

ENVIRONMENTAL MONITORING REPORT



at

**Danapur Village, Hosapete Taluk,
Vijayanagara District, PIN-583222, Karnataka.**

Stage – I

January - 2023

Prepared by

M/s. Premier Analytical Laboratories,

Near Ganesh Gas Godown Beside Govt. Primary School,
Amaravathi, **HOSPET – 583201**, Vijayanagara Dist., Karnataka.
Ph No: 08394 228683, Email: premierlabhpt@yahoo.com

PREFACE

The industries should monitor environmental parameters as per the frequency and locations given in the CFE/CFO. And the same should be submitted on every month to the respective pollution control board.

As part of the conditions and inherent concern on health of the employees and surroundings *M/s. BMM Ispat Ltd.*, as appointed *M/s. Premier Analytical Laboratories, Hosapete*, to carry out the environmental pollution monitoring on AAQ Monitoring, Fugitive monitoring, Noise Monitoring, Water Analysis & Stack monitoring pollution and submit the same to the Pollution Control Board.

Accordingly, *M/s. Premier Analytical Laboratories, Hosapete*, carried out the pollution monitoring as per the standard sampling methods prescribed by CPCB, for AAQ Monitoring, Fugitive monitoring within the plant, Stack Monitoring & Personal Dust Sampling as per the CFO. These monitoring has been carried out in a frequency as mentioned in the CFO and the same report is being submitted to the Board.

We sincerely thank to officials of *M/s. BMM Ispat Ltd.*, for their valuable co-ordination & support during the sampling and reporting.

Place: Hosapete
Date: 04.02.2023



for Premier Analytical Laboratories

K. Suvarna
(Quality Manager)

1.0 INTRODUCTION

M/s. BMM Ispat Ltd, (BMMIL) is a 2.0 million tons integrated steel plant, manufacturing steel with its state of art in advanced technology and protecting environment. It is committed produce quality product, in environmentally friendly technology. Adopting sufficient air pollution control equipment's, recycling and reusing all the water with 'Zero' discharge facility, generating valuable electric power with waste heat recovery boilers (WHRB) and resource optimizing and minimizing the energy needs through re-utilizing char for CFBC boilers.

M/s. BMM ISPAT Ltd., Presently operating the following units under Stage-I units (Manufacturing units coming under 2.0 MTPA integrated steel plant is monitored and are reported separately);

Sl.No.	Units	Capacity
1	Beneficiation Plant	1.3 MTPA
2	Pellet Plant	1.2 MTPA
3	Sponge Iron Division -1	2 x 100 TPD
4	Induction furnace (billets)	9000 tonnes/month
5	Rolling Mill (TMT rods)	9000 tonnes/month
6	Captive Power Plant	25 MW

The report includes environmental monitoring data collected at above site and its surrounding areas, for the month of **JANUARY -2023**. The Parameters monitored are:

- ❖ Ambient Air Quality
- ❖ Fugitive Dust Level
- ❖ Stack Emission
- ❖ Ambient Noise Level
- ❖ Water Quality

2.0 SCOPE AND METHODOLOGY

2.1 PREAMBLE

The scope of the study and the present report covers the detailed characterization of the existing environmental status in and around the plant area for major environmental components viz. Ambient & work zone air quality, Fugitive Emission, Noise level and water quality & Stack Emission.

2.2 AMBIENT AIR QUALITY

To assess the ambient air quality status, monitoring stations were identified 6 Location plant site. Work zone air monitoring stations were identified in the major work spots. Based on the production activities the parameters chosen for Ambient air quality. Were Particulate Matter PM₁₀, Particulate Matter (size less than 2.5 μ m) PM_{2.5}.

2.2.1 PARTICULATE MATTER (PM₁₀)(size less than 10 μ m).

Purpose

The purpose of this protocol is to provide guidelines for monitoring and analysis of Particulate Matter PM₁₀ in ambient air

Reference Method: IS 5182 Part 23 Method of Measurement of Air Pollution: Respirable Suspended Particulate Matter (PM₁₀) cyclonic flow technique.

Principle of the method

Air is drawn through a size-selective inlet and through a 20.3X25.4 cm (8X10 in) filter at a flow rate, which is typically 1132 L/min. Particles with aerodynamic diameter less than the cut-point of the inlet are collected, by the filter. The mass of these particles is determined by the difference in filter weights prior to and after sampling. The concentration of PM₁₀ in the designated size range is calculated by dividing the weight gain of the filter by the volume of air sampled.

Sampling

Field Sampling - Tilt back the inlet and secure it according to manufacturer's instructions. Loosen the faceplate wing nuts and remove the faceplate. Remove the filter from its jacket and center it on the support screen with the rough side of the filter facing upwards. Replace the faceplate and tighten the wing nuts to secure the rubber gasket against the filter edge. Gently lower the inlet. For automatically flow-controlled units, record the designated flow rate on the data sheet. Record the reading of the elapsed time meter. The specified length of sampling is commonly 8 hours or 24 hours. During this

sampling, record the flow meter reading, take out the filter media from the sampler, and put in a container or envelope.

Analysis

Filter inspection: Inspect the filter for pin holes using a light table. Loose particles should be removed with a soft brush. Apply the filter identification number or a code to the filter if it is not a numbered. Condition the filter in conditioning room maintained within 20-30° C and 40-50% relative humidity or in an airtight desiccator for 24 hours. Take initial weight of the filter paper (Wi) before sampling. Condition the filter after sampling in conditioning room maintained within 20-30° C and 40-50% relative humidity or in an airtight desiccator for 24 hours. Take final weight of the filter paper (Wf).

2.2.2 Particulate Matter(PM2.5)(size less than 2.5µm).

Purpose

The purpose of this protocol is to provide guidelines for monitoring and analysis of Particulate Matter PM2.5 in ambient air.

Reference Method: USEPA 2001 Method of Measurement of Air Pollution: Particulate Matter (PM2.5) cyclonic flow technique.

Principle

An electrically powered air sampler draws ambient air at a constant volumetric flow rate (16.7 lpm) maintained by a mass flow / volumetric flow controller coupled to a microprocessor into specially designed inertial particle-size separator (i.e., cyclones or impactors) where the suspended particulate matter in the PM2.5 size ranges is separated for collection on a 47 mm polytetrafluoroethylene (PTFE) filter over a specified sampling period. Each filter is weighed before and after sample collection to determine the net gain due to the particulate matter. The mass concentration in the ambient air is computed as the total mass of collected particles in the PM2.5 size ranges divided by the actual volume of air sampled, and is expressed in µg/m³. The microprocessor reads averages and stores five-minute averages of ambient temperature, ambient pressure, filter temperature and volumetric flow rate. In addition, the microprocessor calculates the average temperatures and pressure, total volumetric flow for the entire sample run time and the coefficient of variation of the flow rate.

2.2.3 Sulphur Dioxide (SO₂).

Purpose: The purpose of this protocol is to provide guidelines for monitoring and analysis of Sulphur dioxide in ambient air.

Reference Method: Modified West & Gaeke Method (IS 5182 Part 2 Method of Measurement of Air Pollution: Sulphur dioxide).

Sulphur dioxide from air is absorbed in a solution of potassium tetra chloromercurate (TCM). A dichlorosulphitomercurate complex, which resists oxidation by the oxygen in the air, is formed. Once formed, this complex is stable to strong oxidants such as ozone and oxides of nitrogen and therefore, the absorber solution may be stored for some time prior to analysis. The complex is made to react with para-rosaniline and formaldehyde to form the intensely coloured pararosaniline methyl sulphonic acid. The absorbance of the solution is measured by means of a suitable spectrophotometer.

Sampling

Place 30 ml of absorbing solution in an impinger and sample for four hours at the flow rate of 1 L/min. After sampling measure the volume of sample and transfer to a sample storage bottle.

Analysis

Replace any water lost by evaporation during sampling by adding distilled water up to the calibration mark on the absorber. Mix thoroughly, pipette out 10 ml of the collected sample into a 25 ml volumetric flask. Add 1 ml 0.6% sulphamic acid and allow reacting for 10 minutes to destroy the nitrite resulting from oxides of nitrogen. Add 2 ml of 0.2% formaldehyde solution and 2 ml pararosaniline solution and make up to 25 ml with distilled water. Prepare a blank in the same manner using 10 ml of unexposed absorbing reagent. After a 30 min colour development interval and before 60 minutes, measure and record the absorbance of samples and reagent blank at 560 nm. Use distilled water; not the reagent blank, as the optical reference.

2.2.4 Nitrogen Di Oxide (NO₂):

Purpose

The purpose of this protocol is to provide guidelines for monitoring of nitrogen dioxide in ambient.

Principle of the method

Modified Jacobs &Hochheiser Method (IS 5182 Part 6 Methods for Measurement of Air Pollution: Oxides of nitrogen)Ambient nitrogen dioxide (NO₂) is collected by bubbling air through a solution of sodium hydroxide and sodium arsenite. The concentration of nitrite ion (NO₂) produced during sampling is determined calorimetrically by reacting the nitrite ion with phosphoric acid, sulfanilamide, and N-(1-naphthyl)-ethylenediamine di-hydrochloride (NEDA) and measuring the absorbance of the highly coloured azo-dye at 540 nm.

2.2.5 Ozone (Chemical method)

Purpose

The purpose of this protocol is to provide guidelines for monitoring of ozone in ambient air.

Principle of the method

Micro-amounts of ozone and the oxidants liberate iodine when absorbed in a 1% solution of potassium iodine buffered at pH 6.8 + 0.2. The iodine is determined spectrophotometrically by measuring the absorption of tri-iodide ion at 352 nm.

Sampling

Place 10 ml of absorbing solution in a standard impinger and sample for one hour at the flow rate of 1 L/min. Do not expose the absorbing reagent to direct sunlight. After sampling measure the volume of sample and transfer to a sample storage bottle.

Analysis

If, appreciable evaporation of the absorbing solution occurs during sampling, add water to bring the liquid volume to 10 ml. Within 30 to 60 minutes after sample collection, read the absorbance in a cuvette at 352 nm against a reference cuvette containing distilled water. Measure the absorbance of the unexposed reagent and subtract the value from the absorbance of the sample.

2.2.6 Ammonia (NH₃)

Purpose

The purpose of this protocol is to provide guidelines for monitoring of ammonia in ambient air.

Principle of the method

Indophenol method Ammonia in the atmosphere is collected by bubbling a measured

The ammonium sulphate formed in the sample is analyzed calorimetrically by reaction with phenol and alkaline sodium hypochlorite to produce indophenol. The reaction is accelerated by the addition of Sodium Nitroprusside as catalyst.

Sampling

Place 10 ml of absorbing solution in an impinger and sample for one hour at the flow rate of 1 to 2 L/min. After sampling measure the volume of sample and transfer to a sample storage bottle

Analysis

Transfer contents of the sample bottle to a 25 ml glass stopper graduated cylinder. Maintain all the solutions and sample at 25° C. Add 2 ml buffer. Add 5 ml of working phenol solution, mix, and fill to about 22 ml. Add 2.5 ml of working hypochlorite solution and rapidly mix. Dilute to 25 ml, mix and store in the dark for 30 minutes to develop colour. Measure the absorbance of the solution at 630 nm on a spectrophotometer using 1 cm cells. Prepare a reagent blank and field blank and measure the absorbance as done in the analysis of samples.

2.2.7 Benzo(a)Pyrene

Purpose

The purpose of this protocol is to provide guidelines for monitoring of Benzo (a) Pyrene (BaP) in ambient air.

Principle of the Method

It is based on BIS method IS 5182 (Part 12):2004 and USEPA method (TO-13). This method is designed to collect particulate phase PAHs in ambient air and fugitive emissions and to determine individual PAH compounds using capillary gas chromatograph equipped with flame ionization detector. It is a high volume (1.2m³/min) sampling method capable of detecting sub.ng/m³ concentration of PAH in 24 hours sample (i.e., collected in 3 shifts of 8 hour each with 480 m³ sampling volume of air)

Sampling

24 hr. sampling using PM10 high volume sampler with 8 hourly samples using EPM 2000 glass fibre or equivalent filter.

Sample Processing

Extraction: Filter papers (half of all the filters papers collected in a day) are cut into strips using scissors and transfer to 250 ml beaker. Add ~50 ml. of Toluene (GC/HPLC grade). These samples are extracted with toluene using ultra sonic bath for about 30

Alternatively, sample can be extracted using Soxhlet extraction apparatus for about 8 hr. with Toluene and repeat it twice.

Filtration

Filter the extracted samples with Whatman filter paper no.41 containing 2 gm of Anhydrous Sodium Sulphate (to remove moisture).

Sample injection

Take 2 μ l of sample from the amber vial using standard gas tight syringe and inject in the Capillary GC-FID instrument for analysis. Record the resulting concentration of each PAH compound including B(a)P. A 10ng/ μ l concentration B(a)P or other PAH standards are to be injected in GC/FID instrument with every batch of samples. As a control Internal Standard of 10 ng/ μ l conc. is added to each sample prior to the analysis in case of internal calibration is used.

2.2.8 Benzene

Samples collected through active sampling (sorbent tubes) are extracted or desorbed by conventional solvent (generally 1-5 ml of carbon disulphide) using ultrasonication for 15 min to remove analyte from the sorbent material. Desorbed samples are analyzed using gas chromatograph (GC) fitted with capillary column and flame ionization detector (FID). A single tube may provide enough samples to permit several analyses.

Principle of the Method

IS 5182 (Part 11): 2006, The charcoal tubes are available in different sizes and contain varying amount of activated charcoal. The ambient air is sucked through the tube using a low flow sampler used for collection of BTX sample in a way that results in an enrichment of the relevant substances in the activated charcoal. Desorption of the adsorbed benzene is done using carbon disulphide (CS₂). The substances desorbed in the CS₂ are analyzed by capillary gas chromatography. A flame ionization detector (FID) is used for analysis while quantification is performed using the internal/external standard.

Gas Chromatograph

Any suitable gas chromatograph with flame ionization detector (FID) with fused silica capillary columns having a length of 25 m or more, an internal diameter of 0.32 mm or below and with a stationary phase film thickness less than 1.5 μ m as follows or equivalent may be recommended.

Sampling

Selection of Sorbent Tube - Samples are collected in glass sampling tube filled with a activated charcoal (coconut shell), Chromo sorb 106 or other suitable adsorbent.

Analytical Procedure

Samples collected through active sampling (sorbent tubes) are extracted or desorbed by conventional solvent (generally 1-5 ml of carbon disulphide) using ultrasonication for 15 min to remove analyte from the sorbent material. Desorbed samples are analyzed using gas chromatograph (GC) fitted with capillary column and flame ionization detector (FID). A single tube may provide enough samples to permit several analyses.

2.2.9 Carbon Monoxide (CO)

Principle:

Samples containing carbon monoxide in the range of 0 to 100 mg/l are analyzed on a non-dispersive infrared absorption gas analyser, namely, an electro-optical spectrophotometer with no spectral dispersion component. It may consist of a single or double source of infrared energy and one or more infrared detectors separated by an optical cell or cells through one or more of which the sample flows, whereby the specific spectral absorption of the component of interest is determined.

Non dispersive Infrared (NDIR) Gas Analyser

The apparatus shall be constructed so as to be suitable for operating within the temperature range of 15°C to 40°C and in a relative humidity range of 0 to 90 percent. The apparatus shall embody facilities for the analysis of continuously applied sample or a discrete sample of volume of 2.0 litres. In the later case the purification train shall be of such a design and dead volume that 2.0 litre is adequate for its proper flushing out. The apparatus shall include facilities for the visual inspection of results and also for their recording. The scale shall be divided into steps of 1.0 percent full scale division (fsd).

Though the basic instrument recommended is for (0 to 100) mg/l range, for samples of higher mg/l range the instrument may be used with proper dilution and conditioning of the samples.

2.2.10 Lead (Pb), Nickel (Ni) & Arsenic (As)

Purpose

The purpose of this protocol is to provide guidelines for monitoring of Lead (Pb), Nickel (Ni) & Arsenic (As) in ambient air.

Principle of the method

The Atomic Absorption Spectroscopy (AAS) technique makes use of absorption spectrometry to assess the concentration of an analyte in the sample. The method is based on active sampling using PM10 Respirable Dust Sampler and then sample analysis is done by atomic absorption spectrophotometer.

Sampling procedure

Tilt back the inlet and secure it according to manufacturer's instructions. Loosen the face-plate wing-nuts and remove the face plate. Remove the filter from its jacket and centre it on the support screen with the rough side of the filter facing upwards. Replace the face-plate and tighten the wing-nuts to secure the rubber gasket against the filter edge. Gently lower the inlet. For automatically flow-controlled units, record the designated flow rate on the data sheet. Record the reading of the elapsed time meter. The specified length of sampling is commonly 8 hours or 24 hours. During this period, several reading (hourly) of flow rate should be taken. After the required time of sampling, record the flow meter reading and take out the filter media from the sampler and put in a container or envelope.

2.3 NOISE LEVELS

Measuring Equipment

The measurements should be made with a sound level meter as specified in IS :9779-1981 The A-weighting network and fast response should be used. The sound level should be measured at the place and time of the annoyance.

Conditions of Measurement

Ambient and work zone Noise level measurement was carried out using a sound level meter (Equinox-107) during day and night times. The measurements were carried out 1 m away from the source and 1 m away from the edge of the roads.

Outdoor measurements should be made at 1.2 to 1.5 m above the ground and, if practical, at least 3.5 m from walls, buildings or other sound reflecting structures. When circumstances indicate, measurements may be made at greater heights and closer to the

wall (for example 0-5 m in front of an open window), provided this is specified and taken into consideration.

Indoor measurements should be made at a distance of at least 1 m from the walls, 1-2 to 1.5 m above the floor, and about 1.5 m from the window(s). In order to reduce disturbances from standing waves, the sound levels measured indoors should be averaged over f 0-5 m of each of at least 3 positions. This is especially important when measuring low-frequency noise. The arithmetic average of the readings determines the value to be taken.

The statistical analysis can be based on analogue or digital recordings of the sound level. For estimating purposes, it may in some cases be sufficient to determine the statistical distribution by observing the sound level meter readings at intervals of time by a sampling technique,

The class intervals for the sound level must be chosen according to the character of the noise; in most cases an interval of 5 dB will be appropriate.

2.4 WATER SAMPLING

Collection and Preservation of Samples

Collection and preservation of water and wastewater samples; the general principles also apply to the sampling of solids or semisolid matrices.

Ensure that all sampling equipment is clean and quality-assured before use. Use sample containers that are clean and free of contaminants. Bake at 450°C all bottles to be used for organic analysis sampling.

Record of sample shall be as follows:

General information

- Sample identification number
- Location
- Sample collector
- Date and hour
- Sample type (Grab or composite)

Collection of Samples

Ground Water:

Grab samples: Grab samples are single collected at a specific spot at a site over a short period of time (typically seconds or minutes).

Surface water:

Composite Sampling: Composite samples vertically over the depth of a water body in one location or horizontally along a specific water depth.

Sewage treatment plant water.

Integrated Sampling: For certain purposes, the information needed is best provided by analyzing mixtures of grab samples collected from different points simultaneously.

2.5 Fugitive Emission Monitoring

Fugitive air quality was monitored 36 samples were collected from the analyzed for SPM analyzed by gravimetric method. Work Zone Air quality was monitored at all Plant area, and material handling area.

2.6 Stack monitoring method

Stack Monitoring was Monitored 32 Samples Collected from Vayubodhan Stack sampler VSS 1 stack monitoring kit was used for drawing the flue gas. Sulphur dioxide and oxides of nitrogen in the flue gas were sampled by bubbling flue gas in 3% H₂O₂ and 0.1N NaOH solution respectively and the analysis of the pollutants were done as per the Indian standard procedures prescribed by CPCB/BIS. Stack emission level was monitored as per the statutory requirement on twice in a month.

Stack Emissions Monitoring Methodology

Pre-Sampling Activities

Weigh the properly conditioned thimble/filter and place it into the clean, air tight Container. Designate appropriate label or ID No. to each thimble/filter container. Particulate matter emission of "Stack Monitoring - Material and Methodology for isokinetic Sampling.

Field activity starts with the collection of detailed information from the industry about the products, raw materials, fuels, and stack dimensions.

Traverse Point Calculation

Calculate the traverse point and accordingly mark the distance from tip of the Nozzle, on Pitot tube and probe. Do not forget to add the collar length of port to the calculated traverses. For detailed calculation of "Stack Monitoring- Material and Methodology for isokinetic sampling.

Determination of Dust Concentration

Determine the mass of dust collected in the thimble by difference i.e., weighing the thimble before and after the run. Dry the thimble in an oven for about 2 hours at 120°C prior to sampling. After sampling, cool, dry and again weigh the thimble along with dust maintaining the same condition as prior to sampling.

2.7 DATA ANALYSIS

2.7.1 BUFFERZONE AMBIENT AIR QUALITY STATUS

Danapur Village (A1)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 76.51, 21.02, 10.86 & 14.00 µg/m³ respectively. All above the values were found within the Limits. And the results given in **Annexure-1**.

Mariyammanahalli Village (A2)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 74.79, 20.33, 9.52 & 12.89 µg/m³ respectively. All above the values were found within the Limits. And the results given in **Annexure-2**.

Hanumanahalli Village (A3)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 73.72, 18.50, 9.07 & 12.24 µg/m³ respectively. All above the values were found within the Limits. Results given in **Annexure-3**.

Galemmanagudi Village (A4)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 69.14, 18.08, 8.20 & 10.59 µg/m³ respectively. All above the values were found within the Limits. Results given in **Annexure-4**.

Gunda Village (A5)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 67.46, 17.71, 7.57 & 10.91 µg/m³ respectively. All above the values were found within the Limits. Results given in **Annexure-5**.

Gunda Tanda Village (A6)

At this location, average of PM10, PM2.5, SO2, NO2 values Average 70.59, 19.79, 7.72 & 11.46 µg/m³ respectively. All above the values were found within the Limits. Results given in **Annexure - 6**.

2.8 FUGITIVE DUST CONCENTRATION

Fortnightly fugitive air quality was monitored all plant area SPM value minimum 554.02 $\mu\text{g}/\text{m}^3$, maximum value 1869.96 $\mu\text{g}/\text{m}^3$, and average value 1391.48 $\mu\text{g}/\text{m}^3$. The Fugitive air quality 1st & 2nd Fortnight Results given in **Annexure-7 & Annexure-8**.

2.9 STACK MONITORING

Stack emission level was monitored as per the statutory requirement on twice in month. Stack emission level was monitored all chimneys' PM values (mg/Nm^3) 1st and 2nd Fort Night Minimum Value 14.95 mg/Nm^3 , Maximum Value 44.10 mg/Nm^3 & Average Value 26.92 mg/Nm^3 . The Stack Emission Results given in **Annexure-9 to Annexure-19**.

3.0 AMBIENT NOISE LEVEL MEASUREMENT

Noise level was recorded at 30 locations each in Ambient and work zone area using Sound Level Meter (Equinox-EQ 107 Instrument / SL-4001) The Day & Night time noise level values were ranging between 42.10 to 72.40dB (A) and 42.60 to 68.90 dB (A). The noise level status is given in **Annexure-20 to Annexure-22**.

3.1 Water Sample Collected at 18 locations in side plant and surrounding nearest villages and nearest surface water Sample Collected every Month. The Water Analysis Test Report is given in **Annexure-23 to Annexure-34**.

3.2 CONCLUSION

All the monitored Environmental parameters were found to be well within the statutory norms and the same are enclosed as follows.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference	: WO/ADMIN/FY23/R073
Sample collected by	: Global Environment & Mining Services
Discipline	: Chemical
Group	: Atmospheric Pollution
Sample Type	: Ambient Air Quality Monitoring
Particulars of Sample Collected	: Respirable Dust Sampler, FPS Sampler
Month	: JANUARY-2023
Location	: A1-Danapur Village
Duration of Monitoring	: 24 Hour
Report Issued Date	: 04.02.2023
Report Number	: ULR-TC619323000001001F

RESULTS

Parameters			PM ₁₀ [µg/m ³]		PM _{2.5} [µg/m ³]		SO ₂ [µg/m ³]		NO ₂ [µg/m ³]	
Reference Method			IS:5182: 2006 (Part-23) (RF-2017)		USEPA 2001 Gravimetric Method		IS:5182: 2001 (Part-2) (RF-2017)		IS:5182: (Part-6) 2006 (RF-2017)	
Date of Sampling	Date of Sample Received	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
02.01.2023	03.01.2023	4249	79.86	100	22.83	60	10.13	80	14.28	80
03.01.2023	04.01.2023	4264	85.10		19.92		8.35		10.39	
09.01.2023	10.01.2023	4356	66.70		18.79		11.80		15.80	
10.01.2023	11.01.2023	4374	71.40		19.93		10.91		11.92	
16.01.2023	17.01.2023	4481	67.96		20.57		9.57		16.77	
17.01.2023	18.01.2023	4503	80.93		22.54		10.02		11.36	
23.01.2023	24.01.2023	4612	75.21		19.91		12.14		18.16	
24.01.2023	25.01.2023	4635	84.89		23.66		13.92		13.30	
Average			76.51		21.02		10.86		14.00	

SL NO	INSTRUMENT DETAILS		
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)
2	Make & Model	Enviro instruments / AAS-217 BL	Enviro instruments / EI-133
3	Serial No	R.D.S. / 14-A-142	PM2.5/PM10 Sampler / 150-K-20
4	Calibration Date	01.04.2022	07.03.2022
5	Calibration Due Date	31.03.2023	06.03.2023

INFERENCE As per NAAQMS Standards (2009),
Report Status: - Measured Values for the above parameters are within the limit.



Reviewed by



K. Suvama

Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-01

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference : WO/ADMIN/FY23/R073
Sample collected by : Global Environment & Mining Services
Discipline : Chemical
Group : Atmospheric Pollution
Sample Type : Ambient Air Quality Monitoring
Particulars of Sample Collected : CO Analyser
Month : JANUARY-2023
Location : A1-Danapur Village
Duration of Monitoring : 1 Hour
Report Issued Date : 04.02.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	02.01.2023	4249	0.12	4.0
2	03.01.2023	4264	0.16	
3	09.01.2023	4356	0.10	
4	10.01.2023	4374	0.09	
5	16.01.2023	4481	0.13	
6	17.01.2023	4503	0.12	
7	23.01.2023	4612	0.14	
8	24.01.2023	4635	0.11	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	INSTRUMENT DETAILS	
1	Instrument Name	CO Gas Detector
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CO
3	Serial No	180883821
4	Calibration Date	09.07.2022
5	Calibration Due Date	08.07.2023

INFERENCE	As per NAAQMS Standards (2009). Report Status: - Measured Values for the above parameters are within the limit
-----------	---



R. Swamy
Authorized Signatory
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-02

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference : WO/ADMIN/FY23/R073
Sample collected by : Global Environment & Mining Services
Discipline : Chemical
Group : Atmospheric Pollution
Sample Type : Ambient Air Quality Monitoring
Particulars of Sample Collected : Respirable Dust Sampler, FPS Sampler
Month : JANUARY-2023
Location : A2-Mariyammanahalli Village
Duration of Monitoring : 24 Hour
Report Issued Date : 04.02.2023
Report Number : ULR-TC619323000001002F

RESULTS

Parameters			PM ₁₀ [µg/m ³]		PM _{2.5} [µg/m ³]		SO ₂ [µg/m ³]		NO ₂ [µg/m ³]	
Reference Method			IS:5182:2006 (Part-23) (RF-2017)		USEPA 2001 Gravimetric Method		IS:5182:2001 (Part-2) (RF-2017)		IS:5182: (Part-6) 2006 (RF-2017)	
Date of Sampling	Date of Sample Received	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
02.01.2023	03.01.2023	4250	75.63	100	21.80	60	10.24	80	12.89	80
03.01.2023	04.01.2023	4265	83.22		19.47		6.68		9.84	
09.01.2023	10.01.2023	4357	58.68		17.11		11.13		12.75	
10.01.2023	11.01.2023	4375	64.25		18.08		8.46		14.55	
16.01.2023	17.01.2023	4482	87.19		24.76		11.02		11.92	
17.01.2023	18.01.2023	4504	69.81		19.60		7.57		14.41	
23.01.2023	24.01.2023	4613	76.43		21.34		11.80		15.80	
24.01.2023	25.01.2023	4636	83.10		20.48		9.24		10.95	
Average			74.79		20.33		9.52		12.89	

SL NO	INSTRUMENT DETAILS		
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)
2	Make & Model	Enviro instruments / APM -460BL	Enviro instruments / EI-133
3	Serial No	R.D.S./330-DTF-2005	PM2.5 /PM10 Sampler / 159-K-20
4	Calibration Date	01.04.2022	07.03.2022
5	Calibration Due Date	31.03.2023	06.03.2023

INFERENCE	As per NAAQMS Standards (2009), Report Status: - Measured Values for the above parameters are within the limit.
-----------	--

Q

Reviewed by



K. Suvarna

Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



Leaders in Environment
Monitoring



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-02

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference : WO/ADMIN/FY23/R073
Sample collected by : Global Environment & Mining Services
Discipline : Chemical
Group : Atmospheric Pollution
Sample Type : Ambient Air Quality Monitoring
Particulars of Sample Collected : CO Analyser
Month : JANUARY-2023
Location : A2-Mariyammanahalli Village
Duration of Monitoring : 1 Hour
Report Issued Date : 04.02.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	02.01.2023	4250	0.20	4.0
2	03.01.2023	4265	0.18	
3	09.01.2023	4357	0.13	
4	10.01.2023	4375	0.11	
5	16.01.2023	4482	0.10	
6	17.01.2023	4504	0.14	
7	23.01.2023	4613	0.12	
8	24.01.2023	4636	0.21	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	INSTRUMENT DETAILS	
1	Instrument Name	CO Gas Detector
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CO
3	Serial No	180883821
4	Calibration Date	09.07.2022
5	Calibration Due Date	08.07.2023

INFERENCE	As per NAAQMS Standards (2009), Report Status: - Measured Values for the above parameters are within the limit
-----------	---



K. Suvama

Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-03

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
 Customer Reference : WO/ADMIN/FY23/R073
 Sample collected by : Global Environment & Mining Services
 Discipline : Chemical
 Group : Atmospheric Pollution
 Sample Type : Ambient Air Quality Monitoring
 Particulars of Sample Collected : Respirable Dust Sampler, FPS Sampler
 Month : JANUARY-2023
 Location : A3-Hanumanahalli Village
 Duration of Monitoring : 24 Hour
 Report Issued Date : 04.02.2023
 Report Number : ULR-TC619323000001003F

RESULTS

Parameters			PM ₁₀ [µg/m ³]		PM _{2.5} [µg/m ³]		SO ₂ [µg/m ³]		NO ₂ [µg/m ³]	
Reference Method			IS:5182: 2006 (Part-23) (RF-2017)		USEPA 2001 Gravimetric Method		IS:5182: 2001 (Part-2) (RF-2017)		IS:5182: (Part-6) 2006 (RF-2017)	
Date of Sampling	Date of Sample Received	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
02.01.2023	03.01.2023	4251	78.59	100	21.27	60	9.24	80	13.72	80
03.01.2023	04.01.2023	4266	66.23		17.40		7.57		10.12	
09.01.2023	10.01.2023	4358	82.28		19.27		11.91		14.69	
10.01.2023	11.01.2023	4376	62.68		14.04		9.57		13.30	
16.01.2023	17.01.2023	4483	71.43		18.92		6.79		10.26	
17.01.2023	18.01.2023	4505	85.91		20.64		9.02		11.50	
23.01.2023	24.01.2023	4614	69.01		17.97		8.35		11.57	
24.01.2023	25.01.2023	4637	73.65		18.49		10.13		12.75	
Average			73.72		18.50		9.07		12.24	

SL NO	INSTRUMENT DETAILS		
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)
2	Make & Model	Greentech Instruments / GTI -151	Enviro instruments / EI-133
3	Serial No	R.D.S./242-DTC-2020	PM2.5 /PM10 Sampler / 160-K-20
4	Calibration Date	01.04.2022	07.03.2022
5	Calibration Due Date	31.03.2023	06.03.2023

INFERENCE	As per NAAQMS Standards (2009), Report Status: - Measured Values for the above parameters are within the limit.
-----------	--

Reviewed by



Authorised Signatory
K. Suvama
 Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)
ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-03

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference : WO/ADMIN/FY23/R073
Sample collected by : Global Environment & Mining Services
Discipline : Chemical
Group : Atmospheric Pollution
Sample Type : Ambient Air Quality Monitoring
Particulars of Sample Collected : CO Analyser
Month : JANUARY-2023
Location : A3-Hanumanahalli Village
Duration of Monitoring : 1 Hour
Report Issued Date : 04.02.2023

RESULTS

SL No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	02.01.2023	4251	0.16	4.0
2	03.01.2023	4266	0.24	
3	09.01.2023	4358	0.11	
4	10.01.2023	4376	0.13	
5	16.01.2023	4483	0.12	
6	17.01.2023	4505	0.11	
7	23.01.2023	4614	0.18	
8	24.01.2023	4637	0.23	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	INSTRUMENT DETAILS	
1	Instrument Name	CO Gas Detector
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-79-70-CO
3	Serial No	180883821
4	Calibration Date	09.07.2022
5	Calibration Due Date	08.07.2023

INFERENCE	As per NAAQMS Standard: (2009), Report Status: - Measured Values for the above parameters are within the limit
-----------	---



K. Suvama
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-04

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference	: WO/ADMIN/FY23/R073
Sample collected by	: Global Environment & Mining Services
Discipline	: Chemical
Group	: Atmospheric Pollution
Sample Type	: Ambient Air Quality Monitoring
Particulars of Sample Collected	: Respirable Dust Sampler, FPS Sampler
Month	: JANUARY-2023
Location	: A4-Galemmanagudi Village
Duration of Monitoring	: 24 Hour
Report Issue Date	: 04.02.2023
Report Number	: ULR-TC619323000001004F

RESULTS

Parameters			PM ₁₀ [µg/m ³]		PM _{2.5} [µg/m ³]		SO ₂ [µg/m ³]		NO ₂ [µg/m ³]	
Reference Method			IS:5182: 2006 (Part-23) (RF-2017)		USEPA 2001 Gravimetric Method		IS:5182: 2001 (Part-2) (RF-2017)		IS:5182: (Part-6) 2006 (RF-2017)	
Date of Sampling	Date of Sample Received	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
04.01.2023	05.01.2023	4282	73.63	100	18.79	60	8.35	80	12.61	80
05.01.2023	06.01.2023	4301	60.30		15.14		10.13		10.12	
11.01.2023	12.01.2023	4396	70.69		15.12		8.46		11.36	
12.01.2023	13.01.2023	4420	58.41		18.25		7.46		8.87	
18.01.2023	19.01.2023	4528	69.86		16.39		6.57		10.26	
19.01.2023	20.01.2023	4549	75.46		19.70		9.35		9.84	
25.01.2023	26.01.2023	4658	67.18		19.62		8.68		9.29	
27.01.2023	28.01.2023	4665	77.62		21.59		6.57		12.40	
Average			69.14		18.08		8.20		10.59	

Sl NO	INSTRUMENT DETAILS		
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)
2	Make & Model	Ecotech instruments / AAS-217 BL	Enviro instruments / APM-550 G
3	Serial No	R.D.S. / 14-A-141	PM2.5 / PM10 Sampler / 06-DTF-2011
4	Calibration Date	01.04.2022	01.04.2022
5	Calibration Due Date	31.03.2023	31.03.2023

INFERENCE As per NAAQMS Standards (2009),
Report Status: - Measured Values for the above parameters are within the limit.



Reviewed by



Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-04

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference : WO/ADMIN/FY23/R073
Sample collected by : Global Environment & Mining Services
Discipline : Chemical
Group : Atmospheric Pollution
Sample Type : Ambient Air Quality Monitoring
Particulars of Sample Collected : CO Analyser
Month : JANUARY-2023
Location : A4-Galemmanagudi Village
Duration of Monitoring : 1 Hour
Report Issued Date : 04.02.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	04.01.2023	4282	0.23	4.0
2	05.01.2023	4301	0.18	
3	11.01.2023	4396	0.10	
4	12.01.2023	4420	0.22	
5	18.01.2023	4528	0.21	
6	19.01.2023	4549	0.14	
7	25.01.2023	4658	0.11	
8	27.01.2023	4665	0.15	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	INSTRUMENT DETAILS	
1	Instrument Name	CO Gas Detector
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CO
3	Serial No	180883821
4	Calibration Date	09.07.2022
5	Calibration Due Date	08.07.2023

INFERENCE	As per NAAQMS Standards (2009), Report Status: - Measured Values for the above parameters are within the limit
-----------	---



B. Swarna
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-05

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference	: WO/ADMIN/FY23/R073
Sample collected by	: Global Environment & Mining Services
Discipline	: Chemical
Group	: Atmospheric Pollution
Sample Type	: Ambient Air Quality Monitoring
Particulars of Sample Collected	: Respirable Dust Sampler, FPS Sampler
Month	: JANUARY-2023
Location	: A5-Gunda Village
Duration of Monitoring	: 24 Hour
Report Issue Date	: 04.02.2023
Report Number	: ULR-TC619323000001005F

RESULTS

Parameters			PM10 [µg/m ³]		PM2.5 [µg/m ³]		SO ₂ [µg/m ³]		NO ₂ [µg/m ³]	
Reference Method			IS:5182: 2006 (Part-23) (RF-2017)		USEPA 2001 Gravimetric Method		IS:5182: 2001 (Part-2) (RF-2017)		IS:5182: (Part-6) 2006 (RF-2017)	
Date of Sampling	Date of Received Sample	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
04.01.2023	05.01.2023	4283	68.79	100	19.10	60	10.47	80	12.06	80
05.01.2023	06.01.2023	4302	74.42		17.06		6.68		10.39	
11.01.2023	12.01.2023	4397	64.65		16.75		7.90		12.89	
12.01.2023	13.01.2023	4421	56.43		15.09		5.68		9.42	
18.01.2023	19.01.2023	4529	70.46		16.68		6.90		11.23	
19.01.2023	20.01.2023	4550	63.84		17.27		6.23		10.26	
25.01.2023	26.01.2023	4659	72.61		20.05		5.68		9.15	
27.01.2023	28.01.2023	4666	68.50		19.71		11.02		11.92	
Average			67.46		17.71		7.57		10.91	

SL NO	INSTRUMENT DETAILS		
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)
2	Make & Model	Greentech Instruments / GTI-154	Enviro instruments / APM-550 Mini
3	Serial No	R.D.S./263-OCT-2020	PM2.5 /PM10 Sampler / 08-DK-2011
4	Calibration Date	01.04.2022	01.04.2022
5	Calibration Due Date	31.03.2023	31.03.2023

INFERENCE As per NAAQMS Standards (2009),
Report Status: - Measured Values for the above parameters are within the limit.

Reviewed by



B. S. Swarna
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-05

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference : WO/ADMIN/FY23/R073
Sample collected by : Global Environment & Mining Services
Discipline : Chemical
Group : Atmospheric Pollution
Sample Type : Ambient Air Quality Monitoring
Particulars of Sample Collected : CO Analyser
Month : JANUARY-2023
Location : A5-Gunda Village
Duration of Monitoring : 1 Hour
Report Issued Date : 04.02.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	04.01.2023	4283	<0.01	4.0
2	05.01.2023	4302	<0.01	
3	11.01.2023	4397	<0.01	
4	12.01.2023	4421	0.10	
5	18.01.2023	4529	<0.01	
6	19.01.2023	4550	0.08	
7	25.01.2023	4659	<0.01	
8	27.01.2023	4666	<0.01	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	INSTRUMENT DETAILS	
1	Instrument Name	CO Gas Detector
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CO
3	Serial No	180883821
4	Calibration Date	09.07.2022
5	Calibration Due Date	08.07.2023

INFERENCE	As per NAAQMS Standards (2009), Report Status: - Measured Values for the above parameters are within the limit
-----------	---



K. Suvarna
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-06

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
 Customer Reference : WO/ADMIN/FY23/R073
 Sample collected by : Global Environment & Mining Services
 Discipline : Chemical
 Group : Atmospheric Pollution
 Sample Type : Ambient Air Quality Monitoring
 Particulars of Sample Collected : Respirable Dust Sampler, FPS Sampler
 Month : JANUARY-2023
 Location : A6-Gunda Tanda Village
 Duration of Monitoring : 24 Hour
 Report Issue Date : 04.02.2023
 Report Number : ULR-TC619323000001006F

RESULTS

Parameters			PM ₁₀ [µg/m ³]		PM _{2.5} [µg/m ³]		SO ₂ [µg/m ³]		NO ₂ [µg/m ³]	
Reference Method			IS:5182: 2006 (Part-23) (RF-2017)		USEPA 2001 Gravimetric Method		IS:5182: 2001 (Part-2) (RF-2017)		IS:5182: (Part-6) 2006 (RF-2017)	
Date of Sampling	Date of Received Sample	Sample Code	Result	STD	Result	STD	Result	STD	Result	STD
04.01.2023	05.01.2023	4284	71.96	100	20.70	60	8.57	80	11.92	80
05.01.2023	06.01.2023	4303	80.31		22.58		7.68		10.81	
11.01.2023	12.01.2023	4398	48.84		14.43		9.24		13.44	
12.01.2023	13.01.2023	4422	66.84		18.36		5.23		9.01	
18.01.2023	19.01.2023	4530	74.87		19.92		8.68		12.61	
19.01.2023	20.01.2023	4551	84.12		23.72		5.57		9.29	
25.01.2023	26.01.2023	4660	66.70		18.74		7.68		11.36	
27.01.2023	28.01.2023	4667	71.08		19.91		9.13		13.22	
Average			70.59		19.79		7.72		11.46	

SLNO	INSTRUMENT DETAILS		
1	Instrument Name	Respirable Dust Sampler (RDS)	Fine Particulate Sampler (FPS)
2	Make & Model	Ecotech instruments / APM-460	Enviro instruments / APM-550 G
3	Serial No	R.D.S./325-DTT-2005	PM2.5 / PM10 Sampler / 66-ETP-2011
4	Calibration Date	01.04.2022	01.04.2022
5	Calibration Due Date	31.03.2023	31.03.2023

INFERENCE As per NAAQMS Standards (2009),
 Report Status: - Measured Values for the above parameters are within the limit.

Reviewed by



Authorised Signatory
K. Suvarna
 Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



Leaders in Environment
Monitoring



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-06

ANALYSIS REPORT OF AMBIENT AIR QUALITY DATA

Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference	: WO/ADMIN/FY23/R073
Sample collected by	: Global Environment & Mining Services
Discipline	: Chemical
Group	: Atmospheric Pollution
Sample Type	: Ambient Air Quality Monitoring
Particulars of Sample Collected	: CO Analyser
Month	: JANUARY-2023
Location	: A6-Gunda Tanda Village
Duration of Monitoring	: 1 Hour
Report Issued Date	: 04.02.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	04.01.2023	4284	<0.01	4.0
2	05.01.2023	4303	0.10	
3	11.01.2023	4398	<0.01	
4	12.01.2023	4422	<0.01	
5	18.01.2023	4530	<0.01	
6	19.01.2023	4551	<0.01	
7	25.01.2023	4660	0.09	
8	27.01.2023	4667	<0.01	

Note: CO - GEMS/SOP/86/as per CO Analyzer Manual (1 Hour)

ND - Not Detected

SL NO	INSTRUMENT DETAILS	
1	Instrument Name	CO Gas Detector
2	Make & Model	Vasthi Instruments Pvt Ltd & VS-70-70-CO
3	Serial No	180883821
4	Calibration Date	09.07.2022
5	Calibration Due Date	08.07.2023

INFERENCE	As per NAAQMS Standards (2009), Report Status: - Measured Values for the above parameters are within the limit
-----------	---



R. Swam
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-07

FORTNIGHTLY FUGITIVE AIR QUALITY MONITORING DATA

1	Name of the Industry	:	BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	:	WO/ADMIN/FY23/RO73
3	Sample collected by	:	GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	:	RDS Sampler (GEMS-01, GEMS-02, GEMS-03, GEMS-04, GEMS-05)
5	Month	:	JANUARY-2023(1 st Fort Night)
6	Discipline	:	Chemical
7	Group	:	Atmospheric Pollution
8	Method adopted	:	IS 5182 (Part 4): 1999 RA 2014
9	Report Issued Date	:	04.02.2023
10	Report Number	:	PAL/BMM/2022-23/1007

RESULTS

Sl. No.	Location / Plant	Sample Code	Date Of Monitoring	Date Of Sample Receipt	SPM ($\mu\text{g}/\text{m}^3$)	Standard
I. Beneficiation Plant-1						
1.	Main Canteen	4404	11.01.2023	12.01.2023	1869.96	2000
2.	Main Crusher	4402	11.01.2023	12.01.2023	1071.45	2000
3.	Iron Ore Screen	4403	11.01.2023	12.01.2023	1456.55	2000
II. Pellet Plant-I						
4.	Near Pellet Plant	4405	11.01.2023	12.01.2023	1308.42	2000
5.	Annual Cooler Pellet Discharge bin	4406	11.01.2023	12.01.2023	1159.98	2000
6.	Pellet Stock Yard	4426	12.01.2023	13.01.2023	1529.89	2000
III. Sponge Iron Division-1 (kiln 1 & 2)						
7.	Control Room SID-1	4449	13.01.2023	14.01.2023	1662.67	2000
8.	Near Product bin	4450	13.01.2023	14.01.2023	1693.39	2000
9.	Coal Feeding Area	4451	13.01.2023	14.01.2023	1290.74	2000
IV. Induction Furnace & Rolling Mill - 1						
10.	IF Office	4427	12.01.2023	13.01.2023	1756.76	2000
11.	TMT Stock Yard	4428	12.01.2023	13.01.2023	1118.84	2000
12.	RML Gasifier	4429	12.01.2023	13.01.2023	1571.64	2000
V. Power Plant 25 MW-1						
13.	25 MW ESP	4452	13.01.2023	14.01.2023	1248.68	2000
14.	25 MW ACC	4458	14.01.2023	15.01.2023	1257.82	2000
VI. Site Services						
15.	PGP- coal handling system	4430	12.01.2023	13.01.2023	938.27	2000
16.	IF Slag Crusher	4453	13.01.2023	14.01.2023	1599.86	2000
17.	Main Gate	4459	14.01.2023	15.01.2023	554.02	2000
18.	Fly ash Dump	4384	10.01.2023	11.01.2023	1843.70	2000

Note: SPM- Suspended Particulate matter. ($\mu\text{g}/\text{m}^3$), INFERENCE: The Measured Values are within the limits.

Sl. NO	INSTRUMENT DETAILS	GEMS-01	GEMS-02	GEMS-03	GEMS-04	GEMS-05
1	Instrument Name	Respirable Dust Sampler	Respirable Dust Sampler	Respirable Dust Sampler	Respirable Dust Sampler	Respirable Dust Sampler
2	Make & Model	Greentech Instruments/ GTI-151	Greentech Instruments/ GTI-151	Greentech Instruments/ GTI-151	Greentech Instruments/ GTI-151	Greentech Instruments/ GTI-151
3	Serial No	RDS / 241-DTC-2020	RDS / 243-DTL-2020	RDS / 244-DTL-2020	RDS / 193-DTH-2019	RDS / 197-DTH-2019
4	Calibration Date	01.04.2022	01.04.2022	01.04.2022	01.04.2022	01.04.2022
5	Calibration Due Date	31.03.2023	31.03.2023	31.03.2023	31.03.2023	31.03.2023



K. Suvana
Authorised Signatory
K. Suvana
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-08

FORTNIGHTLY FUGITIVE AIR QUALITY MONITORING DATA

1	Name of the Industry	:	BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	:	WO/ADMIN/FY23/R073
3	Sample collected by	:	GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	:	RDS Sampler (GEMS-01, GEMS-02, GEMS-03, GEMS-04, GEMS-05)
5	Month	:	JANUARY-2023(2 nd Fort Night)
6	Discipline	:	Chemical
7	Group	:	Atmospheric Pollution
8	Method adopted	:	IS 5182 (Part 4): 1999 RA 2014
9	Report Issued Date	:	04.02.2023
10	Report Number	:	PAL/BMM/2022-23/1008

RESULTS

Sl. NO.	Location / Plant	Sample Code	Date Of Monitoring	Date Of Sample Receipt	SPM ($\mu\text{g}/\text{m}^3$)	Standard
I. Beneficiation Plant-1						
1.	Main Canteen	4590	21.01.2023	22.01.2023	1095.26	2000
2.	Main Crusher	4588	21.01.2023	22.01.2023	1115.81	2000
3.	Iron Ore Screen	4589	21.01.2023	22.01.2023	1718.58	2000
II. Pellet Plant-I						
4.	Near Pellet Plant	4591	21.01.2023	22.01.2023	1491.49	2000
5.	Annual Cooler Pellet Discharge bin	4592	21.01.2023	22.01.2023	1589.52	2000
6.	Pellet Stock Yard	4618	23.01.2023	24.01.2023	1831.27	2000
III. Sponge Iron Division-1(kiln 1 & 2)						
7.	Control Room SID-I	4641	24.01.2023	25.01.2023	1206.83	2000
8.	Near Product bin	4642	24.01.2023	25.01.2023	1228.87	2000
9.	Coal Feeding Area	4643	24.01.2023	25.01.2023	1518.67	2000
IV. Induction Furnace & Rolling Mill - 1						
10.	IF Office	4619	23.01.2023	24.01.2023	1836.06	2000
11.	TMT Stock Yard	4620	23.01.2023	24.01.2023	1284.19	2000
12.	RML Gasifier	4670	30.01.2023	31.01.2023	1415.01	2000
V. Power Plant 25 MW-1						
13.	25 MW ESP	4674	30.01.2023	31.01.2023	1531.67	2000
14.	25 MW ACC	4675	30.01.2023	31.01.2023	969.97	2000
VI. Site Services						
15.	PGP- Coal handling system	4622	23.01.2023	24.01.2023	1264.02	2000
16.	IF Slag Crusher	4644	24.01.2023	25.01.2023	1385.12	2000
17.	Main Gate	4676	30.01.2023	31.01.2023	867.65	2000
18.	Fly ash Dump	4575	20.01.2023	21.01.2023	1810.58	2000

Note: SPM - Suspended Particulate matter ($\mu\text{g}/\text{m}^3$), INFERENCE: The Measured Values are within the limits.

SL NO	INSTRUMENT DETAILS	GEMS-01	GEMS-02	GEMS-03	GEMS-04	GEMS-05
1	Instrument Name	Respirable Dust Sampler	Respirable Dust Sampler	Respirable Dust Sampler	Respirable Dust Sampler	Respirable Dust Sampler
2	Make & Model	Greentech Instruments/ GTI-151	Greentech Instruments/ GTI-151	Greentech Instruments/ GTI-151	Greentech Instruments/ GTI-151	Greentech Instruments/ GTI-151
3	Serial No	RDS / 241-DTC-2020	RDS / 243-DTL-2020	RDS / 244-DTL-2020	RDS / 193-DTH-2019	RDS / 197-DTH-2019
4	Calibration Date	01.04.2022	01.04.2022	01.04.2022	01.04.2022	01.04.2022
5	Calibration Due Date	31.03.2023	31.03.2023	31.03.2023	31.03.2023	31.03.2023



B. Swarna
Authorised Signatory
K. Suvana
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-09

Analysis Report of Stack Emission

- 1 Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
- 2 Customer Reference : WO/ADMIN/FY23/R073
- 3 Sample collected by : GLOBAL Environment & Mining Services, Hosapete
- 4 Particulars of sample collected : Vayubodhan Stack sampler/ VSS-1
Sl. No: Stack Monitoring Kit/ 304-DTB-2007
- 5 Instrument Details : Calibration Date: 07.02.2022
Calibration Due Date: 06.02.2023
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Sampling Location : Pellet Plant-1 ESP
- 10 Month of Sampling : JANUARY-2023
- 11 Date of Sample Received : 05.01.2023 & 18.01.2023
- 12 Date of Sample Analysis : 05.01.2023 & 18.01.2023
- 13 Date Sample Analysis Completion : 06.01.2023 & 19.01.2023
- 14 Report Issued Date : 04.02.2023
- 15 Report Number : ULR-TC619323000001009F

Stack Details

- 1 Fuel Used : Coal & furnace oil
- 2 Stack Height (mtr) : 100.0
- 3 Stack Diameter (mtr) : 4.4

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
				1 st Fort Night	2 nd Fort Night	
				04.01.2023	17.01.2023	
	Date of Monitoring			4285	4506	
	Sample Code					
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	29	29	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	72	71	-
3	Velocity of Fuel Gas	IS: 11255 (Part 1) - 1985 (RA 2014)	m/sec	6.65	6.79	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m ³ /hr	364062	371727	-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm ³ /hr	315376	322655	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	38.51	33.53	150
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³	74.36	91.57	160
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	14.35	10.25	50

Note: NS- Not Specified, RA: Reaffirmed, INFERENCE: The Measured Values are within the limits.



Reviewed by



K. Suvarna

Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



Leaders in Environment
Monitoring



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-09

Analysis Report of Stack Emission

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	: Vayubodhan Stack sampler/ VSS-1 Sl. No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	: Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Sampling Location	: Pellet Plant-1 ESP
10	Month of Sampling	: JANUARY-2023
11	Date of Sample Received	: 05.01.2023 & 18.01.2023
12	Date of Sample Analysis	: 05.01.2023 & 18.01.2023
13	Date Sample Analysis Completion	: 06.01.2023 & 19.01.2023
14	Report Issued Date	: 04.02.2023

Stack Details

1	Fuel Used	Coal & furnace oil
2	Stack Height (mtr)	100.0
3	Stack Diameter (mtr)	4.4

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
				1 st Fort Night	2 nd Fort Night	
				04.01.2023	17.01.2023	
				4285	4506	
1	Carbon Monoxide	GEMS/SOP/69	%	0.014	0.011	-

Note: NS- Not Specified, RA: Reaffirmed, INFERENCE: The Measured Values are within the limits.



K. Suvarna
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-10

Analysis Report of Stack Emission

- 1 Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
- 2 Customer Reference : WO/ADMIN/FY23/RO73
- 3 Sample collected by : GLOBAL Environment & Mining Services, Hosapete
- 4 Particulars of sample collected : Vayubodhan Stack sampler/ **VSS-1**
Sl.No: Stack Monitoring Kit/ **304-DTB-2007**
- 5 Instrument Details : Calibration Date: 07.02.2022
Calibration Due Date: 06.02.2023
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Sampling Location : **2X110 TPD Sponge iron plant Kiln 1 & 2**
- 10 Month of Sampling : **JANUARY-2023**
- 11 Date of Sample Received : 14.01.2023 & 25.01.2023
- 12 Date of Sample Analysis : 14.01.2023 & 25.01.2023
- 13 Date Sample Analysis Completion : 16.01.2023 & 27.01.2023
- 14 Report Issued Date : **04.02.2023**
- 15 Report Number : **ULR-TC619323000001010F**

Stack Details

- 1 Fuel Used : Coal
- 2 Stack Height (mtr) : 60.0
- 3 Stack Diameter (mtr) : 2.00

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
				1 st Fort Night	2 nd Fort Night	
				13.01.2023	24.01.2023	
	Date of Monitoring					
	Sample Code					
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	28	28	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	174	169	-
3	Velocity of Fuel Gas	IS: 11255 (Part 1) - 1985 (RA 2014)	m/sec	7.58	7.33	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m ³ /hr	85739	82911	-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm ³ /hr	57242	55877	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	44.10	27.33	150
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³	85.80	77.22	100
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	26.66	22.55	50

Note: NS- Not Specified. RA: Reaffirmed, INFERENCE: The Measured Values are within the limits.

Reviewed by



K. Suvama
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-10

Analysis Report of Stack Emission

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	: Vayubodhan Stack sampler/ VSS-1 Sl.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	: Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Sampling Location	: 2X110 TPD Sponge iron plant Kiln 1 & 2
10	Month of Sampling	: JANUARY-2023
11	Date of Sample Received	: 14.01.2023& 25.01.2023
12	Date of Sample Analysis	: 14.01.2023& 25.01.2023
13	Date Sample Analysis Completion	: 16.01.2023& 27.01.2023
14	Report Issued Date	: 04.02.2023

Stack Details

1	Fuel Used	Coal
2	Stack Height (mtr)	60.0
3	Stack Diameter (mtr)	2.00

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
				1st Fort Night	2nd Fort Night	
				13.01.2023	24.01.2023	
	Date of Monitoring			4446	4638	
	Sample Code					
1	Carbon Monoxide	GEMS/SOP/69	%	0.048	0.037	-

Note: NS- Not Specified. RA: Reaffirmed, **INFERENCE:** The Measured Values are within the limits.



R. Swarna
Authorised Signatory
H. Suvanna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-11

Analysis Report of Stack Emission

1	Name of the Industry	:	BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District
2	Customer Reference	:	WO/ADMIN/FY23/R073
3	Sample collected by	:	GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	:	Vayubodhan Stack sampler/ VSS-1 Sl.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	:	Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	:	Chemical
7	Group	:	Atmospheric Pollution
8	Sample Type	:	Stack Monitoring
9	Sampling Location	:	Induction Furnace1& 2
10	Month of Sampling	:	JANUARY-2023
11	Date of Sample Received	:	-
12	Date of Sample Analysis	:	-
13	Date Sample Analysis Completion	:	-
14	Report Issued Date	:	04.02.2023
15	Report Number	:	ULR-TC619323000001011F

Stack Details

1	Fuel Used	Electric Power
2	Stack Height (mtr)	30.0
3	Stack Diameter (mtr)	1.0

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
	Date of Monitoring			1 st Fort Night	2 nd Fort Night	
	Sample Code			-	-	
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	Under Maintenance		-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C			-
3	Velocity of Fuel Gas	IS: 11255 (Part 1) - 1985 (RA 2014)	m/sec			-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m ³ /hr			-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm ³ /hr			-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³			100
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³			NS
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³			NS

Note: NS- Not Specified, RA: Reaffirmed, INFERENCE: The Measured Values are within the limits.

Reviewed by



Authorised Signatory
K. Suvana
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-11

Analysis Report of Stack Emission

1	Name of the Industry	:	BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District
2	Customer Reference	:	WO/ADMIN/FY23/R073
3	Sample collected by	:	GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	:	Vayubodhan Stack sampler/ VSS-1 Sl.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	:	Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	:	Chemical
7	Group	:	Atmospheric Pollution
8	Sample Type	:	Stack Monitoring
9	Sampling Location	:	Induction Furnace1& 2
10	Month of Sampling	:	JANUARY-2023
11	Date of Sample Received	:	-
12	Date of Sample Analysis	:	-
13	Date Sample Analysis Completion	:	-
14	Report Issued Date	:	04.02.2023

Stack Details

1	Fuel Used	Electric Power
2	Stack Height (mtr)	30.0
3	Stack Diameter (mtr)	1.0

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
	Date of Monitoring			1st Fort Night	2nd Fort Night	
	Sample Code			-	-	
9	Carbon Monoxide	GEMS/SOP/69	%	Under Maintenance		-

Note: NS- Not Specified, RA: Reaffirmed, INFERENCE: The Measured Values are within the limits.



B. Suvanna
Authorised Signatory
R. Suvanna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-12

Analysis Report of Stack Emission

- 1 Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District
- 2 Customer Reference : WO/ADMIN/FY23/R073
- 3 Sample collected by : GLOBAL Environment & Mining Services, Hosapete
- 4 Particulars of sample collected : Vayubodhan Stack sampler/ VSS-1
Sl.No: Stack Monitoring Kit/ 304-DTB-2007
- 5 Instrument Details : Calibration Date: 07.02.2022
Calibration Due Date: 06.02.2023
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Sampling Location : Rolling mill reheating furnace
- 10 Month of Sampling : JANUARY-2023
- 11 Date of Sample Received : 13.01.2023 & 31.01.2023
- 12 Date of Sample Analysis : 13.01.2023 & 01.02.2023
- 13 Date Sample Analysis Completion : 14.01.2023 & 02.02.2023
- 14 Report Issued Date : 04.02.2023
- 15 Report Number : ULR-TC619323000001012F

Stack Details

- 1 Fuel Used : Coal
- 2 Stack Height (mtr) : 30.0
- 3 Stack Diameter (mtr) : 0.8

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
				1 st Fort Night	2 nd Fort Night	
				12.01.2023	30.01.2023	
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	4423	4671	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	28	28	-
3	Velocity of Fuel Gas	IS: 11255 (Part 1) - 1985 (RA 2014)	m/sec	377	360	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m ³ /hr	8.53	8.30	-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm ³ /hr	15438	15021	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	7086	7070	-
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³	17.93	20.60	100
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	5.72	100.10	270
				0.0	20.50	50

Note: NS- Not Specified. RA: Reaffirmed, INFERENCE: The Measured Values are within the limits.

Reviewed by



Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)
ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory
Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-12

Analysis Report of Stack Emission

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	: Vayubodhan Stack sampler/ VSS-1 Sl.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	: Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Sampling Location	: Rolling mill reheating furnace
10	Month of Sampling	: JANUARY-2023
11	Date of Sample Received	: 13.01.2023 & 31.01.2023
12	Date of Sample Analysis	: 13.01.2023 & 01.02.2023
13	Date Sample Analysis Completion	: 14.01.2023 & 02.02.2023
14	Report Issued Date	: 04.02.2023

Stack Details

1	Fuel Used	Coal
2	Stack Height (mtr)	30.0
3	Stack Diameter (mtr)	0.8

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
	Date of Monitoring			1 st Fort Night	2 nd Fort Night	
	Sample Code			12.01.2023	30.01.2023	
1	Carbon Monoxide	GEMS/SOP/69	%	0.281	0.264	-

Note: NS- Not Specified. RA: Reaffirmed, **INFERENCE:** The Measured Values are within the limits.



K. Suvanna
Authorised Signatory
K. Suvanna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-13

Analysis Report of Stack Emission

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	: Vayubodhan Stack sampler/ VSS-1 SI.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	: Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Sampling Location	: AFBC Boiler ESP (25 MW Power Plant)
10	Month of Sampling	: JANUARY-2023
11	Date of Sample Received	: -
12	Date of Sample Analysis	: -
13	Date Sample Analysis Completion	: -
14	Report Issued Date	: 04.02.2023
15	Report Number	: ULR-TC619323000001013F

Stack Details

1	Fuel Used	Coal
2	Stack Height (mtr)	65.0
3	Stack Diameter (mtr)	2.5

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
				1 st Fort Night	2 nd Fort Night	
	Date of Monitoring Sample Code					
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	Shutdown		-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C			-
3	Velocity of Fuel Gas	IS: 11255 (Part 1) - 1985 (RA 2014)	m/sec			-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m ³ /hr			-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm ³ /hr			-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³			50
7	Sulphur Dioxide	IS: 11255 (Part 2) - (RA 2014)	mg/Nm ³			600
8	Nitrogen Dioxide	IS:11255 (Part7): 2007 (RA 2017)	mg/Nm ³			300

Note: NS- Not Specified. RA: Reaffirmed.

Reviewed by



Authorised Signatory
K. Suvana
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



Leaders in Environment
Monitoring



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-13

Analysis Report of Stack Emission

1	Name of the Industry	:	BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District
2	Customer Reference	:	WO/ADMIN/FY23/R073
3	Sample collected by	:	GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	:	Vayubodhan Stack sampler/ VSS-1 Sl.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	:	Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	:	Chemical
7	Group	:	Atmospheric Pollution
8	Sample Type	:	Stack Monitoring
9	Sampling Location	:	AFBC Boiler ESP (25 MW Power Plant)
10	Month of Sampling	:	JANUARY-2023
11	Date of Sample Received	:	-
12	Date of Sample Analysis	:	-
13	Date Sample Analysis Completion	:	-
14	Report Issued Date	:	04.02.2023

Stack Details

1	Fuel Used	Coal
2	Stack Height (mtr)	65.0
3	Stack Diameter (mtr)	2.5

Emission Details

Sl. No.	Parameters	Method	Unit	Result		Permissible Limit
	Date of Monitoring			1 st Fort Night	2 nd Fort Night	
	Sample Code					
1	Carbon Monoxide	GEMS/SOP/69	%	Shutdown		-

Note: NS- Not Specified. RA: Reaffirmed,



K. Suvana

Authorised Signatory

K. Suvana

Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-14

Analysis Report of Stack Emission

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	: Vayubodhan Stack sampler/ VSS-1 Sl.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	: Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Date of Analysis Completion	: JANUARY-2023 (1 st Fort Night)
10	Date of Sample Received	: 07.01.2023
11	Date of Sample Analysis	: 09.01.2023
12	Date Sample Analysis Completion	: 10.01.2023
13	Report Issued Date	: 04.02.2023
14	Report Number	: ULR-TC619323000001014F

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm ³	KSPCB Std mg/Nm ³
Chimneys attached to Bag Filter (De dusting Units)											
Beneficiation Plant											
1	Ore Crushing & Screening	07.01.2023	4341	-	28	40	5.62	30	0.40	15.91	50
2	Ore Fines Hopper Bottom	07.01.2023	4342	-	27	38	5.38	30	0.40	20.05	50
3	Main Crusher (RMHS)	07.01.2023	4343	-	29	39	5.48	25	0.50	14.5	50

Sl. No	Beneficiation Plant	Gas flow rate at Stack Condition m ³ /hr	Gas flow rate at NTP Nm ³ /hr	KSPCB Std
1	Ore Crushing & Screening	2543	2412	-
2	Ore Fines Hopper Bottom	2434	2321	-
3	Main Crusher (RMHS)	3874	3697	-

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

Reviewed by



K. Suvarna
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-15

Analysis Report of Stack Emission

- 1 Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
- 2 Customer Reference : WO/ADMIN/FY23/RO73
- 3 Sample collected by : GLOBAL Environment & Mining Services, Hosapete
- 4 Particulars of sample collected : Vayubodhan Stack sampler/ **VSS-1**
SI.No: Stack Monitoring Kit/ **304-DTB-2007**
- 5 Instrument Details : Calibration Date: 07.02.2022
Calibration Due Date: 06.02.2023
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Date of Analysis Completion : **JANUARY-2023 (1st Fort Night)**
- 10 Date of Sample Received : 05.01.2023 & 06.01.2023
- 11 Date of Sample Analysis : 05.01.2023 & 06.01.2023
- 12 Date Sample Analysis Completion : 06.01.2023 & 07.01.2023
- 13 Report Issued Date : **04.02.2023**
- 14 Report Number : **ULR-TC619323000001015F**

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm ³	KSPCB Std mg/Nm ³
Chimneys attached to Bag Filter (De dusting Units)											
Pellet Plant -I											
4	Mixed Area	05.01.2023	4305	---	29	36	5.24	3.0	0.30	37.06	50
5	Pellet Discharge Point	04.01.2023	4286	---	30	40	6.38	7.0	0.50	32.14	50
6	Production Transfer Point (AGB)	05.01.2023	4306	---	29	38	5.71	6.5	0.60	25.38	50

Sl. No	Pellet Plant	Gas flow rate at Stack Condition m ³ /hr	Gas flow rate at NTP Nm ³ /hr	KSPCB Std
4	Mixed Area	1334	1288	-
5	Pellet Discharge Point	4510	4296	-
6	Product Transfer Point(AGB)	5813	5573	-

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

Reviewed by



Authorised Signatory
K. Suvanna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-16

Analysis Report of Stack Emission

- 1 Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
- 2 Customer Reference : WO/ADMIN/FY23/RO73
- 3 Sample collected by : GLOBAL Environment & Mining Services, Hosapete
- 4 Particulars of sample collected : Vayubodhan Stack sampler/ VSS-1
Sl.No: Stack Monitoring Kit/ 304-DTB-2007
- 5 Instrument Details : Calibration Date: 07.02.2022
Calibration Due Date: 06.02.2023
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Date of Analysis Completion : JANUARY-2023 (1st Fort Night)
- 10 Date of Sample Received : 14.01.2023 & 16.01.2023
- 11 Date of Sample Analysis : 14.01.2023 & 16.01.2023
- 12 Date Sample Analysis Completion : 16.01.2023 & 17.01.2023
- 13 Report Issued Date : 04.02.2023
- 14 Report Number : ULR-TC619323000001016F

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm ³	KSPCB Std mg/Nm ³
Chimneys attached to Bag Filter (De dusting Units)											
2 X 100 TPD Sponge Iron Kiln 1 & 2											
7	Cooler Discharge -1	13.01.2023	4447	---	31	36	4.68	30	1.20	24.86	50
8	Cooler Discharge -2	14.01.2023	4455	---	28	36	5.30	30	1.20	28.78	50
9	Coal Crusher	-	-	---	-	-	-	30	1.20	-	50
10	Production Separation Bin (PSB)	14.01.2023	4456	---	29	38	5.47	30	1.20	35.16	50
11	Intermediate Bin	14.01.2023	4457	---	31	39	5.55	30	1.20	25.37	50

Sl. No	2 X 100 TPD Sponge Iron Kiln 1 & 2	Gas flow rate at Stack Condition m ³ /hr	Gas flow rate at NTP Nm ³ /hr	KSPCB Std
7	Cooler Discharge -1	19912	19020	-
8	Cooler Discharge -2	21460	20545	-
9	Coal Crusher	-	-	-
10	Production Separation Bin (PSB)	21622	20820	-
11	Intermediate Bin	23007	21979	-

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)



Reviewed by



K. Suvama

Authorised Signatory

K. Suvama

Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-17

Analysis Report of Stack Emission

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services, Hosapete
4	Particulars of sample collected	: Vayubodhan Stack sampler/ VSS-1 Sl.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	: Calibration Date: 07.02.2022 Calibration Due Date: 06.02.2023
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Date of Analysis Completion	: JANUARY-2023 (2 ND Fort Night)
10	Date of Sample Received	: 31.01.2023
11	Date of Sample Analysis	: 01.02.2023
12	Date Sample Analysis Completion	: 02.02.2023
13	Report Issued Date	: 04.02.2023
14	Report Number	: ULR-TC619323000001017F

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm ³	KSPCB Std mg/Nm ³
Chimneys attached to Bag Filter (De dusting Units)											
Beneficiation Plant											
1	Ore Crushing & Screening	27.01.2023	4662	---	29	40	5.47	30	0.40	16.03	50
2	Ore Fines Hopper Bottom	27.01.2023	4663	---	30	39	5.37	30	0.40	24.13	50
3	Main Crusher (RMHS)	31.01.2023	4681	---	28	35	5.46	25	0.50	17.03	50

Sl. No	Beneficiation Plant	Gas flow rate at Stack Condition m ³ /hr	Gas flow rate at NTP Nm ³ /hr	KSPCB Std
1	Ore Crushing & Screening	2475	2360	-
2	Ore Fines Hopper Bottom	2430	2319	-
3	Main Crusher (RMHS)	3860	3734	-

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

Reviewed by



Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-18

Analysis Report of Stack Emission

- 1 Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
- 2 Customer Reference : WO/ADMIN/FY23/R073
- 3 Sample collected by : GLOBAL Environment & Mining Services, Hosapete
- 4 Particulars of sample collected : Vayubodhan Stack sampler/ **VSS-1**
Sl.No: Stack Monitoring Kit/ **304-DTB-2007**
- 5 Instrument Details : Calibration Date: 07.02.2022
Calibration Due Date: 06.02.2023
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Date of Analysis Completion : **JANUARY-2023 (2ND Fort Night)**
- 10 Date of Sample Received : 18.01.2023 & 19.01.2023
- 11 Date of Sample Analysis : 18.01.2023 & 19.01.2023
- 12 Date Sample Analysis Completion : 19.01.2023 & 20.01.2023
- 13 Report Issued Date : **04.02.2023**
- 14 Report Number : **ULR-TC619323000001018F**

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm ³	KSPCB Std mg/Nm ³
Chimneys attached to Bag Filter (De dusting Units)											
Pellet Plant-I											
4	Mixed Area	18.01.2023	4532	---	31	38	4.95	3.0	0.30	33.12	50
5	Pellet Discharge Point	17.01.2023	4507	---	31	39	6.00	7.0	0.50	23.30	50
6	Production Transfer Point (AGB)	18.01.2023	4533	---	31	37	4.65	6.5	0.60	28.27	50

Sl. No	Pellet Plant	Gas flow rate at Stack Condition m ³ /hr	Gas flow rate at NTP Nm ³ /hr	KSPCB Std
4	Mixed Area	1260	1204	-
5	Pellet Discharge Point	4242	4048	-
6	Production Transfer Point (AGB)	4734	4536	-

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

Reviewed by



Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-19

Analysis Report of Stack Emission

- | | | | |
|----|---------------------------------|---|--|
| 1 | Name of the Industry | : | BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District. |
| 2 | Customer Reference | : | WO/ADMIN/FY23/RO73 |
| 3 | Sample collected by | : | GLOBAL Environment & Mining Services, Hosapete |
| 4 | Particulars of sample collected | : | Vayubodhan Stack sampler/ VSS-1
SL.No: Stack Monitoring Kit/ 304-DTB-2007 |
| 5 | Instrument Details | : | Calibration Date: 07.02.2022
Calibration Due Date: 06.02.2023 |
| 6 | Discipline | : | Chemical |
| 7 | Group | : | Atmospheric Pollution |
| 8 | Sample Type | : | Stack Monitoring |
| 9 | Date of Analysis Completion | : | JANUARY-2023 (2 ND Fort Night) |
| 10 | Date of Sample Received | : | 25.01.2023 & 31.01.2023 |
| 11 | Date of Sample Analysis | : | 25.01.2023 & 31.01.2023 |
| 12 | Date Sample Analysis Completion | : | 27.01.2023 & 01.02.2023 |
| 13 | Report Issued Date | : | 04.02.2023 |
| 14 | Report Number | : | ULR-TC619323000001019F |

Sl. No	Stack Attached to	Date of Monitoring	Sample Code	Fuel Used	Ta °C	TS °C	V m/Sec	Height (m)	Diameter (m)	PM mg/Nm ³	KSPCB Std mg/Nm ³
Chimneys attached to Bag Filter (De dusting Units)											
2 X 100 TPD Sponge Iron Kiln 1 & 2											
7	Cooler Discharge -1	24.01.2023	4639	---	30	37	4.83	30	1.20	25.32	50
8	Cooler Discharge -2	24.01.2023	4640	---	29	39	5.41	30	1.20	28.15	50
9	Coal Crusher	-	-	---	-	-	-	30	1.20	-	50
10	Transfer House-PSB	30.01.2023	4672	---	29	36	5.26	30	1.20	32.51	50
11	Intermediate Bin	30.01.2023	4673	---	30	37	5.36	30	1.20	30.18	50

Sl. No	2 X 100 TPD Sponge Iron Kiln 1 & 2	Gas flow rate at Stack Condition m ³ /hr	Gas flow rate at NTP Nm ³ /hr	KSPCB Std
7	Cooler Discharge -1	19668	18837	-
8	Cooler Discharge -2	22030	20950	-
9	Coal Crusher	-	-	-
10	Transfer House-PSB	21419	20597	-
11	Intermediate Bin	21826	20904	-

Parameter	Protocol
Particulate Matter (mg/Nm ³)	IS: 11255 (Part 1) - 1985 (reaffirmed 2014)
Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)
Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)

Reviewed by



K. Suvarna
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-20

AMBIENT NOISE LEVEL MONITORING REPORT

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
Customer Reference : WO/ADMIN/FY23/R073
Sample collected by : Global Environment & Mining Services
Discipline : Chemical
Group : Atmospheric Pollution
Sample Type : Noise Level Monitoring
Particulars of Sample Collected : Equinox-107
Sl. No: 110706604
Instrument Details : Calibration Date: 24.05.2022
Calibration Due Date: 23.05.2023
Month : JANUARY-2023
Report Issue Date : 04.02.2023
Method Adopted : IS 9989-1981 Reaffirmed 2014
Report No : ULR-TC619323000001020F

Sl. No	Location	Date of Monitoring	Noise Level dB (A)					
			Day Time		Standard	Night Time		Standard
			Min	Max		Min	Max	
1	Main Gate	03.01.2023	48.3	54.6	75	48.9	59.6	70
2	Near ATM	03.01.2023	48.2	54.2	75	49.6	65.7	70
3	Transit House	04.01.2023	46.4	54.2	75	46.8	59.2	70
4	CAAQMS Station	04.01.2023	46.6	54.2	75	44.7	56.3	70
5	Gunda Road	05.01.2023	52.8	59.2	75	48.3	57.1	70
6	Gunda Railway Station	05.01.2023	62.4	69.8	75	55.4	68.2	70
7	Bagging Shed	06.01.2023	56.8	66.0	75	56.2	67.3	70
8	Railway Siding	06.01.2023	62.8	69.2	75	61.8	67.5	70
9	4th Gate	10.01.2023	52.3	56.2	75	52.3	66.8	70
10	Bricks Plant	10.01.2023	52.4	63.4	75	60.4	66.8	70
11	Kempuhalla (Wagon Tippler)	11.01.2023	52.2	58.2	75	56.8	68.9	70
12	Danapura Bridge	11.01.2023	52.4	63.9	75	62.5	66.3	70
13	2nd Gate	12.01.2023	53.4	62.4	75	56.1	63.4	70
14	Project Store	12.01.2023	47.6	53.4	75	54.8	59.8	70
15	Dispatch (Truck Parking Area)	12.01.2023	60.1	72.4	75	57.5	64.7	70

INFERENCE

As per CPCB Standards,
Report Status: - Measured Values for the above parameters are within the limit.



Reviewed by



K. Suvama
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-21

AMBIENT NOISE LEVEL MONITORING REPORT

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
 Customer Reference : WO/ADMIN/FY23/R073
 Sample collected by : Global Environment & Mining Services
 Discipline : Chemical
 Group : Atmospheric Pollution
 Sample Type : Noise Level Monitoring
 Particulars of Sample Collected : Equinox-107
 Instrument Details : Sl. No: 110706604
 Calibration Date: 24.05.2022
 Calibration Due Date: 23.05.2023
 Month : JANUARY-2023
 Report Issue Date : 04.02.2023
 Method Adopted : IS 9989-1981 Reaffirmed 2014
 Report No : ULR-TC619323000001021F

Sl. No	Location	Date of Monitoring	Noise Level dB (A)					
			Day Time		Standard	Night Time		Standard
			Min	Max		Min	Max	
1	Main Gate	16.01.2023	45.3	56.8	75	47.2	55.9	70
2	Near ATM	16.01.2023	47.2	54.8	75	45.7	63.4	70
3	Transit House	17.01.2023	47.8	55.1	75	42.6	55.8	70
4	CAAQMS Station	17.01.2023	42.6	60.2	75	45.1	57.6	70
5	Gunda Road	18.01.2023	42.3	52.3	75	46.5	58.1	70
6	Gunda Railway Station	18.01.2023	49.8	69.6	75	54.2	65.8	70
7	Bagging Shed	19.01.2023	56.2	64.5	75	52.6	64.5	70
8	Railway Siding	19.01.2023	60.0	66.8	75	57.3	66.4	70
9	4th Gate	20.01.2023	50.4	56.2	75	48.1	63.9	70
10	Bricks Plant	20.01.2023	53.2	64.1	75	50.8	64.1	70
11	Kempuhalla (Wagon Tippler)	21.01.2023	46.4	56.5	75	53.2	61.8	70
12	Danapura Bridge	21.01.2023	57.2	63.9	75	58.5	67.7	70
13	2nd Gate	23.01.2023	42.9	56.4	75	53.7	60.4	70
14	Project Store	23.01.2023	42.1	46.4	75	50.3	57.1	70
15	Dispatch (Truck Parking Area)	23.01.2023	59.2	66.5	75	52.6	62.5	70

INFERENCE As per CPCB Standards,
 Report Status: - Measured Values for the above parameters are within the limit.

Reviewed by



Authorised Signatory
K. Suvama
 Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-22

AMBIENT NOISE LEVEL MONITORING REPORT

Name of the Industry : BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
 Customer Reference : WO/ADMIN/FY23/R073
 Sample collected by : Global Environment & Mining Services
 Discipline : Chemical
 Group : Atmospheric Pollution
 Sample Type : Noise Level Monitoring
 Particulars of Sample Collected : Equinox-107
 Sl. No: 110706604
 Instrument Details : Calibration Date: 24.05.2022
 Calibration Due Date: 23.05.2023
 Month : JANUARY-2023
 Report Issue Date : 04.02.2023
 Method Adopted : IS 9989-1981 Reaffirmed 2014
 Sample Code : 4252, 4344, 4359, 4454, 4468 & 4661
 Report No : ULR-TC619323000001022F

Sl. No	Location	Date of Monitoring	Noise Level dB (A)							
			Day Time			Standard	Night Time			Standard
			Min	Max	Avg		Min	Max	Avg	
1	Danapur Village	02.01.2023	40.3	53.8	49.72	55	36.2	43.6	39.17	45
2	MariyammanaHalli	07.01.2023	44.2	54.3	51.43		36.8	43.4	40.06	
3	HanumanaHalli	09.01.2023	45.7	53.6	51.29		38.3	43.2	41.95	
4	Galemmanagudi	13.01.2023	42.9	51.1	48.69		37.6	42.1	40.78	
5	GundaVillage	14.01.2023	39.5	46.3	43.30		35.4	40.1	38.49	
6	GundaTanda Village	25.01.2023	38.4	49.8	46.86		35.3	41.3	39.38	

INFERENCE As per CPCB Standards,
 Report Status: - Measured Values for the above parameters are within the limit.

NOISE: (AMBIENT STANDARDS)

Area code	Category of Area	Limit in dB(A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Area	50	40

Reviewed by



Authorised Signatory
K. Suvarna
 Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-23

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4323
10	Date of Sampling	: 06.01.2023
11	Sample Received	: 07.01.2023
12	Date of Analysis	: 07.01.2023
13	Date of Analysis Completion	: 12.01.2023
14	Report Issue Date	: 04.02.2023
15	Report Number	: ULR-TC619323000001023F

Results

Sl. No.	Parameters	Protocol	Unit	Danapur Village (GW1)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	pH	4500 H+ B (Pg. No.4-95 to 4-99)	-	7.28	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	µS/cm	2400	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	1536	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0.3	1	5
5.	Total Suspended Solids	2540 D (Pg. No.2-70 to 2-71)	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	4500 -SO ₄ ²⁻ E (Page No. 4-199 to 200)	mg/L	122.38	200	400
7.	Phosphorus as P	4500-P D (Page No. 4-163 to 4-164)	mg/L	Nil	-	-
8.	Sodium as Na	Na 3500 B (Pg. No.3-99 to 3-100)	mg/L	412.90	-	-
9.	Potassium as K	K 3500 B (Pg. No.3-89 to 3-90)	mg/L	0.0	-	-
10.	Calcium as Ca	3500 Ca B (Pg. No.3-69 to 3-70)	mg/L	104.80	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.86)	mg/L	59.29	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	506.0	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	391.68	250	1000
14.	Color	2120 C (Pg No. 2-7 to 2-8)	Hazen	<5	5	15
15.	Nitrate Nitrogen as NO ₃	4500 NO ₃ E (Pg. No.4-131 to 4-132)	mg/L	9.65	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	529.24	200	600
17.	Acidity as CaCO ₃	2320 B (Pg. No.2-34 to 2-36)	mg/L	Nil	-	-
18.	Total Iron as Fe	3500 Fe-B (Pg. No.3-80 to 3-82)	mg/L	0.12	0.30	NR

Note: GW1: Danapur Village. NR-No relaxation. Ab-Absent.

INFERENCE	As per Standards IS: 10500:2012
	Report Status: - Measured Values for the above parameters are within the limit.

Reviewed by



Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-23

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4323
10	Date of Sampling	: 06.01.2023
11	Sample Received	: 07.01.2023
12	Date of Analysis	: 07.01.2023
13	Date of Analysis Completion	: 12.01.2023
14	Report Issue Date	: 04.02.2023

Results

Sl. No	Parameters	Protocol	Unit	DanapurVillage (GW1)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1	Fluoride as F	APHA 23 rd Edition 2017 4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.72	1	
2.	Cadmium as Cd	APHA-23RD Edition-3111 -B (Pg No.3 -20 to 3-21)	mg/L	<0.001	0.003	NR
3.	Total Coli form count	APHA 23 rd Edition 9222-B (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
4.	Escherichia coli count	APHA 23 rd Edition 9222 (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
5.	Nickel as Ni	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.02	0.02	NR
6.	Manganese as Mn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.1	0.10	0.30
7.	Copper as Cu	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.312	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.235	5	15
9.	Lead as Pb	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.01	0.01	NR
10.	Arsenic as As	APHA 23 rd Edition 2017 3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	APHA 23rd Edition 2017 3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



K. Suvama
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or In part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-24

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4460
10	Date of Sampling	: 14.01.2023
11	Sample Received	: 14.01.2023
12	Date of Analysis	: 16.01.2023
13	Date of Analysis Completion	: 20.01.2023
14	Report Issue Date	: 04.02.2023
15	Report Number	: ULR-TC619323000001025F

Results

Sl. No	Parameters	Protocol APHA 23rd Edition 2017	Unit	Hanumanahalli Village (GW2)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	pH	4500 H+ B (Pg. No.4-95 to 4-99)	-	7.12	6.5 to 8.5	NR
2.	Conductivity	2510 A(Pg. No.2-56 to 2-58)	µS/cm	2800	-	-
3.	Total Dissolved Solids	2540 C(Pg. No.2-69 to 2-70)	mg/L	1792	500	2000
4.	Turbidity (NTU)	2130 B(Pg. No.2-13 to 2-15)	NTU	0.2	1	5
5.	Total Suspended Solids	2540 D(Pg. No.2-70 to 2-71)	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	4500 -SO ₄ ²⁻ E (Page No. 4-199 to 4-200)	mg/L	132.70	200	400
7.	Phosphorus as P	4500-P D (Page No. 4-163 to 4-164)	mg/L	Nil	-	-
8.	Sodium as Na	Na 3500 B(Pg. No.3-99 to 3-100)	mg/L	343.15	-	-
9.	Potassium as K	K 3500 B(Pg. No.3-89 to 3-90)	mg/L	0.0	-	-
10.	Calcium as Ca	3500 Ca B(Pg. No.3-69 to 3-70)	mg/L	116.0	75	200
11.	Magnesium as Mg	3500-B MgBy calculation (Pg. No.3-86)	mg/L	59.77	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	536.0	200	600
13.	Chloride as Cl	4500 Cl-(Page No. 4-75 to 4-76)	mg/L	271.92	250	1000
14.	Color	2120 C(Pg No. 2-7 to 2-8)	Hazen	<5	5	15
15.	Nitrate Nitrogen as NO ₃	4500 NO ₃ E (Pg. No.4-131 to 4-132)	mg/L	21.46	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B(Pg. No.2-37 to 2-39)	mg/L	513.08	200	600
17.	Acidity as CaCO ₃	2320 B(Pg. No.2-34 to 2-36)	mg/L	Nil	-	-
18.	Total Iron as Fe	3500 Fe-B.(Pg. No.3-80 to 3-82)	mg/L	0.093	0.30	NR

Note: GW2: Hanumanahalli Village, NR-No relaxation. Ab-Absent.

INFERENCE	As per Standards IS: 10500:2012 Report Status: - Measured Values for the above parameters are within the limit.
-----------	--

Reviewed by



Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



Leaders in Environment
Monitoring



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-24

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4460
10	Date of Sampling	: 14.01.2023
11	Sample Received	: 14.01.2023
12	Date of Analysis	: 16.01.2023
13	Date of Analysis Completion	: 20.01.2023
14	Report Issue Date	: 04.02.2023

Results

Sl. No	Parameters	Protocol	Unit	Hanumanahalli Village (GW2)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	Fluoride as F	APHA 23 rd Edition 2017 4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.57	1	1.5
2.	Cadmium as Cd	APHA-23RD Edition-3111 -B (Pg.No.3 -20 to 3-21)	mg/L	<0.001	0.003	NR
3.	Total Coli form count	APHA 23 rd Edition 9222-B (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
4.	Escherichia coli count	APHA 23 rd Edition 9222 (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
5.	Nickel as Ni	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.02	0.02	NR
6.	Manganese as Mn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.1	0.10	0.30
7.	Copper as Cu	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.284	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.214	5	15
9.	Lead as Pb	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.01	0.01	NR
10.	Arsenic as As	APHA 23 rd Edition 2017 3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	APHA 23 rd Edition 2017 3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



R. Suvanna
Authorised Signatory
R. Suvanna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-25

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4461
10	Date of Sampling	: 14.01.2023
11	Sample Received	: 14.01.2023
12	Date of Analysis	: 16.01.2023
13	Date of Analysis Completion	: 20.01.2023
14	Report Issue Date	: 04.02.2023
15	Report Number	: ULR-TC619323000001026F

Results

Sl. No	Parameters	Protocol APHA 23 rd Edition 2017	Unit	Galemmanna Gudi Village (GW3)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	pH	4500 H+ B (Pg. No.4-95 to 4-99)	-	7.92	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	µS/cm	2200	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	1408	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0.3	1	5
5.	Total Suspended Solids	2540 D (Pg. No.2-70 to 2-71)	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	4500 -SO ₄ ²⁻ E (Page No. 4-199 to 4-200)	mg/L	142.78	200	400
7.	Phosphorus as P	4500-P D (Page No. 4-163 to 4-164)	mg/L	Nil	-	-
8.	Sodium as Na	Na 3500 B (Pg. No.3-99 to 3-100)	mg/L	160.70	-	-
9.	Potassium as K	K 3500 B (Pg. No.3-89 to 3-90)	mg/L	0.0	-	-
10.	Calcium as Ca	3500 Ca B (Pg. No.3-69 to 3-70)	mg/L	89.60	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	52.0	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	438.0	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	126.06	250	1000
14.	Color	2120 C (Pg. No. 2-7 to 2-8)	Hazen	<5	5	-
15.	Nitrate Nitrogen as NO ₃	4500 NO ₃ E (Pg. No.4-131 to 4-132)	mg/L	14.48	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	202.0	200	600
17.	Acidity as CaCO ₃	2320 B (Pg. No.2-34 to 2-36)	mg/L	Nil	-	-
18.	Total Iron as Fe	3500 Fe-B (Pg. No.3-80 to 3-82)	mg/L	0.18	0.30	NR

Note: GW3: GalemmannaGudi Village, NR-No relaxation. Ab-Absent.

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are within the limit.

Reviewed by



K. Suvarna
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)
ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel.: 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-25

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4461
10	Date of Sampling	: 14.01.2023
11	Sample Received	: 14.01.2023
12	Date of Analysis	: 16.01.2023
13	Date of Analysis Completion	: 20.01.2023
14	Report Issue Date	: 04.02.2023

Results

Sl. No	Parameters	Protocol	Unit	GalemmannaGudi Village (GW3)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	Fluoride as F	APHA-23RD Edition 4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.84	1	1.5
2.	Cadmium as Cd	APHA-23RD Edition-3111 -B (Pg No.3 -20 to 3-21)	mg/L	<0.001	0.003	NR
3.	Total Coli form count	APHA 23 rd Edition 9222-B (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
4.	Escherichia coli count	APHA 23 rd Edition 9222 (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
5.	Nickel as Ni	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.02	0.02	NR
6.	Manganese as Mn	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.1	0.10	0.30
7.	Copper as Cu	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.286	0.05	1.50
8.	Zinc as Zn	B. Direct Air Acetylene Flame Method	mg/L	0.212	5	15
9.	Lead as Pb	. Direct Air Acetylene Flame Method	mg/L	<0.01	0.01	NR
10.	Arsenic as As	APHA-23RD Edition 3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	APHA-23RD Edition 3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



K. Suvama
Authorized Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-26

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4324
10	Date of Sampling	: 06.01.2023
11	Sample Received	: 07.01.2023
12	Date of Analysis	: 07.01.2023
13	Date of Analysis Completion	: 12.01.2023
14	Report Issue Date	: 04.02.2023
15	Report Number	: ULR-TC619323000001029F

Results

Sl. No	Parameters	Protocol APHA 23 rd Edition 2017	Unit	Mariyammana Halli Village (GW4)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	pH	4500 H+ B (Pg. No.4-95 to 4-99)	-	7.16	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	µS/cm	3000	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	1830	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0.4	1	5
5.	Total Suspended Solids	2540 D (Pg. No.2-70 to 2-71)	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	4500 -SO ₄ ²⁻ E (Page No. 4-199 to 4-200)	mg/L	138.80	200	400
7.	Phosphorus as P	4500-P D (Page No. 4-163 to 4-164)	mg/L	Nil	-	-
8.	Sodium as Na	Na 3500 B (Pg. No.3-99 to 3-100)	mg/L	402.60	-	-
9.	Potassium as K	K 3500 B (Pg. No.3-89 to 3-90)	mg/L	0.0	-	-
10.	Calcium as Ca	3500 Ca B (Pg. No.3-69 to 3-70)	mg/L	110.40	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	52.0	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	490.0	200	600
13.	Chloride as Cl	4500 Cl (Page No. 4-75 to 4-76)	mg/L	230.51	250	1000
14.	Color	2120 C (Pg. No. 2-7 to 2-8)	Hazen	<5	5	15
15.	Nitrate Nitrogen as NO ₃	4500 NO ₃ E (Pg. No.4-131 to 4-132)	mg/L	9.87	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	492.88	200	600
17.	Acidity as CaCO ₃	2320 B (Pg. No.2-34 to 2-36)	mg/L	Nil	-	-
18.	Total Iron as Fe	3500 Fe-B (Pg. No.3-80 to 3-82)	mg/L	0.16	0.30	NR

Note: GW4: Mariyammana Halli Village. NR-No relaxation. Ab-Absent.

INFERENCE	As per Standards IS: 10500:2012 Report Status: - Measured Values for the above parameters are within the limit.
-----------	--

Reviewed by



Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-26

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4324
10	Date of Sampling	: 06.01.2023
11	Sample Received	: 07.01.2023
12	Date of Analysis	: 07.01.2023
13	Date of Analysis Completion	: 12.01.2023
14	Report Issue Date	: 04.02.2023

Results

Sl. No	Parameters	Protocol	Unit	MariyammanaHali Village (GW4)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	Fluoride as F	APHA-23RD Edition 4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.25	1	1.5
2.	Cadmium as Cd	APHA-23RD Edition-3111 -B (Pg No.3 -20 to 3-21)	mg/L	<0.001	0.003	NR
3.	Total Coli form count	APHA 23 rd Edition 9222-B (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
4.	Escherichia coli count	APHA 23 rd Edition 9222 (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
5.	Nickel as Ni	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.02	0.02	NR
6.	Manganese as Mn	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.1	0.10	0.30
7.	Copper as Cu	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.322	0.05	1.50
8.	Zinc as Zn	B. Direct Air Acetylene Flame Method	mg/L	0.267	5	15
9.	Lead as Pb	. Direct Air Acetylene Flame Method	mg/L	<0.01	0.01	NR
10.	Arsenic as As	APHA-23RD Edition 3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	APHA-23RD Edition 3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



K. Suvarna
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-27

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4325
10	Date of Sampling	: 06.01.2023
11	Sample Received	: 07.01.2023
12	Date of Analysis	: 07.01.2023
13	Date of Analysis Completion	: 12.01.2023
14	Report Issue Date	: 04.02.2023
15	Report Number	: ULR-TC619323000001031F

Results

Sl. No	Parameters	Protocol APHA 23 rd Edition 2017	Unit	GundaThanda (GW5)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	pH	4500 H+ B (Pg. No.4-95 to 4-99)	-	7.48	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	µS/cm	680	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	434	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0.2	1	5
5.	Total Suspended Solids	2540 D (Pg. No.2-70 to 2-71)	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	4500 -SO ₄ ²⁻ E (Page No. 4-199 to 4-200)	mg/L	65.88	200	400
7.	Phosphorus as P	4500-P D (Page No. 4-163 to 4-164)	mg/L	Nil	-	-
8.	Sodium as Na	Na 3500 B (Pg. No.3-99 to 3-100)	mg/L	151.40	-	-
9.	Potassium as K	K 3500 B (Pg. No.3-89 to 3-90)	mg/L	0.0	-	-
10.	Calcium as Ca	3500 Ca B (Pg. No.3-69 to 3-70)	mg/L	36.80	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	22.35	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	184.0	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	90.04	250	1000
14.	Color	-2120 C (Pg. No. 2-7 to 2-8)	Hazen	<5	5	1.5
15.	Nitrate Nitrogen as NO ₃	4500 NO ₃ E (Pg. No.4-131 to 4-132)	mg/L	7.81	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	256.54	200	600
17.	Acidity as CaCO ₃	2320 B (Pg. No.2-34 to 2-36)	mg/L	Nil	-	-
18.	Total Iron as Fe	3500 Fe-B (Pg. No.3-80 to 3-82)	mg/L	0.14	0.30	NR

Note: GW5: GundaThanda. NR-No relaxation. Ab-Absent.

INFERENCE	As per Standards IS: 10500:2012 Report Status: - Measured Values for the above parameters are within the limit.
-----------	--



Reviewed by



B. Swarna

Authorised Signatory

K. Suvarna

Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-27

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4325
10	Date of Sampling	: 06.01.2023
11	Sample Received	: 07.01.2023
12	Date of Analysis	: 07.01.2023
13	Date of Analysis Completion	: 12.01.2023
14	Report Issue Date	: 04.02.2023

Results

Sl. No	Parameters	Protocol	Unit	GundaThanda (GW5)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	Fluoride as F	APHA-23RD Edition 4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.62	1	
2.	Cadmium as Cd	APHA-23RD Edition-3111 -B (Pg No.3 -20 to 3-21)	mg/L	<0.001	0.003	NR
3.	Total Coli form count	APHA 23 rd Edition 9222-B (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
4.	Escherichia coli count	APHA 23 rd Edition 9222 (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
5.	Nickel as Ni	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.02	0.02	NR
6.	Manganese as Mn	APHA-23RD Edition 4500 F- D (Page No. 4-90 to 4-91)	mg/L	<0.1	0.10	0.30
7.	Copper as Cu	APHA-23RD Edition-3111 -B (Pg No.3 -20 to 3-21)	mg/L	0.356	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 9222-B (p.no.9-82) Membrane filter technique	mg/L	0.122	5	15
9.	Lead as Pb	APHA 23 rd Edition 9222 (p.no.9-82) Membrane filter technique	mg/L	<0.01	0.01	NR
10.	Arsenic as As	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



[Signature]
AuthKrisd Signatory
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-28

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4326
10	Date of Sampling	: 06.01.2023
11	Sample Received	: 07.01.2023
12	Date of Analysis	: 07.01.2023
13	Date of Analysis Completion	: 12.01.2023
14	Report Issue Date	: 04.02.2023
15	Report Number	: ULR-TC619323000001033F

Results

Sl. No	Parameters	Protocol APHA 23rd Edition 2017	Unit	Gunda Village (GW6)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	pH	4500 H+ B (Pg. No.4-95 to 4-99)	-	7.14	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	μS/cm	1150	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	736	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0.3	1	5
5.	Total Suspended Solids	2540 D (Pg. No.2-70 to 2-71)	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	4500 -SO ₄ ²⁻ E (Page No. 4-199 to 4-200)	mg/L	31.18	200	400
7.	Phosphorus as P	4500-P D (Page No. 4-163 to 4-164)	mg/L	Nil	-	-
8.	Sodium as Na	Na 3500 B (Pg. No.3-99 to 3-100)	mg/L	74.22	-	-
9.	Potassium as K	K 3500 B (Pg. No.3-89 to 3-90)	mg/L	0.0	-	-
10.	Calcium as Ca	3500 Ca B (Pg. No.3-69 to 3-70)	mg/L	76.80	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	39.85	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	356.0	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	56.72	250	1000
14.	Fluoride as F	4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.74	1	1.5
15.	Nitrate Nitrogen as NO ₃	4500 NO ₃ E (Pg. No.4-131 to 4-132)	mg/L	6.43	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	357.54	200	600
17.	Acidity as CaCO ₃	2320 B (Pg. No.2-34 to 2-36)	mg/L	Nil	-	-
18.	Total Iron as Fe	3500 Fe-B (Pg. No.3-80 to 3-82)	mg/L	0.17	0.30	NR

Note: GW6: Gunda Village. NR-No relaxation. Ab-Absent.

INFERENCE

As per Standards IS: 10500:2012

Report Status: - Measured Values for the above parameters are within the limit.



Reviewed by



K. Suvarna

Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-28

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Grab Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Ground Water
9	Sample Code	: 4326
10	Date of Sampling	: 06.01.2023
11	Sample Received	: 07.01.2023
12	Date of Analysis	: 07.01.2023
13	Date of Analysis Completion	: 12.01.2023
14	Report Issue Date	: 04.02.2023

Results

Sl. No	Parameters	Protocol	Unit	GundaVillage (GW6)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	Color	APHA-23RD Edition 4500 F- D (Page No. 4-90 to 4-91)	Hazen	<5	5	15
2.	Cadmium as Cd	APHA-23RD Edition-3111 -B (Pg No.3 -20 to 3-21)	mg/L	<0.001	0.003	NR
3.	Total Coli form count	APHA 23 rd Edition 9222-B (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
4.	Escherichia coli count	APHA 23 rd Edition 9222 (p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-
5.	Nickel as Ni	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.02	0.02	NR
6.	Manganese as Mn	APHA-23RD Edition 4500 F- D (Page No. 4-90 to 4-91)	mg/L	<0.1	0.10	0.30
7.	Copper as Cu	APHA-23RD Edition-3111 -B (Pg No.3 -20 to 3-21)	mg/L	0.286	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 9222-B (p.no.9-82) Membrane filter technique	mg/L	0.102	5	15
9.	Lead as Pb	APHA 23 rd Edition 9222 (p.no.9-82) Membrane filter technique	mg/L	<0.01	0.01	NR
10.	Arsenic as As	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	APHA-23RD Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



[Signature]
Authorised Signatory
R. Suvana
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-29

Analysis Report of Water Quality Data

1	Name of the Industry	:	BMM Ispat Ltd, Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	:	WO/ADMIN/FY23/R073
3	Sample collected by	:	GLOBAL Environment & Mining Services
4	Particulars of sample collected	:	Grab Sampling
5	Sampling Procedure	:	GEMS-LD/SOP/32
6	Discipline	:	Chemical
7	Group	:	Pollution & Environment
8	Sample Type	:	RO Drinking Water
9	Sample Code	:	4462
10	Date of Sampling	:	14.01.2023
11	Sample Received	:	14.01.2023
12	Date of Analysis	:	16.01.2023
13	Date of Analysis Completion	:	20.01.2023
14	Report Issue Date	:	04.02.2023
15	Report Number	:	PAL/BMM/22-23/1034

Results

Sl. No	Parameters	Protocol APHA 23rd Edition 2017	Unit	RO Drinking Water	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	pH	4500 H+ B (Pg. No.4-95 to 4-99)	-	7.52	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	µS/cm	64	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	40	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0	1	5
5.	Total Suspended Solids	2540 D (Pg. No.2-70 to 2-71)	mg/L	<1.0	-	-
6.	Sulphate as SO ₄	4500 -SO ₄ ²⁻ E (Page No. 4-199 to 200)	mg/L	8.90	200	400
7.	Phosphorus as P	4500-P D (Page No. 4-163 to 4-164)	mg/L	Nil	-	-
8.	Sodium as Na	Na 3500 B (Pg. No.3-99 to 3-100)	mg/L	6.12	-	-
9.	Potassium as K	K 3500 B (Pg. No.3-89 to 3-90)	mg/L	0.0	-	-
10.	Calcium as Ca	3500 Ca B (Pg. No.3-69 to 3-70)	mg/L	4.0	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.86)	mg/L	2.91	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	22.0	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	2.70	250	1000
14.	Fluoride as F	4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.19	1	1.5
15.	Nitrate Nitrogen as NO ₃	4500 NO ₃ E (Pg. No.4-131 to 4-132)	mg/L	0.44	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	18.18	200	600
17.	Acidity as CaCO ₃	2320 B (Pg. No.2-34 to 2-36)	mg/L	Nil	-	-
18.	Total Iron as Fe	3500 Fe-B. (Pg. No.3-80 to 3-82)	mg/L	0.13	0.30	NR
19.	Nickel as Ni	3111 B. Direct Air Acetylene Flame Method	mg/L	<0.02	0.02	NR
20.	Manganese as Mn	3111 B. Direct Air Acetylene Flame Method	mg/L	<0.1	0.10	0.30
21.	Copper as Cu	3111 B. Direct Air Acetylene Flame Method	mg/L	0.112	0.05	1.50
22.	Zinc as Zn	3111 B. Direct Air Acetylene Flame Method	mg/L	0.065	5	15
23.	Lead as Pb	3111 B. Direct Air Acetylene Flame Method	mg/L	<0.01	0.01	NR
24.	Arsenic as As	3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
25.	Chromium as Cr	3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR
26.	Mercury as Hg	3114 B. (Pg. No.3-36 to 3-40)	mg/L	Nil	0.001	NR



Authorised Signatory
R. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-29

27	colour	IS: 3025 (PART 4)- 1984, RA-2012 Platinum cobalt Method	Hazen	<5	5	15
28.	Odour	IS: 3025 (PART 5)- 1983, RA-2012, True Odour	-	Agreeable	Agreeable	Agreeable
29.	Total Residual chlorine	IS:3025 (part 26)-1986, RA-2003, Iodometric method	mg/L	Nil	0.2	1.0
30.	Oil & Grease	Clause 6 of IS 3025 (Part 39) Infrared	mg/L	Nil	0.5	No Relaxation
31.	Cadmium as Cd	3111 -B(Pg No.3 -20 to 3-21)	mg/L	<0.001	0.003	NR
32.	Selenium as Se	3114 B. Direct Air Acetylene Flame Method	mg/L	<0.05	0.01	No Relaxation
33.	Cyanides (as CN)	4500 CN (Pg. No.4-45 to 4-46)	mg/L	NA	0.05	No Relaxation
34.	Phenolic Compound as phenols	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	1.0	-
35.	Anionic detergents (as MBAS)	5540 C(Pg. No.5-55 to 5-57)	mg/L	BDL	0.2	1.0
36.	Boron as B	2017 4500 B-B (p.no.4-25 to 4-26)	mg/L	<0.5	0.5	1.0
37.	Escherichia coli count	9222(p.no.9-82) Membrane filter technique	MPN/ 100 ml	Ab	Shall not be detectable in any 100ml sample	-

Note: W: RO Drinking Water. NR-No relaxation. Ab-Absent.

INFERENCE	As per Standards IS: 10500:2012 Report Status: - Measured Values for the above parameters are within the limit.
-----------	--



K. Suvarna

Authorised Signatory

K. Suvarna

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-30

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Sewage Treatment Plant (Outlet)
9	Date of Sampling	: 06.01.2023
10	Sample Received	: 07.01.2023
11	Date of Analysis	: 07.01.2023
12	Date of Analysis Completion	: 12.01.2023
13	Report Issue Date	: 04.02.2023
14	Report Number	: ULR-TC619323000001037F

Sl. No.	Parameters	Protocol	Unit	Results			As per KSPCB Std
				STP 45 KLD	STP-1 90 KLD	STP-2 90 KLD	
		Sample code	-	4327	4328	4329	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.24	7.45	7.58	6.5 to 8.5
2.	Total Suspended Solids	APHA 23rd Edition 2017 2540 D (Pg. No.2-70 to 2-71)	mg/L	20.16	16.58	19.54	<100
3.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS:3025 (part 44)-1993, Reaffirmed -2019	mg/L	4.0	6.0	8.0	30
4.	Chemical Oxygen Demand as COD	APHA 23rd Edition 2017 5220 C (Pg. No.5-18 to 5-19)	mg/L	19.24	28.22	40.80	50
5.	Oil & Grease	APHA 23rd Edition 2017 5520 B (Pg. No.5-41 to 5-42)	mg/L	3.15	1.56	4.80	10

Note: BDL-Below detectable Limit. INFERENCE: The Measured values are within the Limit.

STP 45 KLD - Near Fortivia

STP-1 90 KLD -Near ISP Area

STP-2 90 KLD -Near Gunda Guest House



Reviewed by



K. Suvarna

Authorised Signatory

K. Suvarna

Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-30

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/RO73
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Sewage Treatment Plant (Outlet)
9	Date of Sampling	: 06.01.2023
10	Sample Received	: 07.01.2023
11	Date of Analysis	: 07.01.2023
12	Date of Analysis Completion	: 12.01.2023
13	Report Issue Date	: 04.02.2023

Sl. No.	Parameters	Protocol	Unit	Results			As per KSPCB Std
				STP 45 KLD	STP-1 90 KLD	STP-2 90 KLD	
		Sample code	-	4327	4328	4329	
1.	Color	APHA 23 RD Edition 2120 B (Pg. No.2-6 to 2-7)	Hazen	7	6	9	-
2.	Odour	IS: 3025 (PART 5)- 1983, RA-2012, True Odour	-	Agree able	Agree able	Agree able	-
3.	Cyanides (as CN)	APHA 23 RD Edition 4500 CN (Pg. No.4-45 to 4-46)	mg/L	BDL	BDL	BDL	-
4.	Phenolic Compounds (as C ₆ H ₅ OH)	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	BDL	BDL	-
5.	Chromium (as Cr ⁶⁺)	APHA-23 RD Edition-3500 Cr B (Pg. No.3-71 to 3-72)	mg/L	<0.001	<0.001	<0.001	-
6.	Ammonical nitrogen as N	IS:3025 (part 34)-1988, RA-2014, Nesslerization method	mg/L	1.54	1.42	1.36	-

Note: BDL-Below detectable Limit. INFERENCE: The Measured values are within the Limit.

STP 45 KLD - Near Fortivia

STP-1 90 KLD -Near ISP Area

STP-2 90 KLD -Near Gunda Guest House



[Signature]
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-31

Analysis Report of Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Waste Water
9	Date of Sampling	: 14.01.2023
10	Sample Received	: 14.01.2023
11	Date of Analysis	: 16.01.2023
12	Date of Analysis Completion	: 20.01.2023
13	Report Issue Date	: 04.02.2023
14	Report Number	: ULR-TC619323000001038F

Results

Sl. No.	Parameters	Protocol	Unit	Results		As per KSPCB Std
				Neutralization Pit 70 MW Power Plant	Neutralization Pit 2x70 MW Power Plant	
Sample Code				4463	4464	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.56	7.78	6.5 to 9.0
2.	Total Suspended Solids	APHA 23 rd Edition 2017 2540 D (Pg. No.2-70 to 2-71)	mg/L	14.36	18.44	100
3.	Chemical Oxygen Demand as COD	APHA 23 rd Edition 2017 5220 C (Pg. No.5-18 to 5-19)	mg/L	20.40	61.20	250
4.	Oil & Grease	APHA 23rd Edition 2017 5520 B (Pg. No.5-41 to 5-42)	mg/L	2.40	1.60	10

Note: BDL-Below detectable Limit.

INFERENCE: The Measured values are within the Limit.

Reviewed by



K. Suvama
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-32

Analysis Report of Surface Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Surface Water
9	Date of Sampling	: 06.01.2023
10	Sample Received	: 07.01.2023
11	Date of Analysis	: 07.01.2023
12	Date of Analysis Completion	: 12.01.2023
13	Report Issue Date	: 04.02.2023
14	Report Number	: ULR-TC619323000001039F

Results

Sl. No.	Parameters	Protocol	Unit	Results		IS 2296 - 1982 CLASS -B
				Danayakanakere Upstream	Danayakanakere Downstream	
Sample code				4330	4331	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.44	7.63	6.5-8.5
2.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS:3025 (part 44)-1993, Reaffirmed -2019	mg/L	2.0	2.0	3.0
3.	Fluorides as F	APHA 23 RD Edition 4500F D (Pg. No.4-90 to 4-91)	mg/L	0.31	0.27	1.5
4.	Arsenic as As	APHA-23 RD Edition-3114 -B (Pg. No.3 -36 to 3-40)	mg/L	<0.1	<0.1	0.2

Note: BDL-Below detectable Limit.

INFERENCE: The Measured values are within the Limit.

Reviewed by



Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-32

Analysis Report of Surface Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Surface Water
9	Date of Sampling	: 14.01.2023
10	Sample Received	: 14.01.2023
11	Date of Analysis	: 16.01.2023
12	Date of Analysis Completion	: 20.01.2023
13	Report Issue Date	: 04.02.2023

Sl. No.	Parameters	Protocol	Unit	Results		IS 2296 - 1982 CLASS -B
				Danayakanakere Upstream	Danayakanakere Downstream	
Sample code				4463	4464	
1.	Dissolved Oxygen	APHA 23 RD Edition 4500 C (Pg. No.4-146)	mg/L	5.8	6.2	>5.0
2.	Color	APHA 23 RD Edition 2120 B (Pg. No.2-6 to 2-7)	Hazen	5	5	300
3.	Cyanides (as CN)	APHA 23 RD Edition 4500 CN (Pg. No.4-45 to 4-46)	mg/L	BDL	BDL	0.05
4.	Phenolic Compounds (as C ₆ H ₅ OH)	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	BDL	0.005
5.	Chromium (as Cr ⁶⁺)	APHA-23 RD Edition-3500 Cr B (Pg. No.3-71 to 3-72)	mg/L	<0.001	<0.001	1.0
6.	Anionic detergents (as MBAS)	APHA 23 RD Edition 5540 C (Pg. No.5-55 to 5-57)	mg/L	BDL	BDL	1.0
7.	Total Coliform Organisms					
	Total Coli forms	APHA 23 RD Edition 9221-C (Pg. No.9-72 to 9-74)	MPN/ 100 ml	Absent	Absent	500
	Escherichia coli or E. coli	APHA 23 RD Edition 9221-F (Pg. No.9-78 to 9-79)	MPN/ 100 ml	Absent	Absent	-

Note: BDL-Below detectable Limit.

INFERENCE: The Measured values are within the Limit.



K. Suvama
 Authorised Signatory
K. Suvama
 Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School, Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-33

Analysis Report of Surface Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Surface Water
9	Date of Sampling	: 14.01.2023
10	Sample Received	: 14.01.2023
11	Date of Analysis	: 16.01.2023
12	Date of Analysis Completion	: 20.01.2023
13	Report Issue Date	: 04.02.2023
14	Report Number	: ULR-TC619323000001040F

Results

Sl. No.	Parameters	Protocol	Unit	Results		IS 2296 - 1982 CLASS -B
				KempuHalla Upstream	KempuHalla Downstream	
		Sample code		4465	4466	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.83	7.96	6.5-8.5
2.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS:3025 (part 44)-1993, Reaffirmed -2019	mg/L	2.0	2.0	3.0
3.	Fluorides as F	APHA 23 RD Edition 4500F D (Pg. No.4-90 to 4-91)	mg/L	0.14	0.34	1.5
4.	Arsenic as As	APHA-23 RD Edition-3114 -B (Pg. No.3 -36 to 3-40)	mg/L	<0.1	<0.1	0.2

Note: BDL-Below detectable Limit.

INFERENCE: The measured values are within the Limit.

Reviewed by



Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-33

Analysis Report of Surface Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Surface Water
9	Date of Sampling	: 14.01.2023
10	Sample Received	: 14.01.2023
11	Date of Analysis	: 16.01.2023
12	Date of Analysis Completion	: 20.01.2023
13	Report Issue Date	: 04.02.2023

Sl. No.	Parameters	Protocol	Unit	Results		IS 2296 - 1982 CLASS -B
				KempuHalla Upstream	KempuHalla Downstream	
			Sample code	4465	4466	
1.	Dissolved Oxygen	APHA 23 RD Edition 4500 C (Pg. No.4-146)	mg/L	6.40	5.20	>5.0
2.	Color	APHA 23 RD Edition 2120 B (Pg. No.2-6 to 2-7)	Hazen	7	6	300
3.	Cyanides (as CN)	APHA 23 RD Edition 4500 CN (Pg. No.4-45 to 4-46)	mg/L	BDL	BDL	0.05
4.	Phenolic Compounds (as C ₆ H ₅ OH)	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	BDL	0.005
5.	Chromium (as Cr ⁶⁺)	APHA-23 RD Edition-3500 Cr B (Pg. No.3-71 to 3-72)	mg/L	<0.001	<0.001	1.0
6.	Anionic detergents (as MBAS)	APHA 23 RD Edition 5540 C (Pg. No.5-55 to 5-57)	mg/L	BDL	BDL	1.0
7.	Total Coliform Organisms,					
	Total Coli forms	APHA 23RD Edition 9221-C (Pg. No.9-72 to 9-74)	MPN/ 100 ml	Absent	Absent	500
	Escherichia coli or E. coli	APHA 23RD Edition 9221-F (Pg. No.9-78 to 9-79)	MPN/ 100 ml	Absent	Absent	-

Note: BDL-Below detectable Limit

INFERENCE: The measured values are within the Limit.



B. Swarna
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, 45001 : 2018 Certified & NABL Accredited Testing Laboratory (TC-6193)

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Vijayanagara Dist., Karnataka.

Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-34

Analysis Report of Surface Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Surface Water
9	Date of Sampling	: 14.01.2023
10	Sample Received	: 14.01.2023
11	Date of Analysis	: 16.01.2023
12	Date of Analysis Completion	: 20.01.2023
13	Report Issue Date	: 04.02.2023
14	Report Number	: ULR-TC619323000001041F

Results

Sl. No.	Parameters	Protocol	Unit	Results	IS 2296 -1982 CLASS -B
				Tungabhadra dam	
Sample Code				4467	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.71	6.5-8.5
2.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS:3025 (part 44)-1993, Reaffirmed -2019	mg/L	2.0	3.0
3.	Fluorides as F	APHA 23 RD Edition 4500F-D (Pg. No.4-90 to 4-91)	mg/L	0.22	1.5
4.	Arsenic as As	APHA-23 RD Edition-3114 -B (Pg. No.3 -36 to 3-40)	mg/L	<0.1	0.2

Note: BDL-Below detectable Limit.

INFERENCE: The measured values are within the Limit.

Reviewed by



B. Suvarna
Authorised Signatory
K. Suvarna
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified. 5. The sample will be preserved for maximum period : 1) Water - 15 days, 2) Ores - 3 months, 3) Air - Discarded after analysis.



Leaders in Environment
Monitoring



PREMIER ANALYTICAL LABORATORIES

(Environment Monitoring & Minerals Testing Services)

ISO 9001 : 2015, ISO 45001 : 2018 Certified Laboratory

Near Old Ganesh Gas Godown, Beside Govt. Primary School,
Amaravathi, HOSAPETE - 583 201, Ballari Dist., Karnataka.
Tel. : 08394 - 228683 / email : premierlabhpt@gmail.com

TEST REPORT

ANNEXURE-34

Analysis Report of Surface Water Quality Data

1	Name of the Industry	: BMM Ispat Ltd., Danapur, Hosapete Taluk, Vijayanagara District.
2	Customer Reference	: WO/ADMIN/FY23/R073
3	Sample collected by	: GLOBAL Environment & Mining Services
4	Particulars of sample collected	: Composite Sampling
5	Sampling Procedure	: GEMS-LD/SOP/32
6	Discipline	: Chemical
7	Group	: Pollution & Environment
8	Sample Type	: Surface Water
9	Date of Sampling	: 14.01.2023
10	Sample Received	: 14.01.2023
11	Date of Analysis	: 16.01.2023
12	Date of Analysis Completion	: 20.01.2023
13	Report Issue Date	: 04.02.2023

Sl. No.	Parameters	Protocol	Unit	Results	IS 2296 -1982 CLASS -B
				Tungabhadra dam	
Sample Code				4467	
1.	Dissolved Oxygen	APHA 23 RD Edition 4500 C (Pg. No.4-146)	mg/L	5.20	>5.0
2.	Color	APHA 23 RD Edition 2120 B (Pg. No.2-6 to 2-7)	Hazen	8	300
3.	Cyanides (as CN)	APHA 23 RD Edition 4500 CN (Pg. No.4-45 to 4-46)	mg/L	BDL	0.05
4.	Phenolic Compounds (as C ₆ H ₅ OH)	IS:3025 (part 43)-1992, RA-2014, Chloroform extraction method	mg/L	BDL	0.005
5.	Chromium (as Cr ⁶⁺)	APHA-23 RD Edition-3500 Cr B (Pg. No.3-71 to 3-72)	mg/L	<0.001	1.0
6.	Anionic detergents (as MBAS)	APHA 23 RD Edition 5540 C (Pg. No.5-55 to 5-57)	mg/L	BDL	1.0
7.	Total Coliform Organisms,				
	Total Coli forms	APHA 23RD Edition 9221-C (Pg. No.9-72 to 9-74)	MPN/ 100 ml	Absent	500
	Escherichia coli or E. coli	APHA 23RD Edition 9221-F (Pg. No.9-78 to 9-79)	MPN/ 100 ml	Absent	-

Note: BDL-Below detectable Limit

INFERENCE: The measured values are within the Limit.



K. Suvama
Authorised Signatory
K. Suvama
Quality Manager

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of our Laboratory is limited to the Invoice amount. 3. This report is not to be reproduced either wholly or in part and cannot be used as evidence in the court of law & should not be used in advertising media without prior written permission. 4. Sampling is not done by us unless otherwise specified.