

ENVIRONMENTAL MONITORING REPORT



at

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

Stage – I

FEBRUARY-2023

Prepared by

M/s. Premier Analytical Laboratories

Near Ganesh Gas Godown, Beside Govt.Primary School,
Amaravathi, **HOSAPETE-583201**, Vijayanagara District, 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. Global Environment & Mining Services, 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.

for Premier Analytical Laboratories

Place: Hosapete
Date:06.03.2023



K. Suvarna
(Quality Manager)
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 **FEBRUARY-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 period, several reading (hourly) of flow rate should be taken. After the required time of

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 volume of air through a dilute solution of sulphuric acid to form ammonium sulphate.

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 minutes. Repeat the procedure twice (50ml x 2 times) for complete extraction.

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 320 μ m 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 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 67.45, 27.59, 12.06 & 14.28 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 66.25, 23.99, 10.98 & 13.42 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 67.21, 26.23, 9.10 & 11.31 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 64.24, 23.37, 8.96 & 11.20 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 64.81, 22.61, 9.51 & 11.44 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 65.50, 20.30, 8.51 & 10.39 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 488.55 $\mu\text{g}/\text{m}^3$, maximum value 1963.46 $\mu\text{g}/\text{m}^3$, and average value 1562.39 $\mu\text{g}/\text{m}^3$. 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 12.67 mg/Nm^3 , Maximum Value 48.20 mg/Nm^3 & Average Value 27.27 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 40.50 to 66.80 dB (A) and 37.50 to 61.50 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.



Leaders in Environment
Monitoring



TC-6193

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 : FEBRUARY-2023
Location : A1-Danapur Village
Duration of Monitoring : 24 Hour
Report Issued Date : 06.03.2023
Report Number : ULR-TC619323000001057F

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
01.02.2023	02.02.2023	4694	71.43	100	26.57	60	9.39	80	12.13	80
02.02.2023	03.02.2023	4718	68.39		31.76		11.59		14.65	
06.02.2023	07.02.2023	4770	60.19		28.12		15.07		17.16	
07.02.2023	08.02.2023	4789	61.80		36.56		12.41		14.42	
13.02.2023	14.02.2023	4910	69.20		23.41		11.25		13.50	
14.02.2023	15.02.2023	4918	72.33		17.61		14.61		16.25	
20.02.2023	21.02.2023	4995	70.16		24.70		8.93		10.87	
21.02.2023	22.02.2023	5011	66.11		31.99		13.22		15.22	
Average			67.45		27.59		12.06		14.28	

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 / 158-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



Authorized Signature
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 : FEBRUARY-2023
Location : A1-Danapur Village
Duration of Monitoring : 1 Hour
Report Issued Date : 06.03.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	01.02.2023	4694	0.08	4.0
2	02.02.2023	4718	0.14	
3	06.02.2023	4770	0.17	
4	07.02.2023	4789	0.13	
5	13.02.2023	4910	0.09	
6	14.02.2023	4918	0.16	
7	20.02.2023	4995	0.10	
8	21.02.2023	5011	0.07	

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
-----------	---



[Signature]
Authorised Signatory
K. Suvarna

Note : 1. The result listed above pertain only to the tested samples & applicable parameters. 2. Total liability of the 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.



Leaders in Environment
Monitoring



TC-6193

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 : FEBRUARY-2023
Location : A2-Mariyammanahalli Village
Duration of Monitoring : 24 Hour
Report Issued Date : 06.03.2023
Report Number : ULR-TC619323000001058F

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
01.02.2023	02.02.2023	4695	61.84	100	16.32	60	8.23	80	10.64	80
02.02.2023	03.02.2023	4719	68.00		25.30		10.90		13.73	
06.02.2023	07.02.2023	4771	61.10		23.58		7.42		9.15	
07.02.2023	08.02.2023	4790	62.29		21.87		10.55		12.36	
13.02.2023	14.02.2023	4911	68.65		26.61		13.33		15.22	
14.02.2023	15.02.2023	4919	72.71		29.17		11.01		14.42	
20.02.2023	21.02.2023	4996	73.12		22.49		12.29		15.33	
21.02.2023	22.02.2023	5012	62.34		26.60		14.14		16.48	
Average			66.25		23.99		10.98		13.42	

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.
-----------	--

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-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	: FEBRUARY-2023
Location	: A2-Mariyammanahalli Village
Duration of Monitoring	: 1 Hour
Report Issued Date	: 06.03.2023


RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	01.02.2023	4695	0.13	4.0
2	02.02.2023	4719	0.17	
3	06.02.2023	4771	0.10	
4	07.02.2023	4790	0.08	
5	13.02.2023	4911	0.12	
6	14.02.2023	4919	0.09	
7	20.02.2023	4996	0.13	
8	21.02.2023	5012	0.17	

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
-----------	---


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.



Leaders in Environment
Monitoring



TC-6193

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	: FEBRUARY-2023
Location	: A3-Hanumanahalli Village
Duration of Monitoring	: 24 Hour
Report Issued Date	: 06.03.2023
Report Number	: ULR-TC619323000001059F

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
01.02.2023	02.02.2023	4696	66.12	100	23.30	60	10.09	80	12.24	80
02.02.2023	03.02.2023	4720	65.57		33.07		8.81		10.53	
06.02.2023	07.02.2023	4772	66.75		20.25		7.65		9.50	
07.02.2023	08.02.2023	4791	68.11		19.74		9.39		12.93	
13.02.2023	14.02.2023	4912	64.75		30.89		8.93		10.41	
14.02.2023	15.02.2023	4920	71.29		22.06		10.32		13.50	
20.02.2023	21.02.2023	4997	60.65		26.41		7.77		9.84	
21.02.2023	22.02.2023	5013	74.51		34.13		9.85		11.56	
Average			67.21		26.23		9.10		11.31	

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.
-----------	--

3

Reviewed by

[Signature]

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 : FEBRUARY-2023
Location : A3-Hanumanahalli Village
Duration of Monitoring : 1 Hour
Report Issued Date : 06.03.2023

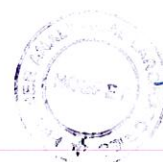
RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	01.02.2023	4696	0.11	4.0
2	02.02.2023	4720	0.16	
3	06.02.2023	4772	0.21	
4	07.02.2023	4791	0.15	
5	13.02.2023	4912	0.09	
6	14.02.2023	4920	0.13	
7	20.02.2023	4997	0.17	
8	21.02.2023	5013	0.08	

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
-----------	---



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.



Leaders in Environment
Monitoring



TC-6193

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	: FEBRUARY-2023
Location	: A4-Galemmanagudi Village
Duration of Monitoring	: 24 Hour
Report Issue Date	: 06.03.2023
Report Number	: ULR-TC619323000001060F

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
03.02.2023	04.02.2023	4741	68.75	100	22.16	60	9.97	80	12.70	80
04.02.2023	05.02.2023	4758	50.29		17.81		8.23		10.64	
08.02.2023	09.02.2023	4813	63.63		27.79		9.85		11.67	
09.02.2023	10.02.2023	4829	68.11		19.59		7.88		10.41	
15.02.2023	16.02.2023	4933	65.16		27.87		6.49		8.70	
16.02.2023	17.02.2023	4950	70.17		20.60		9.51		11.56	
22.02.2023	23.02.2023	5040	58.61		28.55		11.36		13.73	
23.02.2023	24.02.2023	5060	69.22		22.56		8.35		10.18	
Average			64.24		23.37		8.96		11.20	

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 : FEBRUARY-2023
Location : A4-Galemmanagudi Village
Duration of Monitoring : 1 Hour
Report Issued Date : 06.03.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	03.02.2023	4741	0.13	4.0
2	04.02.2023	4758	0.15	
3	08.02.2023	4813	0.19	
4	09.02.2023	4829	0.11	
5	15.02.2023	4933	0.06	
6	16.02.2023	4950	0.18	
7	22.02.2023	5040	0.12	
8	23.02.2023	5060	0.10	

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
-----------	---



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-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	: FEBRUARY-2023
Location	: A5-Gunda Village
Duration of Monitoring	: 24 Hour
Report Issue Date	: 06.03.2023
Report Number	: ULR-TC619323000001061F

RESULTS

Parameters			PM10 [µg/m ³]		PM2.5 [µg/m ³]		SO2 [µg/m ³]		NO2 [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
03.02.2023	04.02.2023	4742	61.17	100	18.58	60	8.35	80	10.41	80
04.02.2023	05.02.2023	4759	68.16		27.35		10.67		12.82	
08.02.2023	09.02.2023	4814	64.92		21.39		7.88		9.73	
09.02.2023	10.02.2023	4830	70.57		18.41		9.04		11.21	
15.02.2023	16.02.2023	4934	54.59		27.23		11.36		13.16	
16.02.2023	17.02.2023	4951	62.63		22.94		9.28		11.44	
22.02.2023	23.02.2023	5041	67.51		18.90		8.70		10.53	
23.02.2023	24.02.2023	5061	68.94		26.08		10.78		12.24	
Average			64.81		22.61		9.51		11.44	

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



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 : FEBRUARY-2023
Location : A5-Gunda Village
Duration of Monitoring : 1 Hour
Report Issued Date : 06.03.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	03.02.2023	4742	<0.01	4.0
2	04.02.2023	4759	<0.01	
3	08.02.2023	4814	<0.01	
4	09.02.2023	4830	0.09	
5	15.02.2023	4934	<0.01	
6	16.02.2023	4951	0.07	
7	22.02.2023	5041	<0.01	
8	23.02.2023	5061	<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
-----------	---



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.



Leaders in Environment
Monitoring



TC-6193

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	: FEBRUARY-2023
Location	: A6-Gunda Tanda Village
Duration of Monitoring	: 24 Hour
Report Issue Date	: 06.03.2023
Report Number	: ULR-TC619323000001062F

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
03.02.2023	04.02.2023	4743	64.68	100	20.35	60	8.70	80	10.76	80
04.02.2023	05.02.2023	4760	51.88		18.91		7.30		9.15	
08.02.2023	09.02.2023	4815	74.21		16.87		7.88		10.07	
09.02.2023	10.02.2023	4831	64.97		22.72		6.72		8.81	
15.02.2023	16.02.2023	4935	60.68		17.20		9.74		10.99	
16.02.2023	17.02.2023	4952	62.65		25.59		10.55		12.93	
22.02.2023	23.02.2023	5042	67.97		21.43		7.65		9.27	
23.02.2023	24.02.2023	5062	76.98		19.34		9.51		11.10	
Average			65.50		20.30		8.51		10.39	

SL NO	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 / 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-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 : FEBRUARY-2023
Location : A6-Gunda Tanda Village
Duration of Monitoring : 1 Hour
Report Issued Date : 06.03.2023

RESULTS

Sl. No.	Date of Sampling	Sample Code	CO (1 Hour) [mg/m ³]	Standard
1	03.02.2023	4743	<0.01	4.0
2	04.02.2023	4760	0.12	
3	08.02.2023	4815	<0.01	
4	09.02.2023	4831	<0.01	
5	15.02.2023	4935	0.05	
6	16.02.2023	4952	<0.01	
7	22.02.2023	5042	0.11	
8	23.02.2023	5062	<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
-----------	---



Authorised Signatory

K. Suvama

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	:	FEBRUARY-2023(1st Fort Night)
6	Discipline	:	Chemical
7	Group	:	Atmospheric Pollution
8	Method adopted	:	IS 5182 (Part 4): 1999 RA 2014
9	Report Issued Date	:	06.03.2023
10	Report Number	:	PAL/BMM/2022-23/1063

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	4794	07.02.2023	08.02.2023	1312.94	2000
2.	Main Crusher	4792	07.02.2023	08.02.2023	1931.61	2000
3.	Iron Ore Screen	4793	07.02.2023	08.02.2023	1543.95	2000
II. Pellet Plant-I						
4.	Near Pellet Plant	4795	07.02.2023	08.02.2023	1924.17	2000
5.	Annual Cooler Pellet Discharge bin	4796	07.02.2023	08.02.2023	1954.71	2000
6.	Pellet Stock Yard	4817	08.02.2023	09.02.2023	1461.01	2000
III. Sponge Iron Division-1(kiln 1 & 2)						
7.	Control Room SID-1	4837	09.02.2023	10.02.2023	1839.43	2000
8.	Near Product bin	4838	09.02.2023	10.02.2023	1848.08	2000
9.	Coal Feeding Area	4839	09.02.2023	10.02.2023	1504.00	2000
IV. Induction Furnace & Rolling Mill - 1						
10.	IF Office	4818	08.02.2023	09.02.2023	1884.98	2000
11.	TMT Stock Yard	4819	08.02.2023	09.02.2023	1670.01	2000
12.	RML Gasifier	4820	08.02.2023	09.02.2023	1938.82	2000
V. Power Plant 25 MW-1						
13.	25 MW ESP	4840	09.02.2023	10.02.2023	1586.13	2000
14.	25 MW ACC	4859	10.02.2023	11.02.2023	1806.04	2000
VI. Site Services						
15.	PGP- coal handling system	4821	08.02.2023	09.02.2023	488.55	2000
16.	IF Slag Crusher	4841	09.02.2023	10.02.2023	1099.42	2000
17.	Main Gate	4860	10.02.2023	11.02.2023	744.11	2000
18.	Fly ash Dump	4777	06.02.2023	07.02.2023	1324.15	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



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, 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	:	FEBRUARY-2023 (2nd Fort Night)
6	Discipline	:	Chemical
7	Group	:	Atmospheric Pollution
8	Method adopted	:	IS 5182 (Part 4): 1999 RA 2014
9	Report Issued Date	:	06.03.2023
10	Report Number	:	PAL/BMM/2022-23/1064

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	5050	22.02.2023	23.02.2023	1753.27	2000
2.	Main Crusher	5048	22.02.2023	23.02.2023	1918.19	2000
3.	Iron Ore Screen	5049	22.02.2023	23.02.2023	1961.46	2000
II. Pellet Plant-I						
4.	Near Pellet Plant	5051	22.02.2023	23.02.2023	1049.78	2000
5.	Annual Cooler Pellet Discharge bin	5052	22.02.2023	23.02.2023	1963.46	2000
6.	Pellet Stock Yard	5063	23.02.2023	24.02.2023	1309.98	2000
III. Sponge Iron Division-1 (kiln 1 & 2)						
7.	Control Room SID-I	5077	24.02.2023	25.02.2023	1415.01	2000
8.	Near Product bin	5078	24.02.2023	25.02.2023	1946.38	2000
9.	Coal Feeding Area	5079	24.02.2023	25.02.2023	1953.54	2000
IV. Induction Furnace & Rolling Mill - 1						
10.	IF Office	5064	23.02.2023	24.02.2023	1831.27	2000
11.	TMT Stock Yard	5065	23.02.2023	24.02.2023	1859.13	2000
12.	RML Gasifier	5066	23.02.2023	24.02.2023	1284.19	2000
V. Power Plant 25 MW-1						
13.	25 MW ESP	5081	24.02.2023	25.02.2023	1293.67	2000
14.	25 MW ACC	5096	25.02.2023	26.02.2023	973.39	2000
VI. Site Services						
15.	PGP- Coal handling system	5067	23.02.2023	24.02.2023	1309.98	2000
16.	IF Slag Crusher	5080	24.02.2023	25.02.2023	1658.30	2000
17.	Main Gate	5097	25.02.2023	26.02.2023	986.72	2000
18.	Fly ash Dump	5022	21.02.2023	22.02.2023	1916.30	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



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-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/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: 03.03.2023 Calibration Due Date: 03.03.2024
6	Discipline	:	Chemical
7	Group	:	Atmospheric Pollution
8	Sample Type	:	Stack Monitoring
9	Sampling Location	:	Pellet Plant-1 ESP
10	Month of Sampling	:	FEBRUARY-2023
11	Date of Sample Received	:	02.02.2023 & 24.02.2023
12	Date of Sample Analysis	:	02.02.2023 & 24.02.2023
13	Date Sample Analysis Completion	:	03.02.2023 & 25.02.2023
14	Report Issued Date	:	06.03.2023
15	Report Number	:	ULR-TC619323000001067F

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	
				01.02.2023	23.02.2023	
	Date of Monitoring					
	Sample Code			4697	5069	
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	29	32	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	81	109	-
3	Velocity of Fuel Gas	IS: 11255 (Part 1) - 1985 (RA 2014)	m/sec	6.88	7.16	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m ³ /hr	376654	371727	-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm ³ /hr	317029	290558	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	32.90	48.20	150
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³	88.66	74.36	100
8	Nitrogen Dioxide	IS: 11255 (Part 7): 2005 (RA 2017)	mg/Nm ³	37.50	42.50	50

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

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-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/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: 03.03.2023 Calibration Due Date: 03.03.2024
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Sampling Location	: Pellet Plant-1 ESP
10	Month of Sampling	: FEBRUARY-2023
11	Date of Sample Received	: 02.02.2023 & 24.02.2023
12	Date of Sample Analysis	: 02.02.2023 & 24.02.2023
13	Date Sample Analysis Completion	: 03.02.2023 & 25.02.2023
14	Report Issued Date	: 06.03.2023
15	Report Number	: 1067

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
				1st Fort Night	2nd Fort Night	
				01.02.2023	23.02.2023	
9	Carbon Monoxide	GEMS/SOP/69	%	4697 0.027	5069 0.039	-

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



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.



Leaders in Environment
Monitoring



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: 03.03.2023 Calibration Due Date: 03.03.2024
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	: FEBRUARY-2023
11	Date of Sample Received	: 09.02.2023&28.02.2023
12	Date of Sample Analysis	: 09.02.2023&28.02.2023
13	Date Sample Analysis Completion	: 10.02.2023&01.03.2023
14	Report Issued Date	: 06.03.2023
15	Report Number	: ULR-TC619323000001068F

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	
				08.02.2023	27.02.2023	
	Date of Monitoring			4816	5108	
	Sample Code					
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	29	31	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	167	175	-
3	Velocity of Fuel Gas	IS: 11255 (Part 1) - 1985 (RA 2014)	m/sec	7.69	7.38	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m ³ /hr	86938	83477	-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm ³ /hr	58966	55505	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm ³	39.80	43.10	150
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm ³	91.52	77.22	100
8	Nitrogen Dioxide	IS:11255 (Part7): 2005 (RA 2017)	mg/Nm ³	28.70	24.60	50

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



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-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: 03.03.2023 |
| | | : | Calibration Due Date: 03.03.2024 |
| 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 | : | FEBRUARY-2023 |
| 11 | Date of Sample Received | : | 09.02.2023 & 28.02.2023 |
| 12 | Date of Sample Analysis | : | 09.02.2023 & 28.02.2023 |
| 13 | Date Sample Analysis Completion | : | 10.02.2023 & 01.03.2023 |
| 14 | Report Issued Date | : | 06.03.2023 |
| 15 | Report Number | : | 1068 |

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	
				08.02.2023	27.02.2023	
9	Carbon Monoxide	GEMS/SOP/69	%	4816	5108	-
				0.039	0.054	-

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



Authorised Signatory
K. S. Swamy
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: 03.03.2023 Calibration Due Date: 03.03.2024
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Sampling Location	: Induction Furnace 1 & 2
10	Month of Sampling	: FEBRUARY-2023
11	Date of Sample Received	: -
12	Date of Sample Analysis	: -
13	Date Sample Analysis Completion	: -
14	Report Issued Date	: 06.03.2023
15	Report Number	: -

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
				1 st Fort Night	2 nd Fort Night	
	Date of Monitoring 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 (Part 7): 2005 (RA 2017)	mg/Nm ³			NS
9	Carbon Monoxide	GEMS/SOP/69	%			-

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

Reviewed by



B. S. S. S.

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-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: 03.03.2023 Calibration Due Date: 03.03.2024
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Sampling Location	: Rolling mill reheating furnace
10	Month of Sampling	: FEBRUARY-2023
11	Date of Sample Received	: 15.02.2023 & 28.02.2023
12	Date of Sample Analysis	: 15.02.2023 & 28.02.2023
13	Date Sample Analysis Completion	: 16.02.2023 & 01.03.2023
14	Report Issued Date	: 06.03.2023
15	Report Number	: ULR-TC619323000001069F

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
				1st Fort Night	2nd Fort Night	
				14.02.2023	27.02.2023	
	Date of Monitoring			4921	5107	
	Sample Code					
1	Ambient Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	30	28	-
2	Stack Temperature	IS: 11255 (Part 1) - 1985 (RA 2014)	°C	359	371	-
3	Velocity of Fuel Gas	IS: 11255 (Part 1) - 1985 (RA 2014)	m/sec	8.45	8.57	-
4	Gas flow rate at Stack Condition	IS-11255(Part 03) (RA 2014)	m³/hr	15356	15510	-
5	Gas flow rate at NTP	IS-11255(Part 03) (RA 2014)	Nm³/hr	7249	7175	-
6	Particulate Matter	IS: 11255 (Part 1) - 1985 (RA 2014)	mg/Nm³	32.50	27.30	100
7	Sulphur Dioxide	IS: 11255 (Part 2): (RA 2014)	mg/Nm³	214.50	200.26	270
8	Nitrogen Dioxide	IS: 11255 (Part 7): 2005 (RA 2017)	mg/Nm³	30.75	38.95	50
9	Carbon Monoxide	GEMS/SOP/69	%	0.216	0.187	-

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

S

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-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: 03.03.2023 Calibration Due Date: 03.03.2024
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Sampling Location	: Rolling mill reheating furnace
10	Month of Sampling	: FEBRUARY-2023
11	Date of Sample Received	: 15.02.2023 & 28.02.2023
12	Date of Sample Analysis	: 15.02.2023 & 28.02.2023
13	Date Sample Analysis Completion	: 16.02.2023 & 01.03.2023
14	Report Issued Date	: 06.03.2023
15	Report Number	: 1069

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	
				14.02.2023	27.02.2023	
9	Carbon Monoxide	GEMS/SOP/69	%	4921 0.216	5107 0.187	-

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



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.



Leaders in Environment
Monitoring



TC-6193

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 Analysis Report of Stack Emission

ANNEXURE-13

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: 03.03.2023 Calibration Due Date: 03.03.2024
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	:	FEBRUARY-2023
11	Date of Sample Received	:	-
12	Date of Sample Analysis	:	-
13	Date Sample Analysis Completion	:	-
14	Report Issued Date	:	06.03.2023
15	Report Number	:	

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 (Part 7): 2005 (RA 2017)	mg/Nm ³			300
9	Carbon Monoxide	GEMS/SOP/69	%			-

Note: NS- Not Specified. RA: Reaffirmed,



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-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: 03.03.2023
Calibration Due Date: 03.03.2024
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Date of Analysis Completion : FEBRUARY-2023 (1st Fort Night)
- 10 Date of Sample Received : 15.02.2023
- 11 Date of Sample Analysis : 16.02.2023
- 12 Date Sample Analysis Completion : 17.02.2023
- 13 Report Issued Date : 06.03.2023
- 14 Report Number : ULR-TC619323000001070F

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	14.02.2023	4922	-	29	36	4.92	30	0.40	12.67	50
2	Ore Fines Hopper Bottom	14.02.2023	4923	-	20	38	4.82	30	0.40	17.54	50
3	Main Crusher (RMHS)	14.02.2023	4924	-	32	36	5.01	25	0.50	14.98	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	2226	2150	-
2	Ore Fines Hopper Bottom	2181	2091	-
3	Main Crusher (RMHS)	3542	3415	-

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)

NP

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 Sl.No: Stack Monitoring Kit/ 304-DTB-2007
5	Instrument Details	: Calibration Date: 03.03.2023 Calibration Due Date: 03.03.2024
6	Discipline	: Chemical
7	Group	: Atmospheric Pollution
8	Sample Type	: Stack Monitoring
9	Date of Analysis Completion	: FEBRUARY-2023 (1st Fort Night)
10	Date of Sample Received	: 02.02.2023 & 10.02.2023
11	Date of Sample Analysis	: 02.02.2023 & 10.02.2023
12	Date Sample Analysis Completion	: 03.02.2023 & 11.02.2023
13	Report Issued Date	: 06.03.2023
14	Report Number	: ULR-TC61932300C001071F

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	01.02.2023	4698	---	30	36	5.07	3.0	0.30	28.59	50
5	Pellet Discharge Point	09.02.2023	4833	---	29	43	5.35	7.0	0.50	25.38	50
6	Production Transfer Point (AGB)	01.02.2023	4699	---	31	38	4.57	6.5	0.60	29.53	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	1290	1241	-
5	Pellet Discharge Point	3782	3566	-
6	Product Transfer Point (AGB)	4652	4441	-

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)

②

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-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: 03.03.2023
Calibration Due Date: 03.03.2024
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Date of Analysis Completion : **FEBRUARY-2023 (1st Fort Night)**
- 10 Date of Sample Received : 14.02.2023
- 11 Date of Sample Analysis : 14.02.2023
- 12 Date Sample Analysis Completion : 15.02.2023
- 13 Report Issued Date : **06.03.2023**
- 14 Report Number : **ULR-TC619323000001072F**

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	-	-	---	-	-	-	30	1.20	-	50
8	Cooler Discharge -2	13.02.2023	4915	---	31	37	4.56	30	1.20	32.31	50
9	Coal Crusher	-	-	---	-	-	-	30	1.20	-	50
10	Production Separation Bin (PSB)	13.02.2023	4914	---	34	39	4.72	30	1.20	31.92	50
11	Intermediate Bin	13.02.2023	4917	---	33	38	4.89	30	1.20	23.46	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	-	-	-
8	Cooler Discharge -2	18568	17852	-
9	Coal Crusher	-	-	-
10	Production Separation Bin (PSB)	19220	18348	-
11	Intermediate Bin	19912	19042	-

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)

②

Reviewed by



Authorised Signatory

K. Suvam

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: 03.03.2023
Calibration Due Date: 03.03.2024
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Date of Analysis Completion : **FEBRUARY-2023 (2ND Fort Night)**
- 10 Date of Sample Received : 23.02.2023
- 11 Date of Sample Analysis : 23.02.2023
- 12 Date Sample Analysis Completion : 24.02.2023
- 13 Report Issued Date : **06.03.2023**
- 14 Report Number : **ULR-TC619323000001073F**

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	22.02.2023	5047	---	30	35	4.82	30	0.40	13.63	50
2	Ore Fines Hopper Bottom	22.02.2023	5045	---	32	36	4.89	30	0.40	15.61	50
3	Main Crusher (RMHS)	23.02.2023	5046	---	34	37	5.07	25	0.50	21.93	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	2181	2112	-
2	Ore Fines Hopper Bottom	2212	2131	-
3	Main Crusher (RMHS)	3584	3436	-

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-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/RO73 |
| 3 | Sample collected by | : | GLOBAL Environment & Mining Services, Hosapete |
| 4 | Particulars of sample collected | : | Vayubodhan Stack sampler/ VSS-1 |
| 5 | Instrument Details | : | Sl.No: Stack Monitoring Kit/ 304-DTB-2007 |
| 6 | Discipline | : | Calibration Date: 03.03.2023 |
| 7 | Group | : | Calibration Due Date: 03.03.2024 |
| 8 | Sample Type | : | Chemical |
| 9 | Date of Analysis Completion | : | Atmospheric Pollution |
| 10 | Date of Sample Received | : | Stack Monitoring |
| 11 | Date of Sample Analysis | : | FEBRUARY-2023 (2 ND Fort Night) |
| 12 | Date Sample Analysis Completion | : | 17.02.2023 & 18.02.2023 |
| 13 | Report Issued Date | : | 17.02.2023 & 18.02.2023 |
| 14 | Report Number | : | 18.02.2023 & 20.02.2023 |
| | | : | 06.03.2023 |
| | | : | ULR-TC619323000001074F |

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	16.02.2023	4956	---	34	38	4.63	3.0	0.30	26.60	50
5	Pellet Discharge Point	17.02.2023	4975	---	30	40	5.23	7.0	0.50	31.88	50
6	Production Transfer Point (AGB)	17.02.2023	4976	---	32	38	4.42	6.5	0.60	28.63	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	1178	1125	-
5	Pellet Discharge Point	3697	3524	-
6	Production Transfer Point (AGB)	4500	4306	-

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: 03.03.2023
Calibration Due Date: 03.03.2024
- 6 Discipline : Chemical
- 7 Group : Atmospheric Pollution
- 8 Sample Type : Stack Monitoring
- 9 Date of Analysis Completion : **FEBRUARY-2023 (2ND Fort Night)**
- 10 Date of Sample Received : 22.02.2023
- 11 Date of Sample Analysis : 22.02.2023
- 12 Date Sample Analysis Completion : 23.02.2023
- 13 Report Issued Date : **06.03.2023**
- 14 Report Number : **ULR-TC619323000001075F**

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	-	-	---	-	-	-	30	1.20	-	50
8	Cooler Discharge -2	21.02.2023	5015	---	31	38	4.46	30	1.20	20.67	50
9	Coal Crusher	-	-	---	-	-	-	30	1.20	-	50
10	Transfer House-PSB	21.02.2023	5016	---	32	39	4.51	30	1.20	21.82	50
11	Intermediate Bin	21.02.2023	5017	---	33	37	4.82	30	1.20	33.66	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	-	-	-
8	Cooler Discharge -2	18161	17411	-
9	Coal Crusher	-	-	-
10	Transfer House-PSB	18365	17511	-
11	Intermediate Bin	19627	18815	-

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



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, 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 AMBIENT NOISE LEVEL MONITORING REPORT

ANNEXURE-20

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 : FEBRUARY-2023
Report Issue Date : 06.03.2023
Method Adopted : IS 9989-1981 Reaffirmed 2014
Report No : ULR-TC619323000001088F

Sl. No	Location	Date of Monitoring	Noise Level dB (A)					
			Day Time		Standard	Night Time		Standard
			Min	Max		Min	Max	
1	Main Gate	01.02.2023	45.4	56.4	75	43.7	51.7	70
2	Near ATM	01.02.2023	45.1	56.3	75	40.5	50.9	70
3	Transit House	02.02.2023	42.7	49.7	75	39.9	46.2	70
4	CAAQMS Station	02.02.2023	46.8	54.3	75	38.8	47.5	70
5	Gunda Road	03.02.2023	41.5	53.9	75	37.5	48.2	70
6	Gunda Railway Station	03.02.2023	51.1	60.1	75	40.1	56.3	70
7	Bagging Shed	04.02.2023	52.6	64.5	75	45.6	57.4	70
8	Railway Siding	04.02.2023	58.3	66.8	75	50.7	60.2	70
9	4th Gate	06.02.2023	47.4	57.5	75	47.3	51.4	70
10	Bricks Plant	06.02.2023	56.5	63.7	75	38.5	55.8	70
11	Kempuhalla (Wagon Tippler)	07.02.2023	52.3	59.3	75	41.7	53.7	70
12	Danapura Bridge	07.02.2023	48.4	58.5	75	43.5	52.6	70
13	2nd Gate	08.02.2023	46.1	52.1	75	39.8	44.9	70
14	Project Store	08.02.2023	40.5	48.4	75	38.9	42.4	70
15	Dispatch (Truck Parking Area)	09.02.2023	56.8	64.8	75	49.8	61.5	70

INFERENCE

As per CPCB Standards,

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, 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 AMBIENT NOISE LEVEL MONITORING REPORT

ANNEXURE-21

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 : FEBRUARY-2023
Report Issue Date : 06.03.2023
Method Adopted : IS 9989-1981 Reaffirmed 2014
Report No : ULR-TC619323000001089F

Sl. No	Location	Date of Monitoring	Noise Level dB (A)					
			Day Time		Standard	Night Time		Standard
			Min	Max		Min	Max	
1	Main Gate	16.02.2023	43.7	54.1	75	40.5	58.3	70
2	Near ATM	16.02.2023	41.2	51.3	75	39.8	49.8	70
3	Transit House	17.02.2023	40.9	53.8	75	39.1	52.5	70
4	CAAQMS Station	17.02.2023	47.2	56.7	75	38.9	49.6	70
5	Gunda Road	18.02.2023	41.3	53.4	75	42.7	49.1	70
6	Gunda Railway Station	18.02.2023	53.8	63.8	75	40.5	61.5	70
7	Bagging Shed	20.02.2023	55.5	64.9	75	41.6	60.7	70
8	Railway Siding	20.02.2023	57.1	69.1	75	45.1	64.6	70
9	4th Gate	21.02.2023	49.6	67.7	75	43.4	62.8	70
10	Bricks Plant	21.02.2023	45.9	52.8	75	44.9	55.1	70
11	Kempuhalla (Wagon Tippler)	22.02.2023	52.7	58.9	75	45.8	56.4	70
12	Danapura Bridge	22.02.2023	51.9	63.4	75	43.1	60.9	70
13	2nd Gate	23.02.2023	42.5	62.8	75	44.6	53.5	70
14	Project Store	23.02.2023	42.8	48.6	75	39.5	51.8	70
15	Dispatch (Truck Parking Area)	23.02.2023	56.1	68.5	75	48.8	62.4	70

INFERENCE As per CPCB Standards,
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, 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 AMBIENT NOISE LEVEL MONITORING REPORT

ANNEXURE-22

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 : Lutron SL- 4023SD
Sl. No: Q679953
Instrument Details : Calibration Date: 02.11.2022
Calibration Due Date: 01.11.2023
Month : FEBRUARY-2023
Report Issue Date : 06.03.2023
Method Adopted : IS 9989-1981 Reaffirmed 2014
Report No : ULR-TC619323000001090F

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	01.02.2023	41.3	54.1	50.12	55	37.1	43.1	40.14	45
2	MariyammanaHalli	03.02.2023	42.9	52.6	50.71		36.9	42.6	38.41	
3	HanumanaHalli	06.02.2023	44.5	53.9	50.01		39.2	41.9	39.68	
4	Galemmanagudi	08.02.2023	41.3	52.7	48.13		36.8	42.4	40.10	
5	GundaVillage	10.02.2023	40.7	49.5	44.67		37.1	42.1	39.82	
6	GundaTanda Village	13.02.2023	39.4	51.0	45.92		36.4	43.3	40.25	

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

Q

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-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/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	: 4893
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023
15	Report Number	: ULR-TC619323000001091F

Results

Sl. No.	Parameters	Protocol APHA 23rd Edition 2017	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)	-	7.17	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	µS/cm	2600	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	1592	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	166.76	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	298.50	-	-
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	114.40	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	59.11	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	529.24	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	437.42	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	7.42	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	416.10	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/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	:	4893
10	Date of Sampling	:	11.02.2023
11	Sample Received	:	11.02.2023
12	Date of Analysis	:	11.02.2023
13	Date of Analysis Completion	:	17.02.2023
14	Report Issue Date	:	06.03.2023

Results

Sl. No	Parameters	Protocol	Unit	Danapur Village (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	0.66	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	0.276	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.138	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	3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	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-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	: 4895
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023
15	Report Number	: ULR-TC619323000001092F

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)	-	7.32	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	1820	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	168.86	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	357.45	-	-
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	88.80	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	79.08	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	547.42	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	422.90	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	15.04	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	508.62	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	0.10	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. 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-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	:	4895
10	Date of Sampling	:	11.02.2023
11	Sample Received	:	11.02.2023
12	Date of Analysis	:	11.02.2023
13	Date of Analysis Completion	:	17.02.2023
14	Report Issue Date	:	06.03.2023

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	0.85	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	0.305	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.119	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	3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



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-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/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	: 4896
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023
15	Report Number	: ULR-TC619323000001093F

Results

Sl. No	Parameters	Protocol APHA 23rd Edition 2017	Unit	Galemmana 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)	-	7.51	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	μS/cm	2300	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	1428	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	119.66	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	227.85	-	-
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	122.40	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	55.23	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	533.28	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	388.41	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	11.38	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	416.93	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	0.11	0.30	NR

Note: GW3: GalemmanaGudi 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-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/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	: 4896
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023

Results

Sl. No	Parameters	Protocol	Unit	GalemmanaGudi Village (GW3)	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	0.84	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 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	0.251	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.109	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	3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



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-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	: 4894
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023
15	Report Number	: ULR-TC619323000001094F

Results

Sl. No	Parameters	Protocol APHA 23rd 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)	-	7.80	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	µS/cm	1540	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	936	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0.9	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	131.40	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	138.86	-	-
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	94.40	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	41.31	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	406.02	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	172.60	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	7.12	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	314.86	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	0.11	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	:	4894
10	Date of Sampling	:	11.02.2023
11	Sample Received	:	11.02.2023
12	Date of Analysis	:	11.02.2023
13	Date of Analysis Completion	:	17.02.2023
14	Report Issue Date	:	06.03.2023

Results

Sl. No	Parameters	Protocol	Unit	MariyammanaHali Village (GW4)	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	Fluoride as F	APHA 23 rd Edition 2017 4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.28	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	0.229	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.161	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	3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



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 Analysis Report of Water Quality Data

ANNEXURE-27

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	: 4897
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023
15	Report Number	: ULR-TC619323000001095F

Results

Sl. No	Parameters	Protocol APHA 23rd 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)	-	7.47	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	µS/cm	700	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	448	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0.8	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	29.29	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	68.88	-	-
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	64.80	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	8.25	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	195.94	200	500
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	90.75	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	11.34	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	217.98	200	500
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: 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



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/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	: 4897
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023

Results

Sl. No	Parameters	Protocol	Unit	GundaThanda (GW5)	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	0.50	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	0.287	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.124	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	3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



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-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	: 4898
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023
15	Report Number	: ULR-TC619323000001096F

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)	-	7.24	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	μS/cm	1200	-	-
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	0.9	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	71.57	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	94.04	-	-
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	84.80	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	45.67	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	399.96	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	145.20	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	5.94	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	295.83	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

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



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	: 4898
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023

Results

Sl. No	Parameters	Protocol	Unit	Gunda Village (GW6)	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	0.77	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	0.311	0.05	1.50
8.	Zinc as Zn	APHA 23 rd Edition 3111 B. Direct Air Acetylene Flame Method	mg/L	0.138	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	3114 B. (Pg. No.3-36 to 3-40)	mg/L	<0.01	0.01	0.05
11.	Chromium as Cr	3500 Cr-B. (Pg. No.3-71 to 3-72)	mg/L	<0.05	0.05	NR

Note: Ab: Absent, NR: No Relaxation



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, 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/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	: RO Drinking Water
9	Sample Code	: 4899
10	Date of Sampling	: 11.02.2023
11	Sample Received	: 11.02.2023
12	Date of Analysis	: 11.02.2023
13	Date of Analysis Completion	: 17.02.2023
14	Report Issue Date	: 06.03.2023
15	Report Number	: PAL/BMM/2022-23/1102

Results

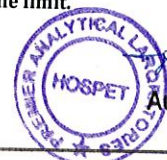
Sl. No	Parameters	Protocol APHA 23rd Edition 2017	Unit	RO Drinking Water	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
1.	pH	4500 H+ B (Pg. No.4-95 to 4-99)	-	7.72	6.5 to 8.5	NR
2.	Conductivity	2510 A (Pg. No.2-56 to 2-58)	μS/cm	100	-	-
3.	Total Dissolved Solids	2540 C (Pg. No.2-69 to 2-70)	mg/L	64	500	2000
4.	Turbidity (NTU)	2130 B (Pg. No.2-13 to 2-15)	NTU	0.0	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 4-200)	mg/L	4.94	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	0.0	-	-
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	3.20	75	200
11.	Magnesium as Mg	3500-B Mg By calculation (Pg. No.3-86)	mg/L	2.96	30	100
12.	Total Hardness as CaCO ₃	2340 C (Page No. 2-48 to 2-50)	mg/L	20.20	200	600
13.	Chloride as Cl	4500 Cl- (Page No. 4-75 to 4-76)	mg/L	45.38	250	1000
14.	Fluoride as F	4500 F- D (Page No. 4-90 to 4-91)	mg/L	0.11	1	1.5
15.	Nitrate Nitrogen as NO ₃	4500 NO ₃ E (Pg. No.4-131 to 4-132)	mg/L	0.52	45	NR
16.	Total Alkalinity as CaCO ₃	2320 B (Pg. No.2-37 to 2-39)	mg/L	24.22	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

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

As per Standards IS: 10500:2012

INFERENCE

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



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, 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

TEST REPORT

Sl. No	Parameters	Protocol	Unit	RO Drinking Water	Standards as per IS: 10500:2012	
					Desirable Limits	Permissible Limits
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	APHA-23RD Edition-3111 -B (Pg No.3 -20 to 3-21)	mg/L	<0.001	0.003	NR
32	Selenium as Se	APHA 23 rd Edition 3114 B. Direct Air Acetylene Flame Method	mg/L	<0.05	0.01	No Relaxation
33	Cyanides (as CN)	APHA 23 rd Edition 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)	APHA 23 rd Edition 5540 C (Pg. No.5-55 to 5-57)	mg/L	BDL	0.2	1.0
36	Boron as B	4500 B-B (p.no.4-25 to 4-26)	mg/L	<0.5	0.5	1.0
37	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	-

Note: Ab: Absent, NR: No Relaxation,



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.



Leaders in Environment
Monitoring



TC-6193

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	:	11.02.2023
10	Sample Received	:	11.02.2023
11	Date of Analysis	:	11.02.2023
12	Date of Analysis Completion	:	17.02.2023
13	Report Issue Date	:	06.03.2023
14	Report Number	:	ULR-TC619323000001097F

Sl. No.	Parameters	Protocol	Unit	Results			As per KSPCB Std
				STP 45 KLD	STP-1 90 KLD	STP-2 90 KLD	
		Sample code	-	4900	4901	4962	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.92	7.85	7.44	6.5 to 8.5
2.	Total Suspended Solids	APHA 23rd Edition 2017 2540 D (Pg. No.2-70 to 2-71)	mg/L	7.34	3.62	8.71	<10
3.	Biochemical Oxygen Demand as BOD (3 days at 27°C)	IS:3025 (part 44)-1993, Reaffirmed -2019	mg/L	4.0	8.0	6.0	<10
4.	Chemical Oxygen Demand as COD	APHA 23rd Edition 2017 5220 C (Pg. No.5-18 to 5-19)	mg/L	17.84	34.08	35.68	<50
5.	Oil & Grease	APHA 23rd Edition 2017 5520 B (Pg. No.5-41 to 5-42)	mg/L	1.20	1.60	2.0	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



S. 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-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	:	11.02.2023
10	Sample Received	:	11.02.2023
11	Date of Analysis	:	11.02.2023
12	Date of Analysis Completion	:	17.02.2023
13	Report Issue Date	:	06.03.2023

Sl. No.	Parameters	Protocol	Unit	Results			As per KSPCB Std
				STP 45 KLD	STP-1 90 KLD	STP-2 90 KLD	
		Sample code	-				
1.	Color	APHA 23 RD Edition 2120 B (Pg. No.2-6 to 2-7)	Hazen	8	7	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	<5.0

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



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.



Leaders in Environment
Monitoring



TC-6193

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	: 11.02.2023
10	Sample Received	: 11.02.2023
11	Date of Analysis	: 11.02.2023
12	Date of Analysis Completion	: 17.02.2023
13	Report Issue Date	: 06.03.2023
14	Report Number	: ULR-TC619323000001098F

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	4902	4903	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.94	7.60	6.5 to 9.0
2.	Total Suspended Solids	APHA 23rd Edition 2017 2540 D (Pg. No.2-70 to 2-71)	mg/L	17.32	20.10	100
3.	Chemical Oxygen Demand as COD	APHA 23rd Edition 2017 5220 C (Pg. No.5-18 to 5-19)	mg/L	35.68	17.84	250
4.	Oil & Grease	APHA 23rd Edition 2017 5520 B (Pg. No.5-41 to 5-42)	mg/L	2.0	2.40	10

Note: BDL-Below detectable Limit.

INFERENCE: The Measured values are within the Limit.

(S)

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-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	:	11.02.2023
10	Sample Received	:	11.02.2023
11	Date of Analysis	:	11.02.2023
12	Date of Analysis Completion	:	17.02.2023
13	Report Issue Date	:	06.03.2023
14	Report Number	:	ULR-TC619323000001099F

Results

Sl. No.	Parameters	Protocol	Unit	Results		IS 2296 - 1982 CLASS - B
				Danayakanakere Upstream	Danayakanakere Downstream	
		Sample code		4904	4905	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.47	7.44	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 23rd Edition 4500F-D (Pg. No.4-90 to 4-91)	mg/L	0.29	0.38	1.5

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	: 11.02.2023
10	Sample Received	: 11.02.2023
11	Date of Analysis	: 11.02.2023
12	Date of Analysis Completion	: 17.02.2023
13	Report Issue Date	: 06.03.2023

Sl. No.	Parameters	Protocol	Unit	Results		IS 2296 - 1982 CLASS -B
				Danayakanakere Upstream	Danayakanakere Downstream	
Sample code				4904	4905	
1.	Dissolved Oxygen	APHA 23 RD Edition 4500 C (Pg. No.4-146)	mg/L	6.2	6.6	>5.0
2.	Color	APHA 23 RD Edition 2120 B (Pg. No.2-6 to 2-7)	Hazen	5	7	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.	Arsenic as As	APHA-23 RD Edition-3114 -B (Pg. No.3 -36 to 3-40)	mg/L	<0.1	<0.1	0.2
8.	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.



Authorised Signatory

K Suvama

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/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	: Surface Water
9	Date of Sampling	: 11.02.2023
10	Sample Received	: 11.02.2023
11	Date of Analysis	: 11.02.2023
12	Date of Analysis Completion	: 17.02.2023
13	Report Issue Date	: 06.03.2023
14	Report Number	: ULR-TC619323000001100F

Results

Sl. No.	Parameters	Protocol	Unit	Results		IS 2296 - 1982 CLASS -B
				KempuHalla Upstream	KempuHalla Downstream	
Sample code				4906	4907	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.87	7.90	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	0.51	0.56	1.5

Note: BDL-Below detectable Limit.

INFERENCE: The measured values are within the Limit.

8

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-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 : 11.02.2023
- 10 Sample Received : 11.02.2023
- 11 Date of Analysis : 11.02.2023
- 12 Date of Analysis Completion : 17.02.2023
- 13 Report Issue Date : **06.03.2023**

Sl. No.	Parameters	Protocol	Unit	Results		IS 2296 - 1982 CLASS -B
				KempuHalla Upstream	KempuHalla Downstream	
			Sample code	4906	4907	
1.	Dissolved Oxygen	APHA 23 RD Edition 4500 C (Pg. No.4-146)	mg/L	6.0	6.8	>5.0
2.	Color	APHA 23 RD Edition 2120 B (Pg. No.2-6 to 2-7)	Hazen	5	7	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.	Arsenic as As	APHA-23 RD Edition-3114 -B (Pg. No.3-36 to 3-40)	mg/L	<0.1	<0.1	0.2
8.	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.



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-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	: 11.02.2023
10	Sample Received	: 11.02.2023
11	Date of Analysis	: 11.02.2023
12	Date of Analysis Completion	: 17.02.2023
13	Report Issue Date	: 06.03.2023
14	Report Number	: ULR-TC619323000001101F

Results

Sl. No.	Parameters	Protocol	Unit	Results	IS 2296 -1982 CLASS -B
				Tungabhadra dam	
				Sample Code	
				4908	
1.	pH	APHA 23rd Edition 2017 4500 H+ B (Pg. No.4-95 to 4-99)	-	7.73	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	0.17	1.5

Note: **BDL**-Below detectable Limit.

INFERENCE: The measured values are within the Limit.

⑧

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

Analysis Report of Surface Water Quality Data

ANNEXURE-34

- | | | | |
|----|---------------------------------|---|---|
| 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 | : | 11.02.2023 |
| 10 | Sample Received | : | 11.02.2023 |
| 11 | Date of Analysis | : | 11.02.2023 |
| 12 | Date of Analysis Completion | : | 17.02.2023 |
| 13 | Report Issue Date | : | 06.03.2023 |

Sl. No.	Parameters	Protocol	Unit	Results	IS 2296 -1982 CLASS -B
				Tungabhadra dam	
			Sample Code	4908	
1.	Dissolved Oxygen	APHA 23 RD Edition 4500 C (Pg. No.4-146)	mg/L	5.8	>5.0
2.	Color	APHA 23 RD Edition 2120 B (Pg. No.2-6 to 2-7)	Hazen	7	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.	Arsenic as As	APHA-23 RD Edition-3114 -B (Pg. No.3 -36 to 3-40)	mg/L	<0.1	<0.1
8.	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.



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.