SA-RIPL-AMRAVATI		<b>Date:</b> 09.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Ground Water/Grab	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Well Water Talkhanda Village	<b>Sample Quantity/Packing</b>	2 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500mL X 1 No. Glass Bottle
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS: 3025(Part I):1987 RA 2003; APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40;		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	09.04.2020

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
<b>Discipline: Chemical Testing; Product Group: Water (Ground Water)</b>						
1	Colour	Hazen	<1	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.3	1 Max.	5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2130-B, 2-13
5	pH	-	7.9	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-H <sup>+</sup> -B, 4-95
6	Residual Free Chlorine	mg/L	<0.05	0.2 Min.	1.0 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl G, 4-72
7	Total Dissolved Solids	mg/L	577	500 Max.	2000 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1(1999-12)
8	Total Suspended Solids	mg/L	<5	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 2540-D, 2-69
9	Alkalinity Total (as CaCO <sub>3</sub> )	mg/L	184	200 Max.	600 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1

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*Report No. 04369 cont...*

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	398	200 Max.	600 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2340-C, 2-48
11	Chloride (as Cl)	mg/L	53.4	250 Max.	1000 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl-B, 4-75
12	Sulphate (as SO <sub>4</sub> )	mg/L	191	200 Max.	400 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> -E, 4-199
13	Nitrate (as NO <sub>3</sub> )	mg/L	28.7	45 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> , E 4-131
14	Calcium (as Ca)	mg/L	99.4	75 Max.	200 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Ca-B, 3-69
15	Magnesium (as Mg)	mg/L	36.4	30 Max.	100 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Mg- B, 3-86
16	Fluoride (as F)	mg/L	0.403	1 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-F, D, 4-90
17	Boron (as B)	mg/L	0.167	0.5 Max.	2.4 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-B B, 4-27
18	Dissolved Oxygen	mg/L	6.9	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 4500-O, B & C, 4-144, 4-146
19	*Oil and Grease	mg/L	N.D.	-	-	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
20	*Cyanide (as CN)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
21	*Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	N.D.	0.001 Max.	0.002 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 5530- B & C, 5-49, 5-50
<b>Residues in water (Trace metal Element)</b>						
22	Iron (as Fe)	mg/L	0.312	0.3 Max.	No relaxation.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
23	Manganese (as Mn)	mg/L	<0.04	0.1 Max.	0.3 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20 AAS Method
24	Aluminium (as Al)	mg/L	0.051	0.03 Max.	0.2 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Al-B, 3-63
25	Cadmium (as Cd)	mg/L	N.D.	0.003Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
26	Chromium Total (as Cr)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
27	Copper (as Cu)	mg/L	N.D.	0.05 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20

ULR- TC748720000004145P

Report No.04369 cont...

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
28	Lead (as Pb)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
29	Zinc (as Zn)	mg/L	0.018	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
30	Arsenic (as As)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3114-C, 3-40
31	Mercury (as Hg)	mg/L	N.D.	0.001Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3112-B, 3-25
32	*Selenium (as Se)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3500-C, 3-95
<b>Remarks:</b> N.D.: Not Detected <b>Remarks:</b> The tests marked with an * are not accredited by NABL						

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
 Kishor C. Yeole  
**BRANCH MANAGER**



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## Water Sample Analysis Report

<b>Report No.:</b> ME-NG04368-200409-SA-RIPL-AMRAVATI		<b>Date:</b> 09.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Ground Water/Grab	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Well Water Wagholi Village	<b>Sample Quantity/Packing</b>	2 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500mL X 1 No. Glass Bottle
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS: 3025(Part I):1987 RA 2003; APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40;		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	09.04.2020

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
<b>Discipline: Chemical Testing; Product Group: Water (Ground Water)</b>						
1	Colour	Hazen	<1	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.3	1 Max.	5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2130-B, 2-13
5	pH	-	8.1	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-H <sup>+</sup> -B, 4-95
6	Residual Free Chlorine	mg/L	<0.05	0.2 Min.	1.0 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl G, 4-72
7	Total Dissolved Solids	mg/L	633	500 Max.	2000 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1(1999-12)
8	Total Suspended Solids	mg/L	<5	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 2540-D, 2-69
9	Alkalinity Total (as CaCO <sub>3</sub> )	mg/L	224	200 Max.	600 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1

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*Report No. 04368 cont...*

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	374	200 Max.	600 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2340-C, 2-48
11	Chloride (as Cl)	mg/L	57.4	250 Max.	1000 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl-B, 4-75
12	Sulphate (as SO <sub>4</sub> )	mg/L	184	200 Max.	400 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> -E, 4-199
13	Nitrate (as NO <sub>3</sub> )	mg/L	31.2	45 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> , E 4-131
14	Calcium (as Ca)	mg/L	103	75 Max.	200 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Ca-B, 3-69
15	Magnesium (as Mg)	mg/L	28.7	30 Max.	100 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Mg- B, 3-86
16	Fluoride (as F)	mg/L	0.402	1 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-F, D, 4-90
17	Boron (as B)	mg/L	<0.1	0.5 Max.	2.4 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-B B, 4-27
18	Dissolved Oxygen	mg/L	6.8	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 4500-O, B & C, 4-144, 4-146
19	*Oil and Grease	mg/L	N.D.	-	-	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
20	*Cyanide (as CN)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
21	*Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	N.D.	0.001 Max.	0.002 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 5530- B & C, 5-49, 5-50
<b>Residues in water (Trace metal Element)</b>						
22	Iron (as Fe)	mg/L	0.234	0.3 Max.	No relaxation.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
23	Manganese (as Mn)	mg/L	0.046	0.1 Max.	0.3 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20 AAS Method
24	Aluminium (as Al)	mg/L	<0.025	0.03 Max.	0.2 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Al-B, 3-63
25	Cadmium (as Cd)	mg/L	N.D.	0.003Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
26	Chromium Total (as Cr)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
27	Copper (as Cu)	mg/L	N.D.	0.05 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20

ULR- TC748720000004144P

Report No.04368 cont...

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
28	Lead (as Pb)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
29	Zinc (as Zn)	mg/L	<0.01	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
30	Arsenic (as As)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3114-C, 3-40
31	Mercury (as Hg)	mg/L	N.D.	0.001Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3112-B, 3-25
32	*Selenium (as Se)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3500-C, 3-95
<b>Remarks:</b> N.D.: Not Detected <b>Remarks:</b> The tests marked with an * are not accredited by NABL						

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
 Kishor C. Yeole  
**BRANCH MANAGER**



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## Water Sample Analysis Report

<b>Report No.:</b> ME-NG04367-200409-SA-RIPL-AMRAVATI		<b>Date:</b> 09.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Ground Water/Grab	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Well Water Pimpalvihirgaon Village	<b>Sample Quantity/Packing</b>	2 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500mL X 1 No. Glass Bottle
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS: 3025(Part I):1987 RA 2003; APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40;		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	09.04.2020

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
<b>Discipline: Chemical Testing; Product Group: Water (Ground Water)</b>						
1	Colour	Hazen	<1	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.3	1 Max.	5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2130-B, 2-13
5	pH	-	8.2	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-H <sup>+</sup> -B, 4-95
6	Residual Free Chlorine	mg/L	<0.05	0.2 Min.	1.0 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl G, 4-72
7	Total Dissolved Solids	mg/L	376	500 Max.	2000 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1(1999-12)
8	Total Suspended Solids	mg/L	<5	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 2540-D, 2-69
9	Alkalinity Total (as CaCO <sub>3</sub> )	mg/L	248	200 Max.	600 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1

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*Report No. 04367 cont...*

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	250	200 Max.	600 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2340-C, 2-48
11	Chloride (as Cl)	mg/L	18.1	250 Max.	1000 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl-B, 4-75
12	Sulphate (as SO <sub>4</sub> )	mg/L	31.1	200 Max.	400 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> -E, 4-199
13	Nitrate (as NO <sub>3</sub> )	mg/L	10.6	45 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> , E 4-131
14	Calcium (as Ca)	mg/L	53.7	75 Max.	200 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Ca-B, 3-69
15	Magnesium (as Mg)	mg/L	28.2	30 Max.	100 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Mg- B, 3-86
16	Fluoride (as F)	mg/L	0.409	1 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-F, D, 4-90
17	Boron (as B)	mg/L	<0.1	0.5 Max.	2.4 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-B B, 4-27
18	Dissolved Oxygen	mg/L	7.0	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 4500-O, B & C, 4-144, 4-146
19	*Oil and Grease	mg/L	N.D.	-	-	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
20	*Cyanide (as CN)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
21	*Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	N.D.	0.001 Max.	0.002 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 5530- B & C, 5-49, 5-50
<b>Residues in water (Trace metal Element)</b>						
22	Iron (as Fe)	mg/L	0.185	0.3 Max.	No relaxation.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
23	Manganese (as Mn)	mg/L	0.049	0.1 Max.	0.3 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20 AAS Method
24	Aluminium (as Al)	mg/L	<0.025	0.03 Max.	0.2 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Al-B, 3-63
25	Cadmium (as Cd)	mg/L	N.D.	0.003Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
26	Chromium Total (as Cr)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
27	Copper (as Cu)	mg/L	<0.04	0.05 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20

ULR- TC748720000004143P

*Report No.04367 cont...*

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
28	Lead (as Pb)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
29	Zinc (as Zn)	mg/L	<0.01	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
30	Arsenic (as As)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3114-C, 3-40
31	Mercury (as Hg)	mg/L	N.D.	0.001Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3112-B, 3-25
32	*Selenium (as Se)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3500-C, 3-95
<b>Remarks:</b> N.D.: Not Detected <b>Remarks:</b> The tests marked with an * are not accredited by NABL						

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
 Kishor C. Yeole  
**BRANCH MANAGER**


Note:

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# Mahabal Enviro Engineers Pvt. Ltd.

Engineers, Consultants, Environmental Monitoring Laboratory & Contractors

Plot Nos. 13,14,17,18, Grampanchayat Bokhara, 8 km from Nagpur City,

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## Water Sample Analysis Report

<b>Report No.:</b> ME-NG04366-200409-SA-RIPL-AMRAVATI		<b>Date:</b> 09.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Ground Water/Grab	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Borewell Water Digargaon Village	<b>Sample Quantity/Packing</b>	2 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500mL X 1 No. Glass Bottle
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS: 3025(Part I):1987 RA 2003; APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40;		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	09.04.2020

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
<b>Discipline: Chemical Testing; Product Group: Water (Ground Water)</b>						
1	Colour	Hazen	<1	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.3	1 Max.	5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2130-B, 2-13
5	pH	-	7.5	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-H <sup>+</sup> -B, 4-95
6	Residual Free Chlorine	mg/L	<0.05	0.2 Min.	1.0 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl G, 4-72
7	Total Dissolved Solids	mg/L	790	500 Max.	2000 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1(1999-12)
8	Total Suspended Solids	mg/L	<5	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 2540-D, 2-69
9	Alkalinity Total (as CaCO <sub>3</sub> )	mg/L	362	200 Max.	600 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1

ULR- TC748720000004142P



Report No. 04366 cont...

ULR- TC748720000004142P

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	604	200 Max.	600 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2340-C, 2-48
11	Chloride (as Cl)	mg/L	93.6	250 Max.	1000 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl-B, 4-75
12	Sulphate (as SO <sub>4</sub> )	mg/L	121	200 Max.	400 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> -E, 4-199
13	Nitrate (as NO <sub>3</sub> )	mg/L	41.3	45 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> , E 4-131
14	Calcium (as Ca)	mg/L	174	75 Max.	200 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Ca-B, 3-69
15	Magnesium (as Mg)	mg/L	41.3	30 Max.	100 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Mg- B, 3-86
16	Fluoride (as F)	mg/L	0.474	1 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-F, D, 4-90
17	Boron (as B)	mg/L	<0.1	0.5 Max.	2.4 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-B B, 4-27
18	Dissolved Oxygen	mg/L	7.0	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 4500-O, B & C, 4-144, 4-146
19	*Oil and Grease	mg/L	N.D.	-	-	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
20	*Cyanide (as CN)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
21	*Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	N.D.	0.001 Max.	0.002 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 5530- B & C, 5-49, 5-50
<b>Residues in water (Trace metal Element)</b>						
22	Iron (as Fe)	mg/L	0.185	0.3 Max.	No relaxation.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
23	Manganese (as Mn)	mg/L	0.049	0.1 Max.	0.3 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20 AAS Method
24	Aluminium (as Al)	mg/L	<0.025	0.03 Max.	0.2 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Al-B, 3-63
25	Cadmium (as Cd)	mg/L	N.D.	0.003Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
26	Chromium Total (as Cr)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
27	Copper (as Cu)	mg/L	<0.04	0.05 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20

*Report No.04366 cont...*

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
28	Lead (as Pb)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
29	Zinc (as Zn)	mg/L	<0.01	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
30	Arsenic (as As)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3114-C, 3-40
31	Mercury (as Hg)	mg/L	N.D.	0.001Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3112-B, 3-25
32	*Selenium (as Se)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3500-C, 3-95
<b>Remarks:</b> N.D.: Not Detected <b>Remarks:</b> The tests marked with an * are not accredited by NABL						

-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
 Kishor C. Yeole  
**BRANCH MANAGER**


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## Water Sample Analysis Report

<b>Report No.:</b> ME-NG04365-200409-SA-RIPL-AMRAVATI		<b>Date:</b> 09.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Ground Water/Grab	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Well Water of Mr. Narayan Lomte Farm back side of Ash Dyke Area	<b>Sample Quantity/Packing</b>	2 L X 1 No. PVC Can 500mL X 1 No. PVC Can 500mL X 1 No. Glass Bottle
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS: 3025(Part I):1987 RA 2003; APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40;		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	09.04.2020

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
<b>Discipline: Chemical Testing; Product Group: Water (Ground Water)</b>						
1	Colour	Hazen	<1	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2120-B, 2-6
2	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 5):1984, Reaffirmed 2006
3	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4	Turbidity	NTU	0.2	1 Max.	5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2130-B, 2-13
5	pH	-	7.6	6.5 to 8.5	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-H <sup>+</sup> -B, 4-95
6	Residual Free Chlorine	mg/L	<0.05	0.2 Min.	1.0 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl G, 4-72
7	Total Dissolved Solids	mg/L	564	500 Max.	2000 Max.	IS 3025 (Part 16):1984 RA 2006, Ed.2.1(1999-12)
8	Total Suspended Solids	mg/L	<5	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 2540-D, 2-69
9	Alkalinity Total (as CaCO <sub>3</sub> )	mg/L	284	200 Max.	600 Max.	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1

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*Report No. 04365 cont...*

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
10	Total Hardness (as CaCO <sub>3</sub> )	mg/L	398	200 Max.	600 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 2340-C, 2-48
11	Chloride (as Cl)	mg/L	48.3	250 Max.	1000 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl-B, 4-75
12	Sulphate (as SO <sub>4</sub> )	mg/L	76.2	200 Max.	400 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> -E, 4-199
13	Nitrate (as NO <sub>3</sub> )	mg/L	43.3	45 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> , E 4-131
14	Calcium (as Ca)	mg/L	110	75 Max.	200 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Ca-B, 3-69
15	Magnesium (as Mg)	mg/L	30.1	30 Max.	100 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Mg- B, 3-86
16	Fluoride (as F)	mg/L	0.435	1 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-F, D, 4-90
17	Boron (as B)	mg/L	<0.1	0.5 Max.	2.4 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-B B, 4-27
18	Dissolved Oxygen	mg/L	6.9	-	-	APHA 23 <sup>rd</sup> Ed. 2017, 4500-O, B & C, 4-144, 4-146
19	*Oil and Grease	mg/L	N.D.	-	-	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
20	*Cyanide (as CN)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
21	*Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	N.D.	0.001 Max.	0.002 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 5530- B & C, 5-49, 5-50
<b>Residues in water (Trace metal Element)</b>						
22	Iron (as Fe)	mg/L	0.272	0.3 Max.	No relaxation.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
23	Manganese (as Mn)	mg/L	<0.04	0.1 Max.	0.3 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20 AAS Method
24	Aluminium (as Al)	mg/L	<0.025	0.03 Max.	0.2 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Al-B, 3-63
25	Cadmium (as Cd)	mg/L	N.D.	0.003Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
26	Chromium Total (as Cr)	mg/L	N.D.	0.05 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
27	Copper (as Cu)	mg/L	N.D.	0.05 Max.	1.5 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20

ULR- TC748720000004141P

Report No.04365 cont...

Sr. No.	Parameter	Unit	Result	Limit for Drinking water as per IS 10500:2012		Method Reference
				Acceptable Limit	Permissible Limit in the Absence of Alternate Source	
28	Lead (as Pb)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
29	Zinc (as Zn)	mg/L	0.020	5 Max.	15 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
30	Arsenic (as As)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3114-C, 3-40
31	Mercury (as Hg)	mg/L	N.D.	0.001Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3112-B, 3-25
32	*Selenium (as Se)	mg/L	N.D.	0.01 Max.	No relaxation	APHA 23 <sup>rd</sup> Ed. 2017, 3500-C, 3-95
<b>Remarks:</b> N.D.: Not Detected <b>Remarks:</b> The tests marked with an * are not accredited by NABL						

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

  
 Kishor C. Yeole  
**BRANCH MANAGER**



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## Water Sample Analysis Report

<b>Report No.:</b> ME-NG04372-200409-SA-RIPL-AMRAVATI		<b>Date:</b> 09.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Surface Water	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Malegaon Pond	<b>Sample Quantity/Packing</b>	2 L X 1 No. PVC Can 500mL X 1No. PVC Can 500mL X 1No.Glass Bottle
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS: 3025(Part I):1987 RA 2003; APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40;		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	09.04.2020

Sr. No.	Parameter	Unit	Result	Method Reference
<b>Discipline: Chemical Testing; Product Group: Water (Surface Water)</b>				
1.	Colour	Hazen	1	APHA 23 <sup>rd</sup> Ed. 2017, 2120-B, 2-6
2.	Odour	-	Agreeable	IS 3025 (Part 05):1984, Reaffirmed 2006
3.	Taste	-	N.A.	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4.	Turbidity	NTU	3.2	APHA 23 <sup>rd</sup> Ed. 2017, 2130-B, 2-13
5.	pH	-	8.1	APHA 23 <sup>rd</sup> Ed. 2017, 4500-H <sup>+</sup> -B, 4-95
6.	Residual Free Chlorine	mg/L	<0.05	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl G, 4-72
7.	Total Dissolved Solids	mg/L	241	IS 3025 (Part 16):1984 Reaffirmed 2006, Ed.2.1(1999-12)
8.	Total Suspended Solids	mg/L	7	APHA 23 <sup>rd</sup> Ed. 2017, 2540-D, 2-69
9.	Alkalinity Total (as CaCO <sub>3</sub> )	mg/L	124	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1
10.	Total Hardness (as CaCO <sub>3</sub> )	mg/L	140	APHA 23 <sup>rd</sup> Ed. 2017, 2340-C, 2-48
11.	Chloride (as Cl)	mg/L	24.2	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl-B, 4-75
12.	Sulphate (as SO <sub>4</sub> )	mg/L	39.2	APHA 23 <sup>rd</sup> Ed. 2017, 4500- SO <sub>4</sub> -E, 4-199
13.	Nitrate (as NO <sub>3</sub> )	mg/L	0.957	APHA 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> , E 4-131
14.	Calcium (as Ca)	mg/L	32.1	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Ca-B, 3-69
15.	Magnesium (as Mg)	mg/L	21.9	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Mg- B, 3-86
16.	Fluoride (as F)	mg/L	0.472	APHA 23 <sup>rd</sup> Ed. 2017, 4500-F, D, 4-90
17.	Boron (as B)	mg/L	<0.1	APHA 23 <sup>rd</sup> Ed. 2017, 4500-B B, 4-27

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*Report No.04372 Cont...*

Sr. No.	Parameter	Unit	Result	Method Reference
18.	Dissolved Oxygen	mg/L	6.1	APHA 23 <sup>rd</sup> Ed. 2017, 4500-O, B & C, 4-144, 4-146
19.	*Oil and Grease	mg/L	N.D.	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
20.	*Cyanide (as CN)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
21.	*Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 5530- B & C, 5-49, 5-50
<b>Residues in water (Trace metal Element)</b>				
22.	Iron (as Fe)	mg/L	0.176	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
23.	Manganese (as Mn)	mg/L	0.06	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20 AAS Method
24.	Aluminium (as Al)	mg/L	<0.025	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Al-B, 3-63
25.	Cadmium (as Cd)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
26.	Chromium Hexa (as Cr <sup>6+</sup> )	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3500- Cr-B, 3-71
27.	Copper (as Cu)	mg/L	<0.04	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
28.	Lead (as Pb)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
29.	Zinc (as Zn)	mg/L	0.020	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
30.	Arsenic (as As)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3114-C, 3-40
31.	Mercury (as Hg)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3112-B, 3-25
32.	Selenium (as Se)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-C, 3-95
<b>Remarks:</b> N.D.: Not Detected; NA: Not Applicable <b>Remarks: The tests marked with an * are not accredited by NABL</b>				

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-----END-----

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.


  
 Kishor C. Yeole  
**BRANCH MANAGER**


Note:

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## Water Sample Analysis Report

<b>Report No.:</b> ME-NG04371-200409-SA-RIPL-AMRAVATI		<b>Date:</b> 09.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Surface Water	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	Wagholi Pond	<b>Sample Quantity/Packing</b>	2 L X 1 No. PVC Can 500mL X 1No. PVC Can 500mL X 1No.Glass Bottle
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS: 3025(Part I):1987 RA 2003; APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40;		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	09.04.2020

Sr. No.	Parameter	Unit	Result	Method Reference
<b>Discipline: Chemical Testing; Product Group: Water (Surface Water)</b>				
1.	Colour	Hazen	<1	APHA 23 <sup>rd</sup> Ed. 2017, 2120-B, 2-6
2.	Odour	-	Agreeable	IS 3025 (Part 05):1984, Reaffirmed 2006
3.	Taste	-	N.A.	IS 3025 (Part 7 & 8):1984, Reaffirmed 2006
4.	Turbidity	NTU	1.2	APHA 23 <sup>rd</sup> Ed. 2017, 2130-B, 2-13
5.	pH	-	8.1	APHA 23 <sup>rd</sup> Ed. 2017, 4500-H <sup>+</sup> -B, 4-95
6.	Residual Free Chlorine	mg/L	<0.05	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl G, 4-72
7.	Total Dissolved Solids	mg/L	584	IS 3025 (Part 16):1984 Reaffirmed 2006, Ed.2.1(1999-12)
8.	Total Suspended Solids	mg/L	11	APHA 23 <sup>rd</sup> Ed. 2017, 2540-D, 2-69
9.	Alkalinity Total (as CaCO <sub>3</sub> )	mg/L	148	IS 3025 (Part 23):1986 Reaffirmed 2009 Amds 1
10.	Total Hardness (as CaCO <sub>3</sub> )	mg/L	336	APHA 23 <sup>rd</sup> Ed. 2017, 2340-C, 2-48
11.	Chloride (as Cl)	mg/L	61.4	APHA 23 <sup>rd</sup> Ed. 2017, 4500-Cl-B, 4-75
12.	Sulphate (as SO <sub>4</sub> )	mg/L	234	APHA 23 <sup>rd</sup> Ed. 2017, 4500- SO <sub>4</sub> -E, 4-199
13.	Nitrate (as NO <sub>3</sub> )	mg/L	0.890	APHA 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> , E 4-131
14.	Calcium (as Ca)	mg/L	66.5	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Ca-B, 3-69
15.	Magnesium (as Mg)	mg/L	41.3	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Mg- B, 3-86
16.	Fluoride (as F)	mg/L	0.440	APHA 23 <sup>rd</sup> Ed. 2017, 4500-F, D, 4-90
17.	Boron (as B)	mg/L	<0.1	APHA 23 <sup>rd</sup> Ed. 2017, 4500-B B, 4-27

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Sr. No.	Parameter	Unit	Result	Method Reference
18.	Dissolved Oxygen	mg/L	6.5	APHA 23 <sup>rd</sup> Ed. 2017, 4500-O, B & C, 4-144, 4-146
19.	*Oil and Grease	mg/L	N.D.	IS 3025 (Part 39): 1991, Reaffirmed 2009, Amds.1
20.	*Cyanide (as CN)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 4500-CN, C & E, 4-44 & 4-46
21.	*Phenolic Compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 5530- B & C, 5-49, 5-50
<b>Residues in water (Trace metal Element)</b>				
22.	Iron (as Fe)	mg/L	0.331	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
23.	Manganese (as Mn)	mg/L	<0.04	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20 AAS Method
24.	Aluminium (as Al)	mg/L	<0.025	APHA 23 <sup>rd</sup> Ed. 2017, 3500-Al-B, 3-63
25.	Cadmium (as Cd)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
26.	Chromium Hexa (as Cr <sup>6+</sup> )	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3500- Cr-B, 3-71
27.	Copper (as Cu)	mg/L	<0.04	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
28.	Lead (as Pb)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
29.	Zinc (as Zn)	mg/L	0.010	APHA 23 <sup>rd</sup> Ed. 2017, 3111-B, 3-20
30.	Arsenic (as As)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3114-C, 3-40
31.	Mercury (as Hg)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3112-B, 3-25
32.	Selenium (as Se)	mg/L	N.D.	APHA 23 <sup>rd</sup> Ed. 2017, 3500-C, 3-95
<b>Remarks:</b> N.D.: Not Detected; NA: Not Applicable <b>Remarks: The tests marked with an * are not accredited by NABL</b>				

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FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.


  
 Kishor C. Yeole  
**BRANCH MANAGER**


Note:

- The result listed refers only to the tested sample(s) and applicable parameter(s).
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## Effluent Sample Analysis Report

<b>Report No.:</b> ME-NG04373-200323-SA-RIPL-AMRAVATI		<b>Date:</b> 23.03.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b> Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		<b>Order Reference:</b>
			SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Domestic Effluent	<b>Sample Collected by</b>	Laboratory
<b>Sampling Location</b>	1.STP Colony Outlet 2.STP Plant Outlet	<b>Sample Quantity/Packing</b>	2 L X 2 No. PVC Can 100mL X 2 No. PVC Can
<b>Date of Sampling</b>	19.03.2020	<b>Date of Receipt of Sample</b>	20.03.2020
<b>Sampling Procedure</b>	IS:3025(Part I): 1987 RA2003, APHA 23 <sup>rd</sup> Ed. 2017, 1060-B, 1-40		
<b>Date of Start of Analysis</b>	20.03.2020	<b>Date of Completion of Analysis</b>	23.03.2020

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Sr. No.	Parameter	Unit	Result		Limit as per MPCB Consent	Method Reference
			1	2		
<b>Discipline: Chemical Testing; Product Group: Pollution &amp; Environment (Waste Water)</b>						
1	Biochemical Oxygen Demand (3 days 27°C)	mg/L	16	14	30 Max.	IS 3025 (Part 44): 1993, Reaffirmed 2009
2	Chemical Oxygen Demand	mg/L	56	48	100 Max.	APHA 23 <sup>rd</sup> Ed. 2017, 5220-B, 5-18
<b>Remarks:</b>						

END

FOR MAHABAL ENVIRO ENGINEERS PVT. LTD.

Kishor C. Yeole  
**BRANCH MANAGER**



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QF/SALE/02/Issue No 03 Dt 05.12.2019,Amd 00 Dt 00

**Plot No. F-7, Road No. 21, MIDC Wagle Estate, Thane West - 400604, Maharashtra**  
(600 m from Hotel Rukhmini Palace Turn Opp Toyota Show Room. Next to Ashida Electrical - near J B Sawant Bus Stop)  
**Phone: 2582 0658/ 3139/ 1663/ 3154 Fax: 91-22-25823543 [thane@mahabal.com](mailto:thane@mahabal.com)**



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Phone : 91-712-2612162 T/Fax: 91-712-2612212 Email: [nagpur@mahabal.com](mailto:nagpur@mahabal.com)

## Noise Level Monitoring Report

<b>Report No.:</b> ME-NG04363-200411-SA-RIPL-AMRAVATI		<b>Date:</b> 11.04.2020	
<b>Name and Address of Customer</b>	<b>RATTANINDIA POWER LIMITED</b>		<b>Order Reference:</b>
	Plot No.D-2 & D-2 (PART) at Additional MIDC, Village-Nandgaonpeth, Tal & Dist: Amravati 444 901		SO No. 3382017462 Dt.16.08.2019
<b>Sample Description/Type</b>	Noise Level Monitoring	<b>Sample Collected by</b>	NA
<b>Date of Sampling</b>	18.03.2020		
<b>Sampling Procedure</b>	IS 9876:1981 & manufacturer Manual		

Discipline: Chemical Testing; Product Group: Atmospheric Pollution			
Location	Unit	Result	
		Min.	Max.
Near Green Gate	dB(A)	64.3	69.8
Near Compressor Room	dB(A)	63.5	66.4
Near CHP Crusher House	dB(A)	61.4	65.8
Near Colony (Industry Premises)	dB(A)	62.4	67.3
Boiler No. 3&4	dB(A)	65.2	68.3
Limit as per The Factories Act, 1948, The Maharashtra Factory Rules, 1963, Schedule XXIV			
Total time of exposure per day, in hours.		Max. Sound pressure level in dB (A)	
8		90	
6		92	
4		95	
3		97	
2		100	
1 ½		102	
1		105	
¾		107	
½		110	
¼		115	
<b>Remark :</b>			

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FOR MAHABAL ENVIRO ENGINEERS PVT. LTD. -----END-----

Kishor Yeole  
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