

केरेडारी कोयला खनन परियोजना
Kerandari Coal Mining Project

Ref No.: 1078/KDCMP/EMG/2024/07

Date: 25.09.2024

To,
THE MEMBER SECRETARY,
JSPCB (Jharkhand State Pollution Control Board),
H.E.C., Dhurwa,
Ranchi – 834 004 (Jharkhand)
Email: ranchijspcb@gmail.com.

Subject: Submission of Environmental Statement in Form-V for the financial year ending on 31st March 2024 for "Kerandari Coal Mining Project, NTPC Mining Limited, Hazaribagh, Jharkhand"- Reg.

Ref: CTO granted to KDCMP vide Ref No. JSPCB/HO/RNC/CTO-18525714/2024/1083, dtd 28.06.2024.

Dear Sir,

In compliance with the Rule 14 of the Environmental (Protection) Rule 1986, Please find herewith enclosed the Environmental Statement in Form-V for the financial year ending on 31st March 2024 for "Kerandari Coal Mining Project, NTPC Mining limited, Hazaribagh, Jharkhand".

This is for kind information please.

Thanking you,

Yours Faithfully


Ramesh Kumar D.
DGM (P&S/ Mining)
Kerandari Coal Mining Project
NTPC Mining Limited

Copy To,

1. **Regional Director**, Kolkata, Central Pollution Control Board; Southern Conclave, Block 502, 5th & 6th Floors, Rajdhanga Main Road, Kolkata-700107 (W.B.), Email: mkbiswas.cpcb@nic.in
2. **The Deputy Director General of Forest (C)**, Ministry of Environment, Forest and Climate Change, Regional Office (ECZ), 2nd Floor, HQ. Jharkhand State Housing Board, Harmu Chowk, Ranchi (Jharkhand)-834002, email-ro.ranchi-mef@gov.in.
3. **Regional Officer**, Jharkhand State Pollution Control Board, PTC Chowk, Hazaribagh, Jharkhand, Email: jspcb_hazaribagh@rediffmail.com

एन.एम. एल. केरेडारी कोयला खनन परियोजना, सिकरी साईट कार्यालय, बड़कागाँव, हजारीबाग – 825311

NML Kerandari Coal Mining Project, Sikri Site Office, Barkagaon, Hazaribag - 825311

पंजीकृत कार्यालय : एनटीपीसी भवन, स्कोप कॉम्प्लेक्स, 7, इंस्टिट्यूशनल एरिया, लोधी रोड, नई दिल्ली – 110003. टेलीफोन नं./Tel: 011-24387333, फैक्स नं./Fax: 01124361018
Registered Office : NTPC Bhawan, Scope Complex, 7, Institutional Area, Lodi Road, New Delhi - 110003. E-mail : ntppcc@ntpc.co.in, Website : www.ntpc.co.in

Visit : [/ntpc1](https://www.ntpc.co.in) [/ntpcld1](https://www.ntpc.co.in) [/ntpclimited](https://www.ntpc.co.in) [/company/ntpc](https://www.ntpc.co.in) [/ntpclimited](https://www.ntpc.co.in)

**ENVIRONMENTAL STATEMENT
FOR
NTPC Mining Ltd
KERANDARI
COAL MINING PROJECT**

(FOR THE FINANCIAL YEAR ENDING 31ST MARCH 2024)

(Under Rule 14 of The Environmental (Protection) Rule – 1986)



Environment Management Group
NTPC Mining Ltd.-Kerandari Coal Mining Project
PO: Barkagaon, Dist: Hazaribagh
Jharkhand – 825 311

[FORM-V]

(See Rule 14 of The Environmental (Protection) Rule – 1986)

Environmental Statement for “NTPC Mining Ltd - Kerandari Coal Mining Project”

[For financial year ending on 31st March 2024.]

PART-A

S. No.	DISCRIPTION	
01	Name and address of the owner/occupier of the industry Operation or process	Shri SHIV PRASAD General Manager, M/s NTPC Mining Ltd.-Kerandari Coal Mining Project. Site Office : Sikri Post : Barkagaon Dist : Hazaribagh (Jharkhand) PIN : 825 311.
02	Industry category primary :- (SIC Code) Secondary – (SIC Code)	Open cast Coal Mining Project
03	Production capacity – Units	6 MTPA (Coal)
04	Year of establishment	Mines Operation started in the month of April 2023
05	Date of the last environmental statement submitted	Environmental Statement submitted vide letter ref. No. NTPC/KDCMP/Mining/2023/214 dated 11.09.2023 (Mine operation started on 05.04.2023)

PART-B

Water and Raw material Consumption

i) Water Consumption:

Water and Raw material Consumption			
1	Water Consumption m ³ /day	:	118.38 m ³ /day
2	Process	:	Not applicable
3	Cooling (Water sprinkling on Haul roads)	:	96.72 m ³ /day
4	Domestic (Drinking purpose)	:	21.66 m ³ /day

Process water consumption per product output (Litres / te)			
	Name of Products		During the previous fin. Year (2022-23) During the current fin. Year (2023-24)
	Coal	:	Not applicable

1. Substituted by rule 2 (b) of the environment (Protection) amendment rules, 1993 notified vide G.S.R vide G.S.R 3'6 (E) dated 22.04.1993.

(ii) Raw material consumption -

Sl. No.	Name of Raw Materials	Name of Product	UoM	Consumption of raw material per unit of output	
				During Previous FY (2022-23)	During current FY (2023-24)
i.	Explosive	Coal	Kg/te	Mine operation started on 05.04.2023	0.129
ii.	HSD		ltr/te	Mine operation started on 05.04.2023	1.63

**Industry may use codes if disclosing details or raw material would violate contractual obligations, otherwise all industries have to name the raw materials used.*

PART-C

Pollution discharged to environment /unit of output (Parameter as specified in the consent issued)

A) Water: No effluent discharged during the reporting period (FY 2023-24).

(Parameter as specified in the consent issued)			
Pollutants	Quantity of Pollutants Dis- charged (Mass/day)	Conc. of Pollutants Dis- charged (Mass/Volume)	CPCB STANDARD
Water (ETP Discharge) 100% treated effluent is being reused (attached as annexure-I)			
pH	100% treated effluent is being reused for vehicle washing	7.93	6.5-8.5
TSS		56	100.0 mg/l
Oil & Grease		7.6	10.0
Water (S.T.P Discharge)			
The integrated township for NTPC is under construction and STP for NTPC township also under construction.			
pH	NA	NA	6.5-8.5
T.S.S	NA	NA	100.0 mg/l
B.O.D	NA	NA	10.0

B) Air:

Pollutants	Quantity of Pollutants Discharged (mass / Day)	Concentrations of pollutants in discharges (mass/Volume)	Percentage of Variation from prescribed Standards with Reasons
(a) Air	Dust is the only common pollutant generated in mines and its allied activities. Dust emission sources are extensive and fugitive in nature like plying of vehicles, coal loading and unloading operation, coal crushing, screening and handling operation. Fugitive Dust Monitoring Report is enclosed as Annexure-II And also, Ambient air quality is being monitored at eight locations as per direction of SPCB. Data of the same are enclosed as Annexure-III .		

PART – D

Hazardous Wastes

(As specified under Hazardous Waste/ Management and Handling Rules, 1986)

Hazardous Wastes	Total Quantity	
	During Previous FY (2022-23)	During Current FY (2023-24)
a) From process:		
Used Oil	Mine operation started on 05.04.2023	6.93KL
Oil contaminated waste	Mine operation started on	90.5 Kg





	05.04.2023	
b) From Pollution control facilities:	Nil	Nil

PART-E
Solid Waste

Sl No.	Solid Wastes	Total quantity	
		During the Previous Financial year (2022-23)	During the Current Financial year (2023-24)
(a)	From process (Overburden and Interrelated Waste)	Mine operation started on 05.04.2023	2461877.79CuM
(b)	From Pollution control facility	---	---
(c)	Quantity recycled or re-utilized within the unit	---	---
(d)	Sold	---	---
(e)	Disposed	Mine operation started on 05.04.2023	Kept within ML area 2461877.79CuM





PART-F

Please specify the characteristics (in terms of composition and quantum) of Hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes.


-  The generated used oil is stored at an earmarked area in leak proof containers and the same is disposed to authorized recycler in a manner specified by the CPCB.
-  The used lead acid batteries are kept at an earmarked area on impervious ground and in manner specified by the CPCB. Same are disposed to an authorized recycler through buy-back system.
-  The generated of OB & Intercalated waste is dumped in earmarked area as per approved mining plan & scheme with mitigate measures such as proper sloping, terracing and garland drainage.
-  Top soil is kept at separate location with proper slope and soil erosion protection measures such as planting of soil binding grass species, sowing of seeds, planting trees etc. the top soil shall be reused for bio-reclamation of the Overburden dumps after completion of the OB dumps.

PART-G

Impact of the pollution abatement measures taken on conservation of natural re-sources and on the cost of the production

-  Except in rainy season, 100% seepage water and mine effluents are being recycled and reused after necessary treatment. For ground water recharge, roof top Rain Water Harvesting Structures has been proposed at site Office.
-  Till date no effluent is being discharge, dedicated ETP is installed at the workshop.
-  The top soil is stored in a proper manner and the same has been utilized for plantation.
-  Garland drainage is provided to mines dump and soil erosion areas.

PART-H


Ramesh Kumar D.
DGM (P&S/ Mining)
Kerandari Coal Mining Project
NTPC Mining Limited

Additional measures/investment proposal for environmental protection including abatement of pollution, prevention of pollution

- 6 nos. of different capacity (two no. of 12 KL, four nos. of 22 KL) mobile water tanker has engaged for mines haul road dust suppression.
- 2 nos. of piezometer are installed at Fagu saw school and Pagar substation for monitoring of ground water level.
- 2 nos. of flowmeter are installed at BGR workshop and Pandu office to measure dewatering from the borewell.
- Crusher with water sprinkling system has been installed.
- Dust extraction and wetting process are being used for drilling process
- 20KLD ETP plant is installed at mines workshop area and the treated water is reuse for vehicle washing.
- The emissions of the vehicles are being regularly monitored to ascertain the emissions within the norms or not.
- Continuous Ambient Air Quality Monitoring System (CAAQMS) has been installed at the Core Zone.
- Various pollution abatement measures taken are enclosed as **Annexure-IV**.

PART-I

Any other particulars for improving the quality of the environment.

KERANDARI COAL MINING PROJECT OF NML		
Environmental Expenditure for the FY (April-2023 to March-2024)		
Sl. No.	Purpose of Expense	Amount (in Rs.)
(A) For dump slope stabilization		2689480
1	Garland Drain, Settling Pit and its Maintenance	
2	Dozer Operator Salary, HSD Cost and Maintenance charge	
(B) For dust suppression		
1	Water tanker and its maintenance	28522320
(C) Environmental Monitoring		
1	Annual Maintenance Contract of Instruments	8158839.95
2	Environmental Monitoring (AAQ, Water, Noise etc.)	
(D) Plantation		801500
(E) Environment Staff Salary		1356636.923
(F) Water treatment & ETP Maintenance		1097400
(G) Scientific Study		541200
Total Amount		43167377.87


Ramesh Kumar D.
DGM (P&S/ Mining)
Kerandari Coal Mining Project
NTPC Mining Limited

**NTPC Mining Limited
Kerandari Coal Mining Project
Effluent Treatment Plant of 20 KLD**





BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

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Annexure II

TEST REPORT FUGITIVE EMISSION QUALITY (Near Coal Dump Area)

Format No : 7.BE-05

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/037	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/037	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/FE/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A
Sampling Date : 12/04/2023 to 13/04/2023	Sample Receiving & Registration Date : 14/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Near Coal Dump Area (Proposed)	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.44
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	26.70
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	147
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	209

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory

Technical Manager



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TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY (Near Coal Handling Point)

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/039	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/039	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/FE/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A
Sampling Date : 12/04/2023 to 13/04/2023	Sample Receiving & Registration Date : 14/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Near Coal Handling Point	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.69
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	23.09
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	124
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	174

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Analyst by



Authorized Signatory
Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Near Dewatering Pump)

Format No : 7.BF-06

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/035	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/035	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/FE/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A
Sampling Date : 11/04/2023 to 12/04/2023	Sample Receiving & Registration Date : 14/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	08.31
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.85
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	107
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	153

---END OF REPORT---

Declaration :-

- Reported results are related only to the item tested.
- This report is the property of laboratory & should not be used unless advised.
- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Near Mine Trench)

Format No : 7.BF-06

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/036	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/036	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/FE/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A
Sampling Date : 11/04/2023 to 12/04/2023	Sample Receiving & Registration Date : 14/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.27
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	25.08
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	187
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	196

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.BE-06

FUGITIVE EMISSION QUALITY (Near Project View Point)

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/038	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/038	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/FE/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission

Client Name & Address : M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A
Sampling Date : 12/04/2023 to 13/04/2023	Sample Receiving & Registration Date : 14/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Near Project View Point	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	07.22
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	14.21
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	127
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	181

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7-BF-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 01)

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/033	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/033	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/FE/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A
Sampling Date : 11/04/2023 to 12/04/2023	Sample Receiving & Registration Date : 14/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	06.64
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	11.28
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	101
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	143

---END OF REPORT---

Declaration :-

- Reported results are related only to the item tested.
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- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

Registered by Jharkhand State Pollution Control Board (JSPCB)
Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)



Format No : 7.8F-06

TEST REPORT **FUGITIVE EMISSION QUALITY** (Near Soil Dump Yard – 02)

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/034	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/034	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/FE/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission

Client Name & Address :- M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A
Sampling Date : 11/04/2023 to 12/04/2023	Sample Receiving & Registration Date : 14/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	06.04
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	10.90
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	92
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	131

---END OF REPORT---

• **Declaration :-**

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Near coal Dump Area)

Format No : 7.BF-06

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/084	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/084	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A
Sampling Date : 12/05/2023 to 13/05/2023	Sample Receiving & Registration Date : 13/05/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Near coal Dump Area	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.49
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	27.11
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	128
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	199

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



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Technical Manager



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TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY

(Near Coal Handling Plant)

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/086	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/086	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A
Sampling Date : 12/05/2023 to 13/05/2023	Sample Receiving & Registration Date : 13/05/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.89
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.43
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	118
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	154

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

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TEST REPORT FUGITIVE EMISSION QUALITY (Near Dewatering pump)

Format No : 7,8F-06

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/082	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/082	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A
Sampling Date : 11/05/2023 to 12/05/2023	Sample Receiving & Registration Date : 13/05/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	8.21
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.07
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	103
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	129

—END OF REPORT—

• **Declaration :-**

- Reported results are related only to the item tested.
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TEST REPORT FUGITIVE EMISSION QUALITY (Near Mine Trench)

Format No.: ZSE-05

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/083	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/083	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A
Sampling Date : 11/05/2023 to 12/05/2023	Sample Receiving & Registration Date : 13/05/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.17
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	25.35
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	116
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	197

---END OF REPORT---

• **Declaration :-**

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TEST REPORT FUGITIVE EMISSION QUALITY (Near Project View Point)

Format No : 7.BF-06

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/085	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/085	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A
Sampling Date : 12/05/2023 to 13/05/2023	Sample Receiving & Registration Date : 13/05/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Near Project View Point	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	6.98
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	14.13
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	109
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	167

---END OF REPORT---

Declaration :-

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TEST REPORT FUGITIVE EMISSION QUALITY (Near Soil Dump Yard – 01)

Format No : 7.8F-05

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/080	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/080	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A
Sampling Date : 11/05/2023 to 12/05/2023	Sample Receiving & Registration Date : 13/05/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	06.15
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	10.96
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	97
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	113

—END OF REPORT—

Declaration :-

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TEST REPORT

Format No : 7.8F-05

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 02)

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/081	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/081	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A
Sampling Date : 11/05/2023 to 12/05/2023	Sample Receiving & Registration Date : 13/05/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	5.74
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	10.89
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	88
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	112

---END OF REPORT---

Declaration :-

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Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Soil Dump Yard – 01)

Format No : 7.8F-06

Unique Lab Report No : BES/BGR/KRD/23000000011-A	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000027	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/SAMPLING/PLAN/AQ/01
Sampling Date : 26/06/2023 to 27/06/2023	Sample Receiving & Registration Date : 28/06/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	6.85
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	11.63
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	104
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	148

---END OF REPORT---

Declaration :-

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- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Tested by



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TEST REPORT FUGITIVE EMISSION QUALITY (Soil Dump Yard – 02)

Format No : 7.RF-06

Unique Lab Report No : BES/BGR/KRD/23000000012-A	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000028	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/SAMPLING/PLAN/AQ/01
Sampling Date : 26/06/2023 to 27/06/2023	Sample Receiving & Registration Date : 28/06/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	6.19
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	11.24
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	95
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	136

---END OF REPORT---

Declaration :-

- Reported results are related only to the item tested.
- This report is the property of laboratory & should not be used unless advised.
- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

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Technical Manager

**TEST REPORT**

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY

(Dewatering Pump)

Unique Lab Report No : BES/BGR/KRD/23000000013-A	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000029	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/SAMPLING/PLAN/AQ/01
Sampling Date : 26/06/2023 to 27/06/2023	Sample Receiving & Registration Date : 28/06/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	8.57
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.44
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	111
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	158

---END OF REPORT---

Declaration :-

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- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

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Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Mine Trench)

Format No : 7.BF-06

Unique Lab Report No : BES/BGR/KRD/23000000014-A	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000030	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/SAMPLING/PLAN/AQ/01
Sampling Date : 27/06/2023 to 28/06/2023	Sample Receiving & Registration Date : 28/06/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.59
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	25.86
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	142
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	203

—END OF REPORT—

Declaration :-

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- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Coal Dump Yard)

Format No : 7.8F-06

Unique Lab Report No : BES/BGR/KRD/23000000015-A	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000031	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/SAMPLING/PLAN/AQ/01
Sampling Date : 27/06/2023 to 28/06/2023	Sample Receiving & Registration Date : 28/06/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Near Coal Dump Yard (Proposed)	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.82
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	27.53
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	152
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	216

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT **FUGITIVE EMISSION QUALITY** (Project View Point)

Format No : 7.8F-05

Unique Lab Report No : BES/BGR/KRD/23000000016-A	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000032	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/SAMPLING/PLAN/AQ/01
Sampling Date : 27/06/2023 to 28/06/2023	Sample Receiving & Registration Date : 28/06/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Near Project View Point	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	7.44
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	14.65
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	131
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	187

---END OF REPORT---

Declaration :-

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- All parameters in this report conforms to the specific standard.

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Technical Manager



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TEST REPORT **FUGITIVE EMISSION QUALITY** (Coal Dump Yard)

Format No : 7.8F-05

Unique Lab Report No : LAB/REPORTS/BES/00000016	Report Issue Date : 05/08/2023
Job Card No : BES/0000016A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 12/07/2023 to 13/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Near Coal Dump Yard (Proposed)	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.79
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	23.96
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	112
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	187

---END OF REPORT---

Declaration :-

- Reported results are related only to the item tested.
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- All parameters in this report conforms to the specific standard.

Pmitamkur
Tested by



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Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Coal Handling Plant)

Format No : 7_SF-05

Unique Lab Report No : LAB/REPORTS/BES/00000018	Report Issue Date : 05/08/2023
Job Card No : BES/0000018A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 12/07/2023 to 13/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.31
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	24.37
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	131
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	184

---END OF REPORT---

Declaration :-

- Reported results are related only to the item tested.
- This report is the property of laboratory & should not be used unless advised.
- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Pratim Kumar
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Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Dewatering Pump)

Format No : 7.8F-05

Unique Lab Report No : LAB/REPORTS/BES/00000014	Report Issue Date : 05/08/2023
Job Card No : BES/0000014A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 11/07/2023 to 12/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.04
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.56
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	86
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	131

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Pritham Kumar
Tested by



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Technical Manager



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TEST REPORT **FUGITIVE EMISSION QUALITY** (Mine Trench)

Format No : 7.BF-06

Unique Lab Report No : LAB/REPORTS/BES/00000015	Report Issue Date : 05/08/2023
Job Card No : BES/0000015A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 11/07/2023 to 12/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.09
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	24.69
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	135
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	194

---END OF REPORT---

Declaration :-

- Reported results are related only to the item tested.
- This report is the property of laboratory & should not be used unless advised.
- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager



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TEST REPORT

Format No.: 7.8F-06

FUGITIVE EMISSION QUALITY

(Project View Point)

Unique Lab Report No : LAB/REPORTS/BES/00000017	Report Issue Date : 05/08/2023
Job Card No : BES/0000017A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 12/07/2023 to 13/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Near Project View Point	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.52
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.83
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	106
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	131

---END OF REPORT---

Declaration :-

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- All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager



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TC - 12039

TEST REPORT **FUGITIVE EMISSION QUALITY** (Soil Dump Yard - 01)

Format No : 7.BF-06

Unique Lab Report No : LAB/REPORTS/BES/00000012	Report Issue Date : 05/08/2023
Job Card No : BES/0000012A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 10/07/2023 to 11/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Near Soil Dump Yard - 01	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.52
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	23.18
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	78
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	122

---END OF REPORT---

Declaration :-

- Reported results are related only to the item tested.
- This report is the property of laboratory & should not be used unless advised.
- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Pritam K.
Tested by



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Authorized Signatory
Technical Manager



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Format No : 7.BF-05

TEST REPORT **FUGITIVE EMISSION QUALITY** (Soil Dump Yard – 02)

Unique Lab Report No : LAB/REPORTS/BES/00000013	Report Issue Date : 05/08/2023
Job Card No : BES/0000013A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 10/07/2023 to 11/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	9.83
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.69
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	69
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	112

—END OF REPORT—

Declaration :-

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- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager



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TEST REPORT

Format No.: 7.RF-05

FUGITIVE EMISSION QUALITY

(Soil Dump Yard – 01)

Unique Lab Report No : LAB/REPORTS/BES/00000023	Report Issue Date : 09/09/2023
Job Card No : BES/0000023A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006
Sampling Date : 13/08/2023 to 14/08/2023	Sample Receiving & Registration Date : 16/08/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Near coal Dump Area	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.09
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	22.86
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	105
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	179

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
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04. All parameters in this report conforms to the specific standard.

Pritam k n.
Tested by



[Signature]
Authorized Signatory
Technical Manager

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Email Id :- biocratenvi@gmail.com. Mobile No - 7369019812, 9340466751, 9608708172



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TEST REPORT FUGITIVE EMISSION QUALITY (Near Coal Handling Plant)

Format No : 7.8F-06

Unique Lab Report No : LAB/REPORTS/BES/00000025	Report Issue Date : 09/09/2023
Job Card No : BES/0000025A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.86
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	23.78
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	126
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	177

---END OF REPORT---

Declaration :-

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04. All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



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Technical Manager

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Format No : 7.8F-06

TEST REPORT FUGITIVE EMISSION QUALITY (Near Dewatering pump)

Unique Lab Report No : LAB/REPORTS/BES/00000021	Report Issue Date : 09/09/2023
Job Card No : BES/0000021A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.56
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.57
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	81
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	129

---END OF REPORT---

Declaration :-

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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TEST REPORT **FUGITIVE EMISSION QUALITY** (Near Mine trench)

Format No : 7.BF-06

Unique Lab Report No : LAB/REPORTS/BES/00000022	Report Issue Date : 09/09/2023
Job Card No : BES/0000022A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nitesh Kumar & Team	Sampling Plan Reference : BES/0006
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.56
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	24.02
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	127
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	182

---END OF REPORT---

Declaration :-

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Pritom Kumar
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TEST REPORT

Format No: T.BF-06

FUGITIVE EMISSION QUALITY

(Near Project View Area)

Unique Lab Report No : LAB/REPORTS/BES/00000024	Report Issue Date : 09/09/2023
Job Card No : BES/0000024A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006
Sampling Date : 13/08/2023 to 14/08/2023	Sample Receiving & Registration Date : 16/08/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Near Project View Point Area	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.95
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.05
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	99
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	122

---END OF REPORT---

Declaration :-

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Pritam Kar.
Tested by



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TEST REPORT **FUGITIVE EMISSION QUALITY** (Near Soil Dump Yard – 01)

Format No : 7.8F-06

Unique Lab Report No : LAB/REPORTS/BES/00000019	Report Issue Date : 09/09/2023
Job Card No : BES/0000019A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.02
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	22.88
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	74
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	118

—END OF REPORT—

Declaration :-

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Pritam K.
Tested by



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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard - 02)

Unique Lab Report No : LAB/REPORTS/BES/00000020	Report Issue Date : 09/09/2023
Job Card No : BES/0000020A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Air Quality
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Air Quality	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Near Soil Dump Yard - 02	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	8.96
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.12
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	65
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	78

---END OF REPORT---

Declaration :-

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Pritam Kumar
Tested by



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Format No.: 7.BF-05

TEST REPORT

FUGITIVE EMISSION QUALITY

Near Coal Dump Area (Proposed)

Unique Lab Report No : LAB/REPORTS/BES/00000041	Report Issue Date : 10/10/2023
Job Card No : BES/0000041A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/FE/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 12/09/2023 to 13/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Near coal Dump Area	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.56
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.63
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	91
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	166

---END OF REPORT---

Declaration :-

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02. This report is the property of laboratory & should not be used unless advised.
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04. All parameters in this report conforms to the specific standard.

Tested by



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TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY (Near Coal Handling Plant)

Unique Lab Report No : LAB/REPORTS/BES/00000043	Report Issue Date : 10/10/2023
Job Card No : BES/0000043A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/FE/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 12/09/2023 to 13/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.02
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.45
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	114
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	169

---END OF REPORT---

Declaration :-

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04. All parameters in this report conforms to the specific standard.

Tested by



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TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY

(Near Dewatering pump)

Unique Lab Report No : LAB/REPORTS/BES/00000039	Report Issue Date : 10/10/2023
Job Card No : BES/0000039A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/FE/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 11/09/2023 to 12/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	9.91
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	17.35
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	75
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	118

---END OF REPORT---

Declaration :-

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TEST REPORT FUGITIVE EMISSION QUALITY (Near Mine trench)

Format No : 7.BE-06

Unique Lab Report No : LAB/REPORTS/BES/00000040	Report Issue Date : 10/10/2023
Job Card No : BES/0000040A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/FE/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 11/09/2023 to 12/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.93
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	22.45
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	113
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	171

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Bajna, P.O. - Hazaribag, Dist - Ranchi, Jharkhand, Pin - 834003
Email Id :- biocratenv@gmail.com, Mobile No - 7369019812, 83404466751, 9608708172



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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Project View Area)

Unique Lab Report No : LAB/REPORTS/BES/00000042	Report Issue Date : 10/10/2023
Job Card No : BES/0000042A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/FE/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 12/09/2023 to 13/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Near Project View Point Area	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	9.83
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.26
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	91
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	109

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Hajra, P.O - Hehal, Dist - Ranchi, Jharkhand, Pin - 834005
Email Id :- biocratenvis@gmail.com, Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard - 01)

Unique Lab Report No : LAB/REPORTS/BES/00000037	Report Issue Date : 10/10/2023
Job Card No : BES/0000037A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/FE/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 11/09/2023 to 12/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Near Soil Dump Yard - 01	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	9.13
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.69
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	68
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	108

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add :- Sarveshwari Nagar, Itki Road, Bajra, P.O - Harpal, Dist - Ranchi, Jharkhand. Pin - 834005
Email Id :- biocratenvi@gmail.com, Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard - 02)

Unique Lab Report No : LAB/REPORTS/BES/00000038	Report Issue Date : 10/10/2023
Job Card No : BES/0000038A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/FE/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesb Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 11/09/2023 to 12/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Near Soil Dump Yard - 02	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	8.14
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.39
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	59
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	72

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add:- Sarveshwari Nagar, Itki Road, Bagra, P.O - Hehal, Dist - Ranchi, Jharkhand, Pin -834005
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TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY Near Coal Dump Area (Proposed)

Unique Lab Report No : LAB/REPORTS/BES/00000083	Report Issue Date : 08/11/2023
Job Card No : BES/0000083A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/FE/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 11/10/2023 to 12/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Near coal Dump Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.43
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.57
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	104
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	183

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES

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TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY

(Near Coal Handling Plant)

Unique Lab Report No : LAB/REPORTS/BES/00000085	Report Issue Date : 08/11/2023
Job Card No : BES/0000085A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/FE/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 11/10/2023 to 12/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.49
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.15
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	125
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	181

---END OF REPORT---

Declaration : -

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES

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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Dewatering pump)

Unique Lab Report No : LAB/REPORTS/BES/0000081	Report Issue Date : 08/11/2023
Job Card No : BES/0000081A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/FE/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 10/10/2023 to 11/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.82
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	16.49
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	83
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	131

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

Registered by Jharkhand State Pollution Control Board (JSPCB)

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TEST REPORT

Format No : 7-SF-06

FUGITIVE EMISSION QUALITY

(Near Mine trench)

Unique Lab Report No : LAB/REPORTS/BES/00000082	Report Issue Date : 08/11/2023
Job Card No : BES/0000082A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/FE/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 10/10/2023 to 11/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.63
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.37
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	125
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	189

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O - Hetul, Dist - Ranchi, Jharkhand, Pin - 834005

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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Project View Area)

Unique Lab Report No : LAB/REPORTS/BES/00000084	Report Issue Date : 08/11/2023
Job Card No : BES/0000084A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/FE/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.

Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 11/10/2023 to 12/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Near Project View Point Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.67
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	17.48
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	103
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	120

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Biki Road, Bujra, P.O - Hehat, Dist - Hazaribag, Jharkhand, Pin - 834003

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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 01)

Unique Lab Report No : LAB/REPORTS/BES/00000079	Report Issue Date : 08/11/2023
Job Card No : BES/0000079A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/FE/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.

Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 10/10/2023 to 11/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.16
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.12
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	73
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	116

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Surveshwari Nagar, Itki Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin -834005

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Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)

TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 02)

Unique Lab Report No : LAB/REPORTS/BES/00000080	Report Issue Date : 08/11/2023
Job Card No : BES/0000080A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/FE/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 10/10/2023 to 11/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	08.96
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.65
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	66
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	81

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
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03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

Near Coal Dump Area (Proposed)

Unique Lab Report No : LAB/REPORTS/BES/00000114	Report Issue Date : 07/12/2023
Job Card No : BES/0000114A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/FE/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 08/11/2023 to 09/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Near Coal Dump Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.89
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.12
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	116
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	191

---END OF REPORT---

Declaration :-

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02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



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Technical Manager



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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Coal Handling Plant)

Unique Lab Report No : LAB/REPORTS/BES/00000116	Report Issue Date : 07/12/2023
Job Card No : BES/0000116A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/FE/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 10/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.68
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.49
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	132
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	188

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
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04. All parameters in this report conforms to the specific standard.

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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Dewatering pump)

Unique Lab Report No : LAB/REPORTS/BES/00000112	Report Issue Date : 07/12/2023
Job Card No : BES/0000112A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/FE/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 07/11/2023 to 08/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.73
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.15
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	87
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	142

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
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03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

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Format No : 7.BE-06

TEST REPORT FUGITIVE EMISSION QUALITY (Near Mine trench)

Unique Lab Report No : LAB/REPORTS/BES/00000113	Report Issue Date : 07/12/2023
Job Card No : BES/0000113A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/FE/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 08/11/2023 to 09/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.54
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.82
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	133
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	195

---END OF REPORT---

Declaration :-

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03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

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Technical Manager



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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Project View Area)

Unique Lab Report No : LAB/REPORTS/BES/00000115	Report Issue Date : 07/12/2023
Job Card No : BES/0000115A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/FE/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 08/11/2023 to 09/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Near Project View Point Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.47
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.26
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	115
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	131

—END OF REPORT—

Declaration :-

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03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

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Technical Manager



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TEST REPORT

Format No : 7.BE-05

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard - 01)

Unique Lab Report No : LAB/REPORTS/BES/00000110	Report Issue Date : 07/12/2023
Job Card No : BES/0000110A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/FE/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 07/11/2023 to 08/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Near Soil Dump Yard - 01	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.55
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.23
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	78
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	123

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless authorized.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

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Technical Manager



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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 02)

Unique Lab Report No : LAB/REPORTS/BES/00000111	Report Issue Date : 07/12/2023
Job Card No : BES/0000111A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/FE/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 07/11/2023 to 08/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	09.45
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.17
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	71
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	86

---END OF REPORT---

Declaration :-

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Technical Manager



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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

Near Coal Dump Area (Proposed)

Unique Lab Report No : LAB/REPORTS/BES/00000132	Report Issue Date : 09/01/2024
Job Card No : BES/0000132A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/FE/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.

Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 12/12/2023 to 13/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Near Coal Dump Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.34
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.67
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	109
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	179

---END OF REPORT---

Declaration : -

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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No.: 7-BF-06

FUGITIVE EMISSION QUALITY

(Near Coal Handling Plant)

Unique Lab Report No : LAB/REPORTS/BES/00000134	Report Issue Date : 09/01/2024
Job Card No : BES/0000134A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/FE/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 12/12/2023 to 13/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.72
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.44
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	118
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	176

---END OF REPORT---

Declaration :-

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02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

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Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Near Dewatering pump)

Format No.: 7-BE-06

Unique Lab Report No : LAB/REPORTS/BES/00000130	Report Issue Date : 09/01/2024
Joh Card No : BES/0000130A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/FE/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 11/12/2023 to 12/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.69
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	17.24
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	81.0
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	137

—END OF REPORT—

Declaration :-

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02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.


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Technical Manager



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TEST REPORT

Format No : 7.8F-05

FUGITIVE EMISSION QUALITY

(Near Mine trench)

Unique Lab Report No : LAB/REPORTS/BES/00000131	Report Issue Date : 09/01/2024
Job Card No : BES/0000131A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/FE/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.

Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 11/12/2023 to 12/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.52
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.95
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	120
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	182

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add :- Sarveshwari Nagar, Itki Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand, Pin - 834005

Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466731, 9608708172

Page 1 of 1



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

Registered by Jharkhand State Pollution Control Board (JSPCB)

Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)

TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Project View Area)

Unique Lab Report No : LAB/REPORTS/BES/00000133	Report Issue Date : 09/01/2024
Job Card No : BES/0000133A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/FE/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.

Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 12/12/2023 to 13/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Near Project View Point Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.52
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.39
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	106
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	122

---END OF REPORT---

Declaration : -

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

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Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)

TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 01)

Unique Lab Report No : LAB/REPORTS/BES/00000128	Report Issue Date : 09/01/2024
Job Card No : BES/0000128A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/FE/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.

Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 11/12/2023 to 12/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.81
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.63
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	75.0
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	119

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

Registered by Jharkhand State Pollution Control Board (JSPCB)

Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)

TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 02)

Unique Lab Report No : LAB/REPORTS/BES/00000129	Report Issue Date : 09/01/2024
Job Card No : BES/0000129A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/FE/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.

Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 11/12/2023 to 12/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	08.51
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.67
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	68.0
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	82.0

-----END OF REPORT-----

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.


Tested by




Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES

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TEST REPORT

Format No : 7-BF-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 01)

Unique Lab Report No : LAB/REPORTS/BES/00000162	Report Issue Date : 07/02/2024
Job Card No : BES/0000162A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/FE/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170
Sampling Date : 09/01/2024 to 10/01/2024	Sample Receiving & Registration Date : 13/01/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.87
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.93
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	107
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	133

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add :- Sarveshwari Nagar, Biki Road, Hajra, P.O. - Hethal, Dist - Ranchi, Jharkhand. Pin - 834005

Email Id :- biocratenv@gmail.com Mobile No :- 7369019812, 8340466751, 9608708172



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TEST REPORT

Format No : 7.8F-05

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 02)

Unique Lab Report No : LAB/REPORTS/BES/00000163	Report Issue Date : 07/02/2024
Job Card No : BES/0000163A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/FE/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170
Sampling Date : 09/01/2024 to 10/01/2024	Sample Receiving & Registration Date : 13/01/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	10.16
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.13
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	76.0
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	95.0

-----END OF REPORT-----

Declaration :-

- Reported results are related only to the item tested.
- This report is the property of laboratory & should not be used unless advised.
- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES

(BIOCRAT ENVIRONMENTAL LAB)

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Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)

TEST REPORT

Format No.: 7.8F-05

FUGITIVE EMISSION QUALITY

(Near Dewatering pump)

Unique Lab Report No : LAB/REPORTS/BES/00000164	Report Issue Date : 07/02/2024
Job Card No : BES/0000164A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/FE/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170
Sampling Date : 09/01/2024 to 10/01/2024	Sample Receiving & Registration Date : 13/01/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.45
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.57
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	94.0
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	149

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

Registered by Jharkhand State Pollution Control Board (JSPCB)

Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)

TEST REPORT FUGITIVE EMISSION QUALITY (Near Mine Trench)

Format No : 7.BF-06

Unique Lab Report No : LAB/REPORTS/BES/00000165	Report Issue Date : 07/02/2024
Job Card No : BES/0000165A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/FE/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170
Sampling Date : 09/01/2024 to 10/01/2024	Sample Receiving & Registration Date : 13/01/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.68
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.43
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	131
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	198

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Biki Road, Bajra, P.O. - Hahat, Dist - Ranchi, Jharkhand. Pin - 834005

Email Id :- biocratenv@gmail.com. Mobile No - 7369019812, 8340466751, 9608768172



BIOCRAT ENVIRONMENTAL SERVICES

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Registered by Jharkhand State Pollution Control Board (JSPCB)

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TEST REPORT

Format No : 7.BF-06

FUGITIVE EMISSION QUALITY

Near Coal Dump Area (Proposed)

Unique Lab Report No : LAB/REPORTS/BES/00000166	Report Issue Date : 07/02/2024
Job Card No : BES/0000166A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/FE/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170
Sampling Date : 10/01/2024 to 11/01/2024	Sample Receiving & Registration Date : 13/01/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Near Coal Dump Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	14.83
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.55
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	152
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	287

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory

Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES

(BIOCRAT ENVIRONMENTAL LAB)

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TEST REPORT

FUGITIVE EMISSION QUALITY

(Near Project View Area)

Format No.: 7.BF-06

Unique Lab Report No : LAB/REPORTS/BES/00000167	Report Issue Date : 07/02/2024
Job Card No : BES/0000167A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/FE/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information	
Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170
Sampling Date : 10/01/2024 to 11/01/2024	Sample Receiving & Registration Date : 13/01/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Near Project View Point Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.91
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.54
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	113
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	129

---END OF REPORT---

• **Declaration :-**

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES

(BIOCRAT ENVIRONMENTAL LAB)

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TEST REPORT

Format No : 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Coal Handling Plant)

Unique Lab Report No : LAB/REPORTS/BES/00000168	Report Issue Date : 07/02/2024
Job Card No : BES/0000168A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/FE/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170
Sampling Date : 10/01/2024 to 11/01/2024	Sample Receiving & Registration Date : 13/01/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.45
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.56
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	148
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	233

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory

Technical Manager

Add :- Sarveshwari Nagar, Iki Road, Bajra, Hazaribag, Dist - Ranchi, Jharkhand. Pin -834005

Email Id :- biocrateirv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT

Format No : Z-BF-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 01)

Unique Lab Report No : LAB/REPORTS/BES/00000191	Report Issue Date : 09/03/2024
Job Card No : BES/0000191A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/FE/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0205
Sampling Date : 12/02/2024 to 13/02/2024	Sample Receiving & Registration Date : 16/02/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.57
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.31
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	103
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	129

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.8F-05

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 02)

Unique Lab Report No : LAB/REPORTS/BES/00000192	Report Issue Date : 09/03/2024
Job Card No : BES/0000192A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/FE/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0205
Sampling Date : 12/02/2024 to 13/02/2024	Sample Receiving & Registration Date : 16/02/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Near Soil Dump Yard – 02	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	09.24
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.63
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	71.0
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	93.0

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.BF-05

FUGITIVE EMISSION QUALITY

(Near Dewatering pump)

Unique Lab Report No : LAB/REPORTS/BES/00000193	Report Issue Date : 09/03/2024
Job Card No : BES/0000193A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/FE/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0205
Sampling Date : 12/02/2024 to 13/02/2024	Sample Receiving & Registration Date : 16/02/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.67
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.23
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	90.0
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	145

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7_SF-06

FUGITIVE EMISSION QUALITY

(Near Mine Trench)

Unique Lab Report No : LAB/REPORTS/BES/0000194	Report Issue Date : 09/03/2024
Job Card No : BES/0000194A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/FE/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0205
Sampling Date : 12/02/2024 to 13/02/2024	Sample Receiving & Registration Date : 16/02/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.53
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	19.47
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	128
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	195

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7-SF-06

FUGITIVE EMISSION QUALITY Near Coal Dump Area (Proposed)

Unique Lab Report No : LAB/REPORTS/BES/00000195	Report Issue Date : 09/03/2024
Job Card No : BES/0000195A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/FE/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0205
Sampling Date : 13/02/2024 to 14/02/2024	Sample Receiving & Registration Date : 16/02/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Near Coal Dump Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.68
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	20.35
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	147
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	280

—END OF REPORT—

• Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.3F-05

FUGITIVE EMISSION QUALITY

(Near Project View Area)

Unique Lab Report No : LAB/REPORTS/BES/00000196	Report Issue Date : 09/03/2024
Job Card No : BES/0000196A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/FE/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0205
Sampling Date : 13/02/2024 to 14/02/2024	Sample Receiving & Registration Date : 16/02/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Near Project View Point Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.72
02	Oxides of Nitrogen (NO _x)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.57
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	108
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	126

---END OF REPORT---

Declaration : -

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.BF- 05

FUGITIVE EMISSION QUALITY (Near Coal Handling Plant)

Unique Lab Report No : LAB/REPORTS/BES/00000197	Report Issue Date : 09/03/2024
Job Card No : BES/0000197A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/FE/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0205
Sampling Date : 13/02/2024 to 14/02/2024	Sample Receiving & Registration Date : 16/02/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.29
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	18.76
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	143
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	229

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.SP-05

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard – 01)

Unique Lab Report No : LAB/REPORTS/BES/00000247	Report Issue Date : 06/04/2024
Job Card No : BES/0000254A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/FE/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0245
Sampling Date : 11/03/2024 to 12/03/2024	Sample Receiving & Registration Date : 15/03/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Near Soil Dump Yard – 01	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.94
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.51
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	110
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	136

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Form No.: 7.8F-06

FUGITIVE EMISSION QUALITY

(Near Soil Dump Yard - 02)

Unique Lab Report No : LAB/REPORTS/BES/00000248	Report Issue Date : 06/04/2024
Job Card No : BES/0000255A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/FE/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0245
Sampling Date : 11/03/2024 to 12/03/2024	Sample Receiving & Registration Date : 15/03/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Near Soil Dump Yard - 02	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	11.00
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	22.54
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	82.00
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	104

---END OF REPORT---

Declaration :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No.: 7-BF-06

FUGITIVE EMISSION QUALITY

(Near Dewatering pump)

Unique Lab Report No : LAB/REPORTS/BES/00000249	Report Issue Date : 06/04/2024
Job Card No : BES/0000256A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/FE/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0245
Sampling Date : 11/03/2024 to 12/03/2024	Sample Receiving & Registration Date : 15/03/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Near Dewatering Pump	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.44
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.63
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	102
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	154

—END OF REPORT—

Declaration :-

01. Reported results are related only to the item tested.
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04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT FUGITIVE EMISSION QUALITY (Near Mine Trench)

Format No : J.SP-06

Unique Lab Report No : LAB/REPORTS/BES/00000250	Report Issue Date : 06/04/2024
Job Card No : BES/0000257A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/FE/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0245
Sampling Date : 11/03/2024 to 12/03/2024	Sample Receiving & Registration Date : 15/03/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Near Mine Trench	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.70
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	22.57
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	137
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	203

—END OF REPORT—

Declaration : -

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Tested by



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Technical Manager



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TEST REPORT

Format No : 7.8F-05

FUGITIVE EMISSION QUALITY Near Coal Dump Area (Proposed)

Unique Lab Report No : LAB/REPORTS/BES/00000251	Report Issue Date : 06/04/2024
Job Card No : BES/0000258A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/FE/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0245
Sampling Date : 12/03/2024 to 13/03/2024	Sample Receiving & Registration Date : 15/03/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Near Coal Dump Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	14.21
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	23.00
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	155
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	291

---END OF REPORT---

Declaration :-

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Technical Manager



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TEST REPORT

Format No : 7.BF-05

FUGITIVE EMISSION QUALITY

(Near Project View Area)

Unique Lab Report No : LAB/REPORTS/BES/00000252	Report Issue Date : 06/04/2024
Job Card No : BES/0000259A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/FE/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0245
Sampling Date : 12/03/2024 to 13/03/2024	Sample Receiving & Registration Date : 15/03/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Near Project View Point Area	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	12.86
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.49
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	116
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	131

—END OF REPORT—

Declaration :-

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Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.BF- 06

FUGITIVE EMISSION QUALITY

(Near Coal Handling Plant)

Unique Lab Report No : LAB/REPORTS/BES/00000253	Report Issue Date : 06/04/2024
Job Card No : BES/0000260A	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/FE/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Fugitive Emission
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Fugitive Emission	Type of Sample: Dust Generating Sources
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0245
Sampling Date : 12/03/2024 to 13/03/2024	Sample Receiving & Registration Date : 15/03/2024
Sample Condition : OK, Preserved & Sealed	Emission Due to : Surrounding Activities of Mining

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Near Coal Handling Plant	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Air Quality Standard [Notification GSR 742(E), Dated 25/09/2000]	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	08 Hours	IS 5182 Part-02	120	13.61
02	Oxides of Nitrogen (NO ₂)	µg/m ³	08 Hours	IS 5182 Part-06	120	21.54
03	Respirable Particulate Matter (size less than 10 µm)	µg/m ³	08 Hours	IS 5182 Part 23	250	152
04	Suspended Particulate Matter (SPM)	µg/m ³	08 Hours	IS 5182 Part 04	500	235

—END OF REPORT—

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Annexure III

TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/022	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/022	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A		
Sampling Date : 12/04/2023 to 13/04/2023	Sample Receiving & Registration Date : 14/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 34 °C	Avg. R.Humidity : 51 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Jordag Village – Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.09
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	19.99
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	68.76
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.84

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/045	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/045	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
--

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/002A		
Sampling Date : 28/04/2023 to 29/04/2023	Sample Receiving & Registration Date : 29/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 35 °C	Avg. R.Humidity : 49 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/04/2023	Test End Date : 06/05/2023
Sampling Location : Jordag Village - Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.17
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.19
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part-23	100	69.45
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	30.14

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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TEST REPORT AMBIENT AIR QUALITY (Kerendari Village)

Format No: Z.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/024	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/024	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerendari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A		
Sampling Date : 12/04/2023 to 13/04/2023	Sample Receiving & Registration Date : 14/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 34 °C	Avg. R.Humidity : 51 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Kerendari Village – Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.19
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	34.37
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	75.21
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.19

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin - 834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Kerandari Village)

Format No: 7-BF-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/047	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/047	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/002A		
Sampling Date : 28/04/2023 to 29/04/2023	Sample Receiving & Registration Date : 29/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 35 °C	Avg. R.Humidity : 49 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/04/2023	Test End Date : 06/05/2023
Sampling Location : Kerandari Village - Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.37
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	34.71
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	75.96
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.50

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/021	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/021	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A		
Sampling Date : 12/04/2023 to 13/04/2023	Sample Receiving & Registration Date : 14/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 34 °C	Avg. R.Humidity : 51 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.82
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.99
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	66.65
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.64

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration: -**

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- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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Registered by Jharkhand State Pollution Control Board (JSPCB)
Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)



TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

Format No: 7.87-04

SECOND FORTNIGHT

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/044	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/044	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/I3	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/002A
Sampling Date : 28/04/2023 to 29/04/2023	Sample Receiving & Registration Date : 29/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Avg. Temp: 35 °C
	Avg. R.Humidity : 49 %
	Barometric Pressure: 705 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/04/2023	Test End Date : 06/05/2023
Sampling Location : Manatu Village - Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.89
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.15
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	67.32
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.93

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

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Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)



TEST REPORT **AMBIENT AIR QUALITY** (SISF Camp)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/019	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/019	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A		
Sampling Date : 11/04/2023 to 12/04/2023	Sample Receiving & Registration Date : 14/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 34 °C	Avg. R.Humidity : 51 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : SISF Camp – Core Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	15.03
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	28.58
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	64.77
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.83

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29015/20/90/PCI-L of 18th November 2009)
- Declaration:-**
 - Reported results are related only to the item tested.
 - This report is the property of laboratory & should not be used unless advised.
 - Items tested are as per the standard requirements.
 - All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Bajra, P.O - Hetai, Dist - Ranchi, Jharkhand. Pin -834005
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TEST REPORT **AMBIENT AIR QUALITY** (SISF Camp)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/042	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/042	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES-KRD/002A	
Sampling Date : 27/04/2023 to 28/04/2023		Sample Receiving & Registration Date : 29/04/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Avg. Temp: 35 °C	Avg. R.Humidity : 49 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/04/2023	Test End Date : 06/05/2023
Sampling Location : SISF Camp – Core Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	15.29
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	28.86
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	65.41
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.11

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration:-

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TEST REPORT AMBIENT AIR QUALITY (Tarhesa Village)

Format No: 7-BF-04

FIRST FORTNIGHT

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/020	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/020	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A
Sampling Date : 11/04/2023 to 12/04/2023	Sample Receiving & Registration Date : 14/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Avg. Temp: 34 °C
	Avg. R.Humidity : 51 %
	Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.12
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.06
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	69.42
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	36.37

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration: -**

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TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

Format No: 7.8F-04

SECOND FORTNIGHT

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/043	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/043	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/002A
Sampling Date : 27/04/2023 to 28/04/2023	Sample Receiving & Registration Date : 29/04/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Avg. Temp: 35 °C
	Avg. R.Humidity : 49 %
	Barometric Pressure: 705 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/04/2023	Test End Date : 06/05/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.19
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.23
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	70.11
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	36.01

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/017	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/017	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A		
Sampling Date : 11/04/2023 to 12/04/2023	Sample Receiving & Registration Date : 14/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 34 °C	Avg. R.Humidity : 51 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.27
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	21.11
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	51.71
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	24.87

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Baseria Village)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/040	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/040	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
--

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/002A		
Sampling Date : 27/04/2023 to 28/04/2023	Sample Receiving & Registration Date : 29/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 35 °C	Avg. R.Humidity : 49 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/04/2023	Test End Date : 06/05/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.35
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	21.32
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	52.23
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.12

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)
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TEST REPORT **AMBIENT AIR QUALITY** (BGR Workshop)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/018	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/018	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A		
Sampling Date : 11/04/2023 to 12/04/2023	Sample Receiving & Registration Date : 14/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 34 °C	Avg. R.Humidity : 51 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : BGR Workshop – Core Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	11.26
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	25.68
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	72.83
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	32.58

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
- Declaration: -**
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Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (BGR Workshop)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/041	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/041	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesch Kumar & Team	Sampling Plan Reference : BES-KRD/002A		
Sampling Date : 27/04/2023 to 28/04/2023	Sample Receiving & Registration Date : 29/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 35 °C	Avg. R.Humidity : 49 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/04/2023	Test End Date : 06/05/2023
Sampling Location : BGR Workshop – Core Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	11.37
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	25.93
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	73.56
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	32.91

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PO-I, of 18th November 2009)

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Tested by



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Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Hewai Village)

Format No: 7-SF-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB-BES/BGR/KRD/23-24/023	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/023	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :-	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
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General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/001A		
Sampling Date : 12/04/2023 to 13/04/2023	Sample Receiving & Registration Date : 14/04/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg. Temp: 34 °C	Avg. R.Humidity : 51 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/04/2023	Test End Date : 25/04/2023
Sampling Location : Hewai Village – Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.10
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.35
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	56.64
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.39

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

Declaration:-

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Tested by



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Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Hewai Village)

Format No: 7.BF-04

SECOND FORTNIGHT

Unique Lab Report No : LAB-BES/BGR/KRD/23-24/046	Report Issue Date : 10/05/2023
Job Card No : BES/BGR/KRD/046	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/APR/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES-KRD/002A	
Sampling Date : 28/04/2023 to 29/04/2023		Sample Receiving & Registration Date : 29/04/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Avg. Temp: 35 °C	Avg. R.Humidity : 49 %	Barometric Pressure: 705 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/04/2023	Test End Date : 06/05/2023
Sampling Location : Hewai Village - Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.16
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.50
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	57.21
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.64

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory

Technical Manager



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Format No: 7.8F-04

TEST REPORT AMBIENT AIR QUALITY (BGR Work Shop)

FIRST FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/065	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/065	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A		
Sampling Date : 10/05/2023 to 11/05/2023	Sample Receiving & Registration Date : 13/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 34 °C	R.Humidity : 61 %	Barometric Pressure: 707 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.89
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	25.41
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	73.98
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	32.64

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PC-I of 18th November 2009)
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Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (BGR Work Shop)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/088	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/088	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :-	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
-------------------------------------	---

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/004A		
Sampling Date : 26/05/2023 to 27/05/2023	Sample Receiving & Registration Date : 29/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp: 33 °C	R.Humidity : 54 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/05/2023	Test End Date : 08/06/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	11.05
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	25.69
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	74.16
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	32.93

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Format No: 7.BF-04

TEST REPORT **AMBIENT AIR QUALITY** (Hewai Village)

FIRST FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/070	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/070	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A		
Sampling Date : 11/05/2023 to 12/05/2023	Sample Receiving & Registration Date : 13/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 35 °C	R.Humidity : 59 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Hewai Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.81
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.06
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	57.29
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.17

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-I of 18th November 2009)
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Tested by 




Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Bajna, P.O – Hetaul, Dist – Ranchi, Jharkhand. Pin -834005
Email Id :- biocrategy@gmail.com, Mobile No – 7369019812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Hewai Village)

Format No: 7.BE-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/093	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/093	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: -	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
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General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/004A		
Sampling Date : 27/05/2023 to 28/05/2023	Sample Receiving & Registration Date : 29/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 35 °C	R.Humidity : 56 %	Barometric Pressure: 707 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/05/2023	Test End Date : 08/06/2023
Sampling Location : Hewai Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.02
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.31
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	57.68
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.44

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/069	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/069	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A		
Sampling Date : 11/05/2023 to 12/05/2023	Sample Receiving & Registration Date : 13/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 35 °C	R.Humidity : 59 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Jordag Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.69
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	19.85
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	69.14
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.53

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCS-L of 18th November 2009)

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Tested by



Authorized Signatory
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Add: - Sarveshwari Nagar, Iki Road, Bajra, P.O - Huhul, Dist - Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com Mobile No - 73660119812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

Format No: 7-BF-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/092	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/092	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: -	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
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General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/004A		
Sampling Date : 27/05/2023 to 28/05/2023	Sample Receiving & Registration Date : 29/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 35 °C	R.Humidity : 56 %	Barometric Pressure: 707 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/05/2023	Test End Date : 08/06/2023
Sampling Location : Jordag Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.98
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.17
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	69.46
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.89

---END OF REPORT---

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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

FIRST FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/071	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/071	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A		
Sampling Date : 11/05/2023 to 12/05/2023	Sample Receiving & Registration Date : 13/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 35 °C	R.Humidity : 59 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.14
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	34.93
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	76.35
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.21

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/094	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/094	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/004A		
Sampling Date : 27/05/2023 to 28/05/2023	Sample Receiving & Registration Date : 29/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 35 °C	R.Humidity : 56 %	Barometric Pressure: 707 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/05/2023	Test End Date : 08/06/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.29
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	35.13
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	76.69
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.54

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PG-I of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Manatu Village)

Format No: 7.BF-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/068	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/068	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: -	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
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General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES-KRD/003A	
Sampling Date : 11/05/2023 to 12/05/2023		Sample Receiving & Registration Date : 13/05/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Avg.Temp : 35 °C	R.Humidity : 59 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Manatu village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.18
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.89
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	67.92
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.46

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards) as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

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Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Manatu Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/091	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/091	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/004A		
Sampling Date : 27/05/2023 to 28/05/2023	Sample Receiving & Registration Date : 29/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp: 35 °C	R.Humidity : 56 %	Barometric Pressure: 707 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/05/2023	Test End Date : 08/06/2023
Sampling Location : Manatu village – Buffer Zone	
Predominant Wind Direction : From NNW towards SSE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.51
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.15
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	68.23
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.79

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration:-

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Tested by



Authorized Signatory
Technical Manager



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Form No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (SISF Camp)

FIRST FORTNIGHT

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/066	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/066	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES-KRD/003A	
Sampling Date : 10/05/2023 to 11/05/2023		Sample Receiving & Registration Date : 13/05/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Avg.Temp : 34 °C	R.Humidity : 61 %	Barometric Pressure: 707 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : SISF CAMP – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	14.97
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	28.42
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	65.36
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.19

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (SISF Camp)

Format No: 7.8F-04

SECOND FORTNIGHT

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/089	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/089	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/004A
Sampling Date : 26/05/2023 to 27/05/2023	Sample Receiving & Registration Date : 29/05/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Avg.Temp: 33 °C R.Humidity : 54 % Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/05/2023	Test End Date : 08/06/2023
Sampling Location : SISF CAMP – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	15.14
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	28.71
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	65.89
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.64

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

Format No: JRE-04

FIRST FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/067	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/067	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Keranduri Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A		
Sampling Date : 10/05/2023 to 11/05/2023	Sample Receiving & Registration Date : 13/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 34 °C	R.Humidity : 61 %	Barometric Pressure: 707 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.63
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.57
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	70.45
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	36.14

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PC-I of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

Format No: 7.BF-04

SECOND FORTNIGHT

Unique Lab Report No : LAB- BES/BGR/KRD/23-24/090	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/090	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES-KRD/004A	
Sampling Date : 26/05/2023 to 27/05/2023		Sample Receiving & Registration Date : 29/05/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Avg.Temp: 33 °C	R.Humidity : 54 %	Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/05/2023	Test End Date : 08/06/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.95
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.86
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	70.73
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	36.58

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PG-L of 18th November 2009)

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Format No: 7.8F-04

TEST REPORT **AMBIENT AIR QUALITY** (Baseria Village)

FIRST FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/064	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/064	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/003A		
Sampling Date : 10/05/2023 to 11/05/2023	Sample Receiving & Registration Date : 13/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp : 34 °C	R.Humidity : 61 %	Barometric Pressure: 707 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/05/2023	Test End Date : 23/05/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	8.23
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.67
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	52.33
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	24.97

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-I of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager

Add:- Sarveshwari Nagar, Itki Road, Bajra, P.O – Hetal, Dist – Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com, Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Baseria Village)

Format No: 7,8F-04

SECOND FORTNIGHT	
Unique Lab Report No : LAB- BES/BGR/KRD/23-24/087	Report Issue Date : 10/06/2023
Job Card No : BES/BGR/KRD/087	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAY/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air

Client Name & Address :-	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
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General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES-KRD/004A		
Sampling Date : 26/05/2023 to 27/05/2023	Sample Receiving & Registration Date : 29/05/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Avg.Temp: 33 °C	R.Humidity : 54 %	Barometric Pressure: 706mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/05/2023	Test End Date : 08/06/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.45
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.97
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	52.61
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.13

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-I of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No. 7.8E-04

AMBIENT AIR QUALITY

(Baseria Village)

SECOND FORTNIGHT

Unique Lab Report No : TC812023000000011F	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000011	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesch Kumar & Team		Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01	
Sampling Date : 26/06/2023 to 27/06/2023		Sample Receiving & Registration Date : 28/06/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 28 °C	R.Humidity : 67 %	Barometric Pressure: 705 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	8.53
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	21.76
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	53.31
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.64

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29015/20/90/PCI-L of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager

**TEST REPORT**

Format No : 7.8F-04

AMBIENT AIR QUALITY(BGR Camp)**SECOND FORTNIGHT**

Unique Lab Report No : TC812023000000012F	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000012	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01	
Sampling Date : 26/06/2023 to 27/06/2023		Sample Receiving & Registration Date : 28/06/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 28 °C	R.Humidity : 67 %	Barometric Pressure: 705 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : BGR Camp – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	11.61
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	26.47
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	75.08
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	33.59

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-I of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (SISF Camp)

Format No : 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC812023000000013F	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000013	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01		
Sampling Date : 26/06/2023 to 27/06/2023	Sample Receiving & Registration Date : 28/06/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 28 °C	R.Humidity: 67 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : SISF Camp – Core Zone.	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	15.61
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	29.46
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	66.77
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.69

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Tested by



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**TEST REPORT**

Format No : 7.8F-04

AMBIENT AIR QUALITY

(Tarhesa Village)

SECOND FORTNIGHT

Unique Lab Report No : TC812023000000014F	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000014	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01	
Sampling Date : 26/06/2023 to 27/06/2023		Sample Receiving & Registration Date : 28/06/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 28 °C	R.Humidity: 67 %	Barometric Pressure: 705 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	7.34
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.59
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	71.57
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	37.49

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration :-**

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Tested by

Authorized Signatory
Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Manatu Village)

Format No : 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC812023000000015F	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000015	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01	
Sampling Date : 27/06/2023 to 28/06/2023		Sample Receiving & Registration Date : 28/06/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity: 73 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	7.03
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.48
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	68.71
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.53

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager



TEST REPORT
AMBIENT AIR QUALITY
 (Jordag Village)

Format No : 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC812023000000016F	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000016	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
 Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01	
Sampling Date : 27/06/2023 to 28/06/2023		Sample Receiving & Registration Date : 28/06/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity: 73 %	Barometric Pressure: 705 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Jordag Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	8.35
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.61
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	70.89
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	30.76

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PO-I of 18th November 2009)

- Declaration :-**

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Tested by



Authorized Signatory
 Technical Manager



TEST REPORT
AMBIENT AIR QUALITY
 (Hewai Village)

Format No : 7.BF-04

SECOND FORTNIGHT

Unique Lab Report No : TC812023000000017F	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000017	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
 Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01	
Sampling Date : 27/06/2023 to 28/06/2023		Sample Receiving & Registration Date : 28/06/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity: 73 %	Barometric Pressure: 705 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Hewai Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.29
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.83
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	58.39
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.18

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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Authorized Signatory
 Technical Manager

**TEST REPORT**

Format No : 7.8F-04

AMBIENT AIR QUALITY

(Kerandari Village)

SECOND FORTNIGHT

Unique Lab Report No : TC812023000000018F	Report Issue Date : 26/07/2023
Job Card No : BGR/KRD/0000018	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUN/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01	
Sampling Date : 27/06/2023 to 28/06/2023		Sample Receiving & Registration Date : 28/06/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity: 73 %	Barometric Pressure: 705 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 28/06/2023	Test End Date : 07/07/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.76
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	35.43
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	77.54
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	32.15

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29015/20/90/PCH-L of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager



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Format No : 7.8F-04

TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000063F	Report Issue Date : 05/08/2023
Job Card No : BES/0000063	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003		
Sampling Date : 11/07/2023 to 12/07/2023	Sample Receiving & Registration Date : 14/07/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 26 °C	R.Humidity: 72 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.59
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	10.4
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	47.38
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	20.11

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B-29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TC - 12039

TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

Format No : 7.3F-04

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000091F	Report Issue Date : 05/08/2023
Job Card No : BES/0000091	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0005
Sampling Date : 28/07/2023 to 29/07/2023	Sample Receiving & Registration Date : 29/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity: 64 %
	Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/07/2023	Test End Date : 04/08/2023
Sampling Location : Manatu Village - Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.56
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	8.62
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	42.02
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.13

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iti Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin - 834005

Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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Format No.: 7.8F-04

TEST REPORT AMBIENT AIR QUALITY (Pagar Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000065F	Report Issue Date : 05/08/2023
Job Card No : BES/0000065	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0003	
Sampling Date : 11/07/2023 to 12/07/2023		Sample Receiving & Registration Date : 14/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity: 72 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Pagar Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	< 5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	11.42
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	47.85
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	20.84

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add:- Sarveshwari Nagar, Bkl Road, Bajra, P.O. – Dehri, Jharkhand, Pin -834005
Email Id :- biocrateny@gmail.com Mobile No – 7369019812, 8340466751, 9608708172



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TC - 12099

TEST REPORT **AMBIENT AIR QUALITY** (Pagar Village)

Format No : 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000093F	Report Issue Date : 05/08/2023
Job Card No : BES/0000093	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0005	
Sampling Date : 28/07/2023 to 29/07/2023		Sample Receiving & Registration Date : 29/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity: 64 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/07/2023	Test End Date : 04/08/2023
Sampling Location : Pagar Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	< 5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	8.36
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	41.07
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	13.99

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager



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TC-12839

TEST REPORT **AMBIENT AIR QUALITY** (Pahra Village)

Format No.: 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000064F	Report Issue Date : 05/08/2023
Job Card No : BES/0000064	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0003	
Sampling Date : 11/07/2023 to 12/07/2023		Sample Receiving & Registration Date : 14/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity: 72 %	Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	9.21
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	43.04
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	18.10

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration :-

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Pratiksha
Tested by



[Signature]
Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

Format No : 7-RF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000092F	Report Issue Date : 05/08/2023
Job Card No : BES/0000092	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0005	
Sampling Date : 28/07/2023 to 29/07/2023		Sample Receiving & Registration Date : 29/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity: 64 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/07/2023	Test End Date : 04/08/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	5.92
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	7.19
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	45.88
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.53

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand, Pin -834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TC - 12038

TEST REPORT AMBIENT AIR QUALITY (Tarhesa Village)

Format No : 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000062F	Report Issue Date : 05/08/2023
Job Card No : BES/0000062	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 10/07/2023 to 11/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 69 %
	Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	7.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.42
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	64.1
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.76

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PG-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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Email Id :- biocraterv@gmail.com Mobile No :- 7369019812, 8340466751, 9608708172



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TEST REPORT

Format No.: 7,8F-04

AMBIENT AIR QUALITY

(Tarhesa Village)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000090F	Report Issue Date : 05/08/2023
Job Card No : BES/0000090	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/SAMPLING/PLAN/AAQ/ 01	
Sampling Date : 27/07/2023 to 28/07/2023		Sample Receiving & Registration Date : 29/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 70 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/07/2023	Test End Date : 04/08/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.93
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.36
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	59.63
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.81

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Pratim Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

Format No: 7.BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000059F	Report Issue Date : 05/08/2023
Job Card No : BES/0000059	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0003	
Sampling Date : 10/07/2023 to 11/07/2023		Sample Receiving & Registration Date : 14/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 69 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	7.92
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	19.24
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	50.34
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	22.88

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



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Authorized Signatory
Technical Manager



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TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

(Baseria Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000087F	Report Issue Date : 05/08/2023
Job Card No : BES/0000087	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0005	
Sampling Date : 27/07/2023 to 28/07/2023		Sample Receiving & Registration Date : 29/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 70 %	Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/07/2023	Test End Date : 04/08/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	7.93
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.91
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	47.35
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.76

—END OF REPORT—

• **Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Pritham Kumar
Tested by



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Authorized Signatory
Technical Manager

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Email Id :- biocratenv@gmail.com, Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Bengwari Nadi Tola)

Format No: 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000061F	Report Issue Date : 05/08/2023
Job Card No : BES/0000061	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0003
Sampling Date : 10/07/2023 to 11/07/2023	Sample Receiving & Registration Date : 14/07/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 69 %
	Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	5.91
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	12.56
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	59.97
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	24.97

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager



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TEST REPORT

Format No : 7.8F-04

AMBIENT AIR QUALITY

(Bengwari Nadi Tola)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000089F	Report Issue Date : 05/08/2023
Job Card No : BES/0000089	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0005		
Sampling Date : 27/07/2023 to 28/07/2023	Sample Receiving & Registration Date : 29/07/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 26 °C	R.Humidity : 70 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/07/2023	Test End Date : 04/08/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	6.52
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	9.27
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	56.58
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.00

---END OF REPORT---

Norms : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (BGR Camp)

Form No : 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000060F	Report Issue Date : 05/08/2023
Job Card No : BES/0000060	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0003	
Sampling Date : 10/07/2023 to 11/07/2023		Sample Receiving & Registration Date : 14/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 69 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : BGR Camp – Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	9.83
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	22.38
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	67.96
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.3

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/50/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



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TEST REPORT

Format No : 7.BF-D4

AMBIENT AIR QUALITY (BGR Camp)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000088F	Report Issue Date : 05/08/2023
Job Card No : BES/0000088	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0005		
Sampling Date : 27/07/2023 to 28/07/2023	Sample Receiving & Registration Date : 29/07/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 26 °C	R.Humidity : 70 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/07/2023	Test End Date : 04/08/2023
Sampling Location : BGR Camp - Core Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	8.69
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.51
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	58.55
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.17

---END OF REPORT---

• **Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-I of 18th November 2009)

• **Declaration** :-

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add: - Sarvoshwari Nagar, Iki Road, Bajra, P.O - Helul, Disi - Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com, Mobile No - 7169019812, 8340466751, 9608708172



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TC - 12039

TEST REPORT **AMBIENT AIR QUALITY** (Kerandari Village)

Format No.: 7-BF-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000066F	Report Issue Date : 05/08/2023
Job Card No : BES/0000066	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0003	
Sampling Date : 11/07/2023 to 12/07/2023		Sample Receiving & Registration Date : 14/07/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity: 72 %	Barometric Pressure: 706 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/07/2023	Test End Date : 27/07/2023
Sampling Location : Kerandari Village - Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	17.84
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	33.52
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	70.25
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	30.71

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.25016/20/90/PCI-L of 18th November 2009)

Declaration :-

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- This report is the property of laboratory & should not be used unless advised.
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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Jiki Road, Bujra, P.O - Helhal, Dist - Ranchi, Jharkhand. Pin -834005
Email Id :- biocrateny@gmail.com Mobile No - 9369019812, 8340466751, 9608708172



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Format No : 7-RF-04

TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000094F	Report Issue Date : 05/08/2023
Job Card No : BES/0000094	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JUL/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0005		
Sampling Date : 28/07/2023 to 29/07/2023	Sample Receiving & Registration Date : 29/07/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity: 64 %	Barometric Pressure: 706 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/07/2023	Test End Date : 04/08/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	15.92
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	32.43
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	62.61
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.21

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration :-

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- All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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TC - 12000

TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000113F	Report Issue Date : 09/09/2023
Job Card No : BES/00000117	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006		
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 28 °C	R.Humidity : 71 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.03
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.52
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	55.82
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.65

---END OF REPORT---

• **Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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04. All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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TEST REPORT **AMBIENT AIR QUALITY** (Bengwari Nadi Tola)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000202F	Report Issue Date : 09/09/2023
Job Card No : BES/00000230	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0018		
Sampling Date : 28/08/2023 to 29/08/2023	Sample Receiving & Registration Date : 30/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 29 °C	R.Humidity : 70 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/08/2023	Test End Date : 05/09/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.00
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.48
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	56.21
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.96

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PG-L of 18th November 2009)

Declaration: -

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Pritam K.
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand, Pin -834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9668708172



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TC - 1288

TEST REPORT AMBIENT AIR QUALITY (BGR Work Shop)

Format No: 7.BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000112F	Report Issue Date : 09/09/2023
Job Card No : BES/0000116	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006		
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 28 °C	R.Humidity : 71 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.88
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	19.78
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	57.48
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	24.78

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No S.29016/20/90/PCI-L of 18th November 2009)

Declaration:-

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- All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Bajra, P.O – Hehal, Dist – Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenvi@gmail.com. Mobile No – 7369019812, 8340466751, 9608708172



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TEST REPORT AMBIENT AIR QUALITY (BGR Work Shop)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000201F	Report Issue Date : 09/09/2023
Job Card No : BES/0000229	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
--

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0018		
Sampling Date : 28/08/2023 to 29/08/2023	Sample Receiving & Registration Date : 30/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 29 °C	R.Humidity : 70 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/08/2023	Test End Date : 05/09/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.23
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.61
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	57.62
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	24.98

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/50/PC-I of 18th November 2009)
- Declaration :**
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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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Email id :- biocratenv@gmail.com. Mobile No - 7369019812, 8340466751, 9608708172



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Format No: 7,8F-04

TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000117F	Report Issue Date : 09/09/2023
Job Card No : BES/0000121	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006		
Sampling Date : 13/08/2023 to 14/08/2023	Sample Receiving & Registration Date : 16/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity : 70 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Jordag School – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.48
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	40.12
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	13.56

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

Declaration:-

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Pritam Kumar
Tested by



Arshad
Authorized Signatory
Technical Manager

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TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000206F	Report Issue Date : 09/09/2023
Job Card No : BES/0000234	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
--

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nitesh Kumar & Team	Sampling Plan Reference : BES/0018		
Sampling Date : 29/08/2023 to 30/08/2023	Sample Receiving & Registration Date : 30/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 28 °C	R.Humidity : 69 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/08/2023	Test End Date : 05/09/2023
Sampling Location : Jordag School – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.14
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	40.62
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	13.88

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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TC - 12038

TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

Format No: 7-SF-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000118F	Report Issue Date : 09/09/2023
Job Card No : BES/0000122	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0006	
Sampling Date : 13/08/2023 to 14/08/2023		Sample Receiving & Registration Date : 16/08/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 70 %	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	15.44
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	31.69
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	61.79
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.55

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-I of 18th November 2009)

Declaration:

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- All parameters in this report conforms to the specific standard.

Pritam K.
Tested by



[Signature]

Authorized Signatory
Technical Manager

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Email Id :- biocratenv@gmail.com Mobile No – 7369019812, 8340466751, 9608708172



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TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000207F	Report Issue Date : 09/09/2023
Job Card No : BES/0000235	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0018		
Sampling Date : 29/08/2023 to 30/08/2023	Sample Receiving & Registration Date : 30/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 28 °C	R.Humidity : 69 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/08/2023	Test End Date : 05/09/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	15.86
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	32.45
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	62.05
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.98

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Pritam K.
Tested by



[Signature]
Authorized Signatory
Technical Manager

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TC - 13880

TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

Format No: 7.BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000115F	Report Issue Date : 09/09/2023
Job Card No : BES/0000119	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006		
Sampling Date : 13/08/2023 to 14/08/2023	Sample Receiving & Registration Date : 16/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity : 70 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Manatu village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.84
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.31
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	41.28
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	15.36

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

Format No: 7.8F-04

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000204F	Report Issue Date : 09/09/2023
Job Card No : BES/0000232	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0018	
Sampling Date : 29/08/2023 to 30/08/2023		Sample Receiving & Registration Date : 30/08/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 28 °C	R.Humidity : 69 %	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/08/2023	Test End Date : 05/09/2023
Sampling Location : Manatu village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.02
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.53
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	41.82
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	15.78

---END OF REPORT---

- Norms:** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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Email Id :- biocratenv@gmail.com Mobile No - 7369819812, 8340466751, 9608708172



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TC - 12038

TEST REPORT **AMBIENT AIR QUALITY** (Pahra Village)

Format No: 7.BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000116F	Report Issue Date : 09/09/2023
Job Card No : BES/0000120	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0006	
Sampling Date : 13/08/2023 to 14/08/2023		Sample Receiving & Registration Date : 16/08/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 70 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.39
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.80
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	44.78
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.82

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Pritam K.
Tested by



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Authorized Signatory
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TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY (Pahra Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000205F	Report Issue Date : 09/09/2023
Job Card No : BES/0000233	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0018
Sampling Date : 29/08/2023 to 30/08/2023	Sample Receiving & Registration Date : 30/08/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 28 °C
	R.Humidity : 69 %
	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/08/2023	Test End Date : 05/09/2023
Sampling Location : Pahra Village - Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.74
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.23
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	45.22
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.25

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

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Pritam K.



Prakash Kumar
Authorized Signatory

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Email Id :- biocratenv@gmail.com, Mobile No - 7349019812, 8340466751, 9608708172



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TC - 12000

TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

Format No: 7.SP-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000114F	Report Issue Date : 09/09/2023
Job Card No : BES/0000118	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006		
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 28 °C	R.Humidity : 71 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.05
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	12.34
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	58.75
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.12

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-I of 18th November 2009)
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Pritam Kumar
Tested by



Authorized Signatory
Authorized Signatory
Technical Manager

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TEST REPORT AMBIENT AIR QUALITY (Tarhesa Village)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000203F	Report Issue Date : 09/09/2023
Job Card No : BES/0000231	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesb Kumar & Team	Sampling Plan Reference : BES/0018		
Sampling Date : 28/08/2023 to 29/08/2023	Sample Receiving & Registration Date : 30/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 29 °C	R.Humidity : 70 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/08/2023	Test End Date : 05/09/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.98
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.83
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	59.05
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.51

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)
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 - All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

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TEST REPORT **AMBIENT AIR QUALITY** (Baseria Village)

Format No: 7.BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000111F	Report Issue Date : 09/09/2023
Job Card No : BES/0000115	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0006		
Sampling Date : 12/08/2023 to 13/08/2023	Sample Receiving & Registration Date : 16/08/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 28 °C	R.Humidity : 71 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/08/2023	Test End Date : 28/08/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.03
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.18
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	46.35
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.85

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
- Declaration:** -
 01. Reported results are related only to the item tested.
 02. This report is the property of laboratory & should not be used unless advised.
 03. Items tested are as per the standard requirements.
 04. All parameters in this report conforms to the specific standard.

Pritam Kumar
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O - Belal, Dist - Ranchi, Jharkhand. Pin - 834605
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TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

Format No: 7.8F-04

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000200F	Report Issue Date : 09/09/2023
Job Card No : BES/0000228	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/AUG/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0018	
Sampling Date : 28/08/2023 to 29/08/2023		Sample Receiving & Registration Date : 30/08/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 29 °C	R.Humidity : 70 %	Barometric Pressure: 709mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/08/2023	Test End Date : 05/09/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.58
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.60
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	46.96
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.56

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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- All parameters in this report conforms to the specific standard.

Pratim K.
Tested by



[Signature]
Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Hajra, P.O - Hehal, Ranchi, Jharkhand. Pin - 834005
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TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

Format No: 7.SF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000261F	Report Issue Date : 10/10/2023
Job Card No : BES/0000329	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0032	
Sampling Date : 12/09/2023 to 13/09/2023		Sample Receiving & Registration Date : 15/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 28 °C	R.Humidity : 71 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Manatu village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.65
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.18
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	45.35
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.61

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

Declaration: -

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- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory

Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand, Pin - 834005
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Format No: 7.3F-04

TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000353F	Report Issue Date : 10/10/2023
Job Card No : BES/0000453	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0047	
Sampling Date : 28/09/2023 to 29/09/2023		Sample Receiving & Registration Date : 29/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 68 %	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/09/2023	Test End Date : 04/10/2023
Sampling Location : Manatu village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.36
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.83
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	44.63
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.15

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
- Declaration: -**
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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Rajra, P.O - Hehal, Dist - Ranchi, Jharkhand, Pin -834005
Email Id :- biocratenv@gmail.com, Mobile No - 7369019812, 8340466751, 9608708172



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Format No: 7.8F-04

TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000262F	Report Issue Date : 10/10/2023
Job Card No : BES/0000330	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0032	
Sampling Date : 12/09/2023 to 13/09/2023		Sample Receiving & Registration Date : 15/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 28 °C	R.Humidity : 71 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.21
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.64
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	44.79
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.52

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Bajra, P.O – Hehal, Dist – Ranchi, Jharkhand, Pin -834005
Email Id :- biocratenv@gmail.com, Mobile No – 7369019832, 8340466751, 9608706172



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TEST REPORT

Format No.: 7.8F-04

AMBIENT AIR QUALITY

(Pahra Village)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000354F	Report Issue Date : 10/10/2023
Job Card No : BES/0000454	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :-	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
--------------------------	---

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0047		
Sampling Date : 28/09/2023 to 29/09/2023	Sample Receiving & Registration Date : 29/09/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity : 68 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/09/2023	Test End Date : 04/10/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From SSW towards NNE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.02
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.44
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	44.14
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.09

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards) as per published in the gazette of India; Extraordinary, CPCB Notification No B.29016/20/90/PG-L of 18th November 2009)

Declaration :-

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- All parameters in this report conforms to the specific standard.

Tested by



[Signature]
Authorized Signatory
Technical Manager

Add :- Sanyaswari Nagar, Iki Road, Hajra, P.O – Hehal, Dist – Ranchi, Jharkhand, Pin -834005
Email Id :- biocratenv@gmail.com Mobile No – 7369019812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

Format No: 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000260F	Report Issue Date : 10/10/2023
Job Card No : BES/0000328	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 11/09/2023 to 12/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 69 %
	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.33
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	11.49
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	54.02
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.32

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration:** -

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Tested by



Authorized Signatory
Technical Manager



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TC - 12039

TEST REPORT AMBIENT AIR QUALITY (Tarhesa Village)

Format No: 7.SF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000352F	Report Issue Date : 10/10/2023
Job Card No : BES/0000452	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0047		
Sampling Date : 27/09/2023 to 28/09/2023	Sample Receiving & Registration Date : 29/09/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity : 67 %	Barometric Pressure: 712 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/09/2023	Test End Date : 04/10/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.38
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	11.23
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	53.47
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.84

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards) as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Ikti Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin -834005
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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000257F	Report Issue Date : 10/10/2023
Job Card No : BES/0000325	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032
Sampling Date : 11/09/2023 to 12/09/2023	Sample Receiving & Registration Date : 15/09/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 69 %
	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.64
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.62
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	41.43
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.24

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration:** -

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- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Rajra, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin - 834005
Email Id :- biocratenv@gmail.com. Mobile No - 7369919812, 8340466751, 9038708172



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Format No: 7.8F-04

TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000349F	Report Issue Date : 10/10/2023
Job Card No : BES/0000449	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0047	
Sampling Date : 27/09/2023 to 28/09/2023		Sample Receiving & Registration Date : 29/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 67 %	Barometric Pressure: 712mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/09/2023	Test End Date : 04/10/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.30
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	14.91
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	40.62
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	15.96

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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- All parameters in this report conforms to the specific standard.

Tested by



[Signature]

Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Bajra, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com, Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Bengwari Nadi Tola)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000259F	Report Issue Date : 10/10/2023
Job Card No : BES/00000327	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0032	
Sampling Date : 11/09/2023 to 12/09/2023		Sample Receiving & Registration Date : 15/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 69 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.28
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.05
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	51.61
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.17

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-I of 18th November 2009)

Declaration:-

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Rajra, P.O - Itihai, Dist - Ranchi, Jharkhand. Pin - 834005
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TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

Format No: 7.8F-04

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000351F	Report Issue Date : 10/10/2023
Job Card No : BES/00000451	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0047	
Sampling Date : 27/09/2023 to 28/09/2023		Sample Receiving & Registration Date : 29/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 67%	Barometric Pressure: 712 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/09/2023	Test End Date : 04/10/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.41
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.31
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	50.87
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	24.92

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager

Add:- Sarveshwari Nagar, Iki Road, Bajra, P.O – Hehal, Dist – Ranchi, Jharkhand, Pin – 834003
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TEST REPORT **AMBIENT AIR QUALITY** (BGR Work Shop)

Format No: 7.BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000258F	Report Issue Date : 10/10/2023
Job Card No : BES/0000326	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0032	
Sampling Date : 11/09/2023 to 12/09/2023		Sample Receiving & Registration Date : 15/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 69 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.41
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	18.21
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	51.98
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	22.12

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager

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TC - 12839

TEST REPORT **AMBIENT AIR QUALITY** (BGR Work Shop)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000350F	Report Issue Date : 10/10/2023
Job Card No : BES/0000450	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0047	
Sampling Date : 27/09/2023 to 28/09/2023		Sample Receiving & Registration Date : 29/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 67 %	Barometric Pressure: 712 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/09/2023	Test End Date : 04/10/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.14
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.57
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	51.26
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	21.85

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



[Signature]

Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Joki Road, Bajra, P.O - Huhul, Dist - Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com. Mobile No - 73690119812, 8340466751, 9608708172

Page 1 of 1



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TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

Format No: 7.BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000263F	Report Issue Date : 10/10/2023
Job Card No : BES/0000331	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0032	
Sampling Date : 12/09/2023 to 13/09/2023		Sample Receiving & Registration Date : 15/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 28 °C	R.Humidity : 71 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Jordag School - Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.56
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	35.76
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	12.57

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration :-

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Tested by



Authorized Signatory
Technical Manager



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TC - 12893

TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

Format No: 7.SF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000355F	Report Issue Date : 10/10/2023
Job Card No : BES/0000455	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0047	
Sampling Date : 28/09/2023 to 29/09/2023		Sample Receiving & Registration Date : 29/09/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 68 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/09/2023	Test End Date : 04/10/2023
Sampling Location : Jordag School – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.47
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	35.12
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	12.12

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29015/20/SQ/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager

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Form No. 7.BE-04

TEST REPORT **AMBIENT AIR QUALITY** (Kerandari Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000264F	Report Issue Date : 10/10/2023
Job Card No : BES/0000332	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0032		
Sampling Date : 12/09/2023 to 13/09/2023	Sample Receiving & Registration Date : 15/09/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 28 °C	R.Humidity : 71 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/09/2023	Test End Date : 25/09/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	14.92
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	29.32
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	57.08
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	24.45

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-I of 18th November 2009)
- Declaration: -**
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 - This report is the property of laboratory & should not be used unless advised.
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Tested by



Authorized Signatory
Technical Manager

Add :- Sarveshwari Nagar, Iki Road, Hajra, P.O – Hehal, Dist – Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com Mobile No - 7360019812, 8340466751, 9608708172



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TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

Format No: 7.BF-Q4

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000356F	Report Issue Date : 10/10/2023
Job Card No : BES/0000456	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/SEP/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0047		
Sampling Date : 28/09/2023 to 29/09/2023	Sample Receiving & Registration Date : 29/09/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity : 68 %	Barometric Pressure: 711 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/09/2023	Test End Date : 04/10/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	14.27
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	28.96
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	56.49
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	23.93

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory

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Format No. 7.8F-04

TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000404F	Report Issue Date : 08/11/2023
Job Card No : BES/00000553	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0064	
Sampling Date : 10/10/2023 to 11/10/2023		Sample Receiving & Registration Date : 14/10/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 65 %	Barometric Pressure: 729 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.87
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.78
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	55.17
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.34

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

Format No: 7.BF-04

AMBIENT AIR QUALITY

(Bengwari Nadi Tola)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000492F	Report Issue Date : 08/11/2023
Job Card No : BES/00000671	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0077	
Sampling Date : 27/10/2023 to 28/10/2023		Sample Receiving & Registration Date : 30/10/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 67%	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/10/2023	Test End Date : 04/11/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.86
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.09
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	56.14
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.09

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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Tested by



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Technical Manager



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Format No: 7.8F-04

TEST REPORT **AMBIENT AIR QUALITY** (BGR Work Shop)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000403F	Report Issue Date : 08/11/2023
Job Card No : BES/0000552	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 10/10/2023 to 11/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 26 °C
	R.Humidity : 65 %
	Barometric Pressure: 729 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.79
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.70
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	57.80
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	24.30

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



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Technical Manager



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TEST REPORT

Form No: 7.BF-04

AMBIENT AIR QUALITY (BGR Work Shop)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000491F	Report Issue Date : 08/11/2023
Job Card No : BES/0000670	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: -	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
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General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0077		
Sampling Date : 27/10/2023 to 28/10/2023	Sample Receiving & Registration Date : 30/10/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity : 67 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/10/2023	Test End Date : 04/11/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.15
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.83
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	58.15
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.70

—END OF REPORT—

- **Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

Format No: 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000408F	Report Issue Date : 08/11/2023
Job Card No : BES/0000557	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0064	
Sampling Date : 11/10/2023 to 12/10/2023		Sample Receiving & Registration Date : 14/10/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 67 %	Barometric Pressure: 724 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Jordag School - Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	< 5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.64
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	39.17
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	13.94

—END OF REPORT—

- **Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 15th November 2009)

Declaration:-

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Tested by



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Technical Manager



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Format No: 7.5F-04

TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000496F	Report Issue Date : 08/11/2023
Job Card No : BES/0000675	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0077
Sampling Date : 28/10/2023 to 29/10/2023	Sample Receiving & Registration Date : 30/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 65 %
	Barometric Pressure: 727 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/10/2023	Test End Date : 04/11/2023
Sampling Location : Jordag School – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.56
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	40.36
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	14.83

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PC-I-L of 18th November 2009)

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Tested by



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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000409F	Report Issue Date : 08/11/2023
Job Card No : BES/0000558	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064		
Sampling Date : 11/10/2023 to 12/10/2023	Sample Receiving & Registration Date : 14/10/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity : 67 %	Barometric Pressure: 724 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From WNW towards ESE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	15.48
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	26.92
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	60.78
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.51

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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Format No: 7.8F-04

TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000497F	Report Issue Date : 08/11/2023
Job Card No : BES/0000676	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0077	
Sampling Date : 28/10/2023 to 29/10/2023		Sample Receiving & Registration Date : 30/10/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/10/2023	Test End Date : 04/11/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	16.18
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	25.46
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	61.54
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.37

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager



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Format No: 7.8F-04

TEST REPORT **AMBIENT AIR QUALITY** (Manatu Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000406F	Report Issue Date : 08/11/2023
Job Card No : BES/0000555	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 11/10/2023 to 12/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 67 %
	Barometric Pressure: 724 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Manatu village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.63
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.27
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	49.31
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.57

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

Declaration: -

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Tested by



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Technical Manager



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Format No: 7.SF-04

TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000494F	Report Issue Date : 08/11/2023
Job Card No : BES/0000673	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0077
Sampling Date : 28/10/2023 to 29/10/2023	Sample Receiving & Registration Date : 30/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 65 %
	Barometric Pressure: 727 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/10/2023	Test End Date : 04/11/2023
Sampling Location : Manatu village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.77
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.52
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	49.78
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	18.34

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager



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Format No: 7.8F-04

TEST REPORT **AMBIENT AIR QUALITY** (Pahra Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000407F	Report Issue Date : 08/11/2023
Job Card No : BES/0000556	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0064	
Sampling Date : 11/10/2023 to 12/10/2023		Sample Receiving & Registration Date : 14/10/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 67 %	Barometric Pressure: 724 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.92
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	05.82
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	48.41
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.03

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India; Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Format No: 7.BF-C4

TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000495F	Report Issue Date : 08/11/2023
Job Card No : BES/0000674	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0077
Sampling Date : 28/10/2023 to 29/10/2023	Sample Receiving & Registration Date : 30/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 65 %
	Barometric Pressure: 727 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/10/2023	Test End Date : 04/11/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.49
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	05.60
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	49.12
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.96

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Format No: 7,8F-04

TEST REPORT AMBIENT AIR QUALITY (Tarhesa Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000405F	Report Issue Date : 08/11/2023
Job Card No : BES/0000554	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0064
Sampling Date : 10/10/2023 to 11/10/2023	Sample Receiving & Registration Date : 14/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 26 °C
	R.Humidity : 65 %
	Barometric Pressure: 729 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	05.93
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	10.64
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	58.31
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.13

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Tarhesa Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000493F	Report Issue Date : 08/11/2023
Job Card No : BES/0000672	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0077
Sampling Date : 27/10/2023 to 28/10/2023	Sample Receiving & Registration Date : 30/10/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 27 °C
	R.Humidity : 67 %
	Barometric Pressure: 726 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/10/2023	Test End Date : 04/11/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.19
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.16
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	59.17
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.94

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)
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TEST REPORT

Format No: 7-BF-04

AMBIENT AIR QUALITY

(Baseria Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000402F	Report Issue Date : 08/11/2023
Job Card No : BES/0000551	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0064	
Sampling Date : 10/10/2023 to 11/10/2023		Sample Receiving & Registration Date : 14/10/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 65 %	Barometric Pressure: 729 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 14/10/2023	Test End Date : 28/10/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.61
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.14
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	45.70
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.30

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



Authorized Signatory

Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Bajra, P.O – Hehal, Dist – Ranchi, Jharkhand. Pin -834005

Email Id :- biocratenv@gmail.com, Mobile No – 7369019812, 8340466751, 9608708172



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Format No: 7.BF-04

TEST REPORT **AMBIENT AIR QUALITY** (Baseria Village)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000490F	Report Issue Date : 08/11/2023
Job Card No : BES/0000669	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/OCT/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0077		
Sampling Date : 27/10/2023 to 28/10/2023	Sample Receiving & Registration Date : 30/10/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 27 °C	R.Humidity : 67 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/10/2023	Test End Date : 04/11/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.65
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	12.29
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	46.12
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.85

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards) as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000589F	Report Issue Date : 07/12/2023
Job Card No : BES/00000810	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095		
Sampling Date : 07/11/2023 to 08/11/2023	Sample Receiving & Registration Date : 11/11/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 25 °C	R.Humidity : 59 %	Barometric Pressure: 719 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.53
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.02
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	60.21
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.38

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



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TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000634F	Report Issue Date : 07/12/2023
Job Card No : BES/0000889	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0107		
Sampling Date : 27/11/2023 to 28/11/2023	Sample Receiving & Registration Date : 29/11/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 26 °C	R.Humidity : 63 %	Barometric Pressure: 724 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/11/2023	Test End Date : 05/12/2023
Sampling Location : Bengwari Nadi Tola - Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.15
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.71
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	62.44
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.81

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



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TEST REPORT AMBIENT AIR QUALITY (BGR Work Shop)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000588F	Report Issue Date : 07/12/2023
Job Card No : BES/0000809	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0095	
Sampling Date : 07/11/2023 to 08/11/2023		Sample Receiving & Registration Date : 11/11/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 25 °C	R.Humidity : 59 %	Barometric Pressure: 719 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	09.84
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.94
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	62.82
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.34

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (BGR Workshop)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000633F	Report Issue Date : 07/12/2023
Job Card No : BES/0000888	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0107	
Sampling Date : 27/11/2023 to 28/11/2023		Sample Receiving & Registration Date : 29/11/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 63 %	Barometric Pressure: 724 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/11/2023	Test End Date : 05/12/2023
Sampling Location : BGR Workshop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.31
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.07
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	63.55
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.92

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000593F	Report Issue Date : 07/12/2023
Job Card No : BES/0000814	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: -	M/s NTPC Ltd, Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
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General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0095	
Sampling Date : 08/11/2023 to 09/11/2023		Sample Receiving & Registration Date : 11/11/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 61 %	Barometric Pressure: 722 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Jordag School - Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.95
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	44.37
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.24

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No S.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000638F	Report Issue Date : 07/12/2023
Job Card No : BES/0000893	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0107		
Sampling Date : 28/11/2023 to 29/11/2023	Sample Receiving & Registration Date : 29/11/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 25 °C	R.Humidity : 61 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/11/2023	Test End Date : 05/12/2023
Sampling Location : Jordag Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.86
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	45.17
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	16.93

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

Format No: 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000594F	Report Issue Date : 07/12/2023
Job Card No : BES/0000815	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 08/11/2023 to 09/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 26 °C
	R.Humidity : 61 %
	Barometric Pressure: 722 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	17.52
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	26.72
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	64.34
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.59

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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Technical Manager

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Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Kerandari Village)

Format No: 7.BF-0A

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000639F	Report Issue Date : 07/12/2023
Job Card No : BES/0000894	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0107	
Sampling Date : 28/11/2023 to 29/11/2023		Sample Receiving & Registration Date : 29/11/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 25 °C	R.Humidity : 61 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/11/2023	Test End Date : 05/12/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.16
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	27.03
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	65.83
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.19

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT

AMBIENT AIR QUALITY

(Manatu Village)

Format No: 7.BF-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000591F	Report Issue Date : 07/12/2023
Job Card No : BES/0000812	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 08/11/2023 to 09/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 26 °C R.Humidity : 61 % Barometric Pressure: 722 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Manatu Village - Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.90
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.50
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	52.21
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	19.98

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000636F	Report Issue Date : 07/12/2023
Job Card No : BES/0000891	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0107	
Sampling Date : 28/11/2023 to 29/11/2023		Sample Receiving & Registration Date : 29/11/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 25 °C	R.Humidity : 61 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/11/2023	Test End Date : 05/12/2023
Sampling Location : Manatu Village ~ Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.37
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.09
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	54.53
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	20.69

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India; Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

Format No: 7.BF-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000592F	Report Issue Date : 07/12/2023
Job Card No : BES/0000813	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0095	
Sampling Date : 08/11/2023 to 09/11/2023		Sample Receiving & Registration Date : 11/11/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 61 %	Barometric Pressure: 722 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.61
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.37
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	53.87
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	18.62

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000637F	Report Issue Date : 07/12/2023
Job Card No : BES/0000892	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kumar & Team		Sampling Plan Reference : BES/0107	
Sampling Date : 28/11/2023 to 29/11/2023		Sample Receiving & Registration Date : 29/11/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 25 °C	R.Humidity : 61 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/11/2023	Test End Date : 05/12/2023
Sampling Location : Pahra Village - Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.92
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.45
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	54.61
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	19.22

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India; Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Tarhesa Village)

Format No: 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000590F	Report Issue Date : 07/12/2023
Job Card No : BES/0000811	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 07/11/2023 to 08/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 25 °C R.Humidity : 59 % Barometric Pressure: 719 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.53
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.90
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	64.87
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.41

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 5.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

AMBIENT AIR QUALITY

(Tarhesa Village)

Format No: 7_SF-04

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000635F	Report Issue Date : 07/12/2023
Job Card No : BES/0000890	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0107
Sampling Date : 27/11/2023 to 28/11/2023	Sample Receiving & Registration Date : 29/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 26 °C
	R.Humidity : 63 %
	Barometric Pressure: 724 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/11/2023	Test End Date : 05/12/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.97
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	10.04
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	66.00
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	32.21

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT

Format No: 7-SF-04

AMBIENT AIR QUALITY

(Baseria Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000587F	Report Issue Date : 07/12/2023
Job Card No : BES/0000808	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0095
Sampling Date : 07/11/2023 to 08/11/2023	Sample Receiving & Registration Date : 11/11/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 25 °C
	R.Humidity : 59 %
	Barometric Pressure: 719 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/11/2023	Test End Date : 27/11/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.90
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.46
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	49.68
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	18.33

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PC-I of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

Format No: 7.8F-D4

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000632F	Report Issue Date : 07/12/2023
Job Card No : BES/0000887	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/NOV/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kumar & Team	Sampling Plan Reference : BES/0107		
Sampling Date : 27/11/2023 to 28/11/2023	Sample Receiving & Registration Date : 29/11/2023		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 26 °C	R.Humidity : 63 %	Barometric Pressure: 724 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/11/2023	Test End Date : 05/12/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.16
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.96
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	50.21
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	19.93

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (BGR Work Shop)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000752F	Report Issue Date : 09/01/2024
Job Card No : BES/0001061	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 11/12/2023 to 12/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 23 °C
	R.Humidity : 61 %
	Barometric Pressure: 721 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : BGR Work Shop - Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	09.12
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.79
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	60.87
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.29

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT

AMBIENT AIR QUALITY

(BGR Workshop)

Format No: 7.BF-04

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000814F	Report Issue Date : 09/01/2024
Job Card No : BES/0001174	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0149	
Sampling Date : 27/12/2023 to 28/12/2023		Sample Receiving & Registration Date : 30/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 20 °C	R.Humidity : 68 %	Barometric Pressure: 729 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/12/2023	Test End Date : 06/01/2024
Sampling Location : BGR Workshop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.82
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.49
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	64.55
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.00

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

Format No: 7-BF-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000757F	Report Issue Date : 09/01/2024
Job Card No : BES/0001066	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0128	
Sampling Date : 12/12/2023 to 13/12/2023		Sample Receiving & Registration Date : 15/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 21 °C	R.Humidity : 63 %	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Jordag School - Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	06.37
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	41.88
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	15.52

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Format No: 7.8F-04

TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000819F	Report Issue Date : 09/01/2024
Job Card No : BES/0001179	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0149
Sampling Date : 28/12/2023 to 29/12/2023	Sample Receiving & Registration Date : 30/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 21 °C
	R.Humidity : 66 %
	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/12/2023	Test End Date : 06/01/2024
Sampling Location : Jordag Village - Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.86
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	43.82
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.12

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

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TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

(Kerandari Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000758F	Report Issue Date : 09/01/2024
Job Card No : BES/0001067	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0128	
Sampling Date : 12/12/2023 to 13/12/2023		Sample Receiving & Registration Date : 15/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 21 °C	R.Humidity : 63 %	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	17.21
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	25.85
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	62.33
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.85

—END OF REPORT—

- **Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

Format No: 7.8F-04

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000820F	Report Issue Date : 09/01/2024
Job Card No : BES/0001180	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0149	
Sampling Date : 28/12/2023 to 29/12/2023		Sample Receiving & Registration Date : 30/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 21 °C	R.Humidity : 66 %	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/12/2023	Test End Date : 06/01/2024
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.88
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	26.61
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	63.42
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.93

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PC-I of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Manatu Village)

Format No: 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000755F	Report Issue Date : 09/01/2024
Job Card No : BES/0001064	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0128	
Sampling Date : 12/12/2023 to 13/12/2023		Sample Receiving & Registration Date : 15/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 21 °C	R.Humidity : 63 %	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.90
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.45
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	49.81
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	19.25

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

Declaration:-

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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT

AMBIENT AIR QUALITY

(Manatu Village)

Format No: 7.BF-04

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000817F	Report Issue Date : 09/01/2024
Job Card No : BES/0001177	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0149	
Sampling Date : 28/12/2023 to 29/12/2023		Sample Receiving & Registration Date : 30/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 21 °C	R.Humidity : 66 %	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/12/2023	Test End Date : 06/01/2024
Sampling Location : Manatu Village - Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.80
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	10.42
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	52.76
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	21.85

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PO-L of 18th November 2009)

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[Signature]
T. S. Roy



[Signature]
Authorized Signatory
Technical Manager



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TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

(Pahra Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000756F	Report Issue Date : 09/01/2024
Job Card No : BES/0001065	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 12/12/2023 to 13/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 21 °C
	R.Humidity : 63 %
	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.27
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	05.58
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	48.98
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	17.63

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 15th November 2009)

Declaration: -

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Tested by



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Technical Manager



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TEST REPORT

Format No: 7-SF-04

AMBIENT AIR QUALITY

(Pahra Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000818F	Report Issue Date : 09/01/2024
Job Card No : BES/0001178	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0149
Sampling Date : 28/12/2023 to 29/12/2023	Sample Receiving & Registration Date : 30/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 21 °C
	R.Humidity : 66 %
	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/12/2023	Test End Date : 06/01/2024
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.31
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.62
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	51.85
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	19.61

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



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TEST REPORT

AMBIENT AIR QUALITY

(Tarhesa Village)

Format No: 7.BF-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000754F	Report Issue Date : 09/01/2024
Job Card No : BES/0001063	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0128	
Sampling Date : 11/12/2023 to 12/12/2023		Sample Receiving & Registration Date : 15/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 61 %	Barometric Pressure: 721 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.53
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.33
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	63.81
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	30.74

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Technical Manager



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TEST REPORT

Formet No: 7.BF-04

AMBIENT AIR QUALITY

(Tarhesa Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000816F	Report Issue Date : 09/01/2024
Job Card No : BES/0001176	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0149
Sampling Date : 27/12/2023 to 28/12/2023	Sample Receiving & Registration Date : 30/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 20 °C
	R.Humidity : 68 %
	Barometric Pressure: 729 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/12/2023	Test End Date : 06/01/2024
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.41
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	11.33
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	67.84
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	33.45

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India; Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Baseria Village)

Format No: 7.8F-04

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000751F	Report Issue Date : 09/01/2024
Job Card No : BES/0001060	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air	Type of Sample: Ambient Air
Sample Collected By : Nilesh Kumar & Team	Sampling Plan Reference : BES/0128
Sampling Date : 11/12/2023 to 12/12/2023	Sample Receiving & Registration Date : 15/12/2023
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities
Metrological Information	Temp: 23 °C
	R.Humidity : 61 %
	Barometric Pressure: 721 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.88
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	11.70
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	48.42
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	18.17

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



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Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Baseria Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000813F	Report Issue Date : 09/01/2024
Job Card No : BES/0001173	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0149	
Sampling Date : 27/12/2023 to 28/12/2023		Sample Receiving & Registration Date : 30/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 20 °C	R.Humidity : 68 %	Barometric Pressure: 729 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/12/2023	Test End Date : 06/01/2024
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.62
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	12.35
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	51.63
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	20.35

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



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Technical Manager



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TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

(Bengwari Nadi Tola)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000753F	Report Issue Date : 09/01/2024
Job Card No : BES/00001062	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0128	
Sampling Date : 11/12/2023 to 12/12/2023		Sample Receiving & Registration Date : 15/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 61 %	Barometric Pressure: 721 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/12/2023	Test End Date : 30/12/2023
Sampling Location : Bengwari Nadi Tola - Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.37
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	7.00
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	59.45
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	27.38

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager

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Format No: 7.BF-04

TEST REPORT

AMBIENT AIR QUALITY

(Bengwari Nadi Tola)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000000815F	Report Issue Date : 09/01/2024
Job Card No : BES/0001175	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/DEC/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Nilesh Kumar & Team		Sampling Plan Reference : BES/0149	
Sampling Date : 27/11/2023 to 28/11/2023		Sample Receiving & Registration Date : 30/12/2023	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 20 °C	R.Humidity : 68 %	Barometric Pressure: 729 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/12/2023	Test End Date : 06/01/2024
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.82
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.56
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	63.71
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.96

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Baseria Village)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000883F	Report Issue Date : 07/02/2024
Job Card No : BES/0001287	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kr.Singh & Team	Sampling Plan Reference : BES/0170		
Sampling Date : 09/01/2024 to 10/01/2024	Sample Receiving & Registration Date : 13/01/2024		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 21 °C	R.Humidity : 65 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	09.60
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.65
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	64.28
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	23.34

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (BGR Work Shop)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000884F	Report Issue Date : 07/02/2024
Job Card No : BES/0001288	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170		
Sampling Date : 09/01/2024 to 10/01/2024	Sample Receiving & Registration Date : 13/01/2024		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicle Surrounding Activities		
Metrological Information	Temp: 21 °C	R.Humidity : 65 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.28
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	18.47
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	69.88
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	30.21

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration :-

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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000885F	Report Issue Date : 07/02/2024
Job Card No : BES/00001289	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0170	
Sampling Date : 09/01/2024 to 10/01/2024		Sample Receiving & Registration Date : 13/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 21 °C	R.Humidity : 65 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Bengwari Nadi Tola -- Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	09.62
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	10.80
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	76.61
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	39.52

---END OF REPORT---

- **Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Format No: 7.8F-04

TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000000886F	Report Issue Date : 07/02/2024
Job Card No : BES/0001290	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0170		
Sampling Date : 09/01/2024 to 10/01/2024	Sample Receiving & Registration Date : 13/01/2024		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 21 °C	R.Humidity : 65 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.48
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	12.70
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	69.81
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	35.33

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT

Format No: 7-SF-04

AMBIENT AIR QUALITY

(Manatu Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000887F	Report Issue Date : 07/02/2024
Job Card No : BES/0001291	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0170	
Sampling Date : 10/01/2024 to 11/01/2024		Sample Receiving & Registration Date : 13/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 67 %	Barometric Pressure: 728 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.38
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.41
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	55.79
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.61

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT

Format No: 7.BF-04

AMBIENT AIR QUALITY

(Pahra Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000888F	Report Issue Date : 07/02/2024
Job Card No : BES/0001292	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address :- M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr, Singh & Team		Sampling Plan Reference : BES/0170	
Sampling Date : 10/01/2024 to 11/01/2024		Sample Receiving & Registration Date : 13/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 67 %	Barometric Pressure: 728 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	07.88
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.10
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	57.27
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	21.54

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Format No: 7-BF-04

TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000889F	Report Issue Date : 07/02/2024
Job Card No : BES/0001293	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0170	
Sampling Date : 10/01/2024 to 11/01/2024		Sample Receiving & Registration Date : 13/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 67 %	Barometric Pressure: 728 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Jordag School – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	07.83
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	47.65
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	19.24

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY (Kerandari Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000000890F	Report Issue Date : 07/02/2024
Job Card No : BES/0001294	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0170	
Sampling Date : 10/01/2024 to 11/01/2024		Sample Receiving & Registration Date : 13/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 67 %	Barometric Pressure: 728 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 13/01/2024	Test End Date : 27/01/2024
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.90
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	27.49
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	66.53
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.28

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

- Declaration: -**

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Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000000999F	Report Issue Date : 07/02/2024
Job Card No : BES/0001445	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0187	
Sampling Date : 27/01/2024 to 28/01/2024		Sample Receiving & Registration Date : 30/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 69 %	Barometric Pressure: 729 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/01/2024	Test End Date : 05/02/2024
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.24
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	14.57
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	73.41
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.69

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (BGR Workshop)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001000F	Report Issue Date : 07/02/2024
Job Card No : BES/0001446	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0187	
Sampling Date : 27/01/2024 to 28/01/2024		Sample Receiving & Registration Date : 30/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 69 %	Barometric Pressure: 729 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/01/2024	Test End Date : 05/02/2024
Sampling Location : BGR Workshop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	11.61
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	19.56
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	78.24
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	35.59

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001001F	Report Issue Date : 07/02/2024
Job Card No : BES/0001447	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0187	
Sampling Date : 27/01/2024 to 28/01/2024		Sample Receiving & Registration Date : 30/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 69 %	Barometric Pressure: 729 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/01/2024	Test End Date : 05/02/2024
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.54
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	11.84
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	88.82
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	46.21

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

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Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

Format No: 7.BE-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001002F	Report Issue Date : 07/02/2024
Job Card No : BES/0001448	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0187	
Sampling Date : 27/01/2024 to 28/01/2024		Sample Receiving & Registration Date : 30/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 69 %	Barometric Pressure: 729 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/01/2024	Test End Date : 05/02/2024
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.63
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.70
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	78.26
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	39.18

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Manatu Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001003F	Report Issue Date : 07/02/2024
Job Card No : BES/0001449	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0187	
Sampling Date : 28/01/2024 to 29/01/2024		Sample Receiving & Registration Date : 30/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 21 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/01/2024	Test End Date : 05/02/2024
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	09.60
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	10.80
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	64.34
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	30.50

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001004F	Report Issue Date : 07/02/2024
Job Card No : BES/0001450	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0187	
Sampling Date : 28/01/2024 to 29/01/2024		Sample Receiving & Registration Date : 30/01/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 21 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/01/2024	Test End Date : 05/02/2024
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.18
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.96
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	65.17
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.43

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001005F	Report Issue Date : 07/02/2024
Job Card No : BES/0001451	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WD/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish kr. Singh & Team	Sampling Plan Reference : BES/0187		
Sampling Date : 28/01/2024 to 29/01/2024	Sample Receiving & Registration Date : 30/01/2024		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 21 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/01/2024	Test End Date : 05/02/2024
Sampling Location : Jordag Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	<5.0
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.69
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	55.87
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	22.41

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

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TEST REPORT

AMBIENT AIR QUALITY

(Kerandari Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001006F	Report Issue Date : 07/02/2024
Job Card No : BES/0001452	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/JAN/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish kr. Singh & Team	Sampling Plan Reference : BES/0187		
Sampling Date : 28/01/2024 to 29/01/2024	Sample Receiving & Registration Date : 30/01/2024		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 21 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/01/2024	Test End Date : 05/02/2024
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	19.21
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	29.52
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	73.78
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	36.55

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PO-L of 18th November 2009)

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TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001101F	Report Issue Date : 09/03/2024
Job Card No : BES/0001594	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr.Singh & Team		Sampling Plan Reference : BES/0205	
Sampling Date : 12/02/2024 to 13/02/2024		Sample Receiving & Registration Date : 16/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 60 %	Barometric Pressure: 723 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Baseria Village (NTPC Camp) - Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.45
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.12
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	68.40
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	26.72

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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TEST REPORT

Format No: 7, BF-04

AMBIENT AIR QUALITY

(BGR Work Shop)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001102F	Report Issue Date : 09/03/2024
Job Card No : BES/0001395	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/ FEB/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0205	
Sampling Date : 12/02/2024 to 13/02/2024		Sample Receiving & Registration Date : 16/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicle Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 60 %	Barometric Pressure: 723 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.69
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.48
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	72.39
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	33.59

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
- Declaration:** -
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 - All parameters in this report conforms to the specific standard.

Tested by



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Technical Manager

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TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

Format No: 7-BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001103F	Report Issue Date : 09/03/2024
Job Card No : BES/00001596	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/ FEB/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0205	
Sampling Date : 12/02/2024 to 13/02/2024		Sample Receiving & Registration Date : 16/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 60 %	Barometric Pressure: 723 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.96
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	10.26
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	83.88
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	45.00

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
- Declaration: -**
 - Reported results are related only to the item tested.
 - This report is the property of laboratory & should not be used unless advised.
 - Items tested are as per the standard requirements.
 - All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwar Nagar, IIS Road, Baira, P.O - Hahel, Dist - Ranchi, Jharkhand. Pin - 834005
Email Id :- biocratenvij@gmail.com. Mobile No - 7365019812, 8340466751, 9608708172



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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Tarhesa Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001104F	Report Issue Date : 09/03/2024
Job Card No : BES/0001597	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0205	
Sampling Date : 12/02/2024 to 13/02/2024		Sample Receiving & Registration Date : 16/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 60 %	Barometric Pressure: 723 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.79
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	11.84
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	71.66
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	38.24

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
- Declaration: -**
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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Hajira, P.O - Itki, Dist - Ranchi, Jharkhand Pin -834003
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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001105F	Report Issue Date : 09/03/2024
Job Card No : BES/0001598	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air	Type of Sample: Ambient Air		
Sample Collected By : Manish Kr. Singh & Team	Sampling Plan Reference : BES/0205		
Sampling Date : 13/02/2024 to 14/02/2024	Sample Receiving & Registration Date : 16/02/2024		
Sample Condition : OK, Preserved & Sealed	Emission Due to: Movement of Vehicles & Surrounding Activities		
Metrological Information	Temp: 22 °C	R.Humidity : 62 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.55
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	09.16
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	60.63
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	28.61

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
- Declaration: -**
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 - All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Surveshwari Nagar, Bki Road, Durgu, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin - 834005
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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001106F	Report Issue Date : 09/03/2024
Job Card No : BES/0001599	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0205	
Sampling Date : 13/02/2024 to 14/02/2024		Sample Receiving & Registration Date : 16/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 62 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Pahra Village - Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	06.68
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	08.08
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	61.49
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	25.83

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-LoF 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager

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Format No: 7.8F-04

TEST REPORT **AMBIENT AIR QUALITY** (Jordag Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001107F	Report Issue Date : 09/03/2024
Job Card No : BES/0001600	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0205	
Sampling Date : 13/02/2024 to 14/02/2024		Sample Receiving & Registration Date : 16/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 62 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Jordag School – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	11.25
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.80
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	72.38
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	42.69

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Hagra, P.O. - Hagra, Dist - Ranchi, Jharkhand Pin - 834005
Email Id :- biocratenv@gmail.com Mobile No - 7368019812, 8340466751, 908708172



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TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

(Kerandari Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001108F	Report Issue Date : 09/03/2024
Job Card No : BES/0001601	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0205	
Sampling Date : 13/02/2024 to 14/02/2024		Sample Receiving & Registration Date : 16/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 62 %	Barometric Pressure: 726 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 16/02/2024	Test End Date : 29/02/2024
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	18.05
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	27.49
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	69.87
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	34.28

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager

Add: - Surveshwari Nagar, Bkl Road, Hapur, P.O - Hahat, Dist - Ranchi, Jharkhand. Pin - 834005
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TEST REPORT

Form No. 7.BF-04

AMBIENT AIR QUALITY

(Baseria Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000001168F	Report Issue Date : 09/03/2024
Job Card No : BES/0001699	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0220	
Sampling Date : 26/02/2024 to 27/02/2024		Sample Receiving & Registration Date : 29/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description

Sample Temperature at the time of receiving : 5°C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/02/2024	Test End Date : 07/03/2024
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.62
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	15.41
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	74.58
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	30.17

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration: -**

01. Reported results are related only to the item tested.
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Tested by



Authorized Signatory
Technical Manager



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Format No: 7_BF-04

TEST REPORT AMBIENT AIR QUALITY (BGR Workshop)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000001169F	Report Issue Date : 09/03/2024
Job Card No : BES/0001700	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0220	
Sampling Date : 26/02/2024 to 27/02/2024		Sample Receiving & Registration Date : 29/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/02/2024	Test End Date : 07/03/2024
Sampling Location : BGR Workshop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	12.47
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	18.52
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	78.55
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	36.14

---END OF REPORT---

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India; Extraordinary, CPCB Notification No B.29016/20/90/PC-I of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager

Add: - Surveshwari Nagar, Iki Road, Bagra, P.O - Hehal, Dist - Ranchi, Jharkhand Pin - 834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001170F	Report Issue Date : 09/03/2024
Job Card No : BES/0001701	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagann, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0220	
Sampling Date : 26/02/2024 to 27/02/2024		Sample Receiving & Registration Date : 29/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/02/2024	Test End Date : 07/03/2024
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.67
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	14.08
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	89.63
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	48.34

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Hujra, P.O - Hehat, Dist - Ranchi, Jharkhand. Pin - 834005
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TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

Format No: 7.8F-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001171F	Report Issue Date : 09/03/2024
Job Card No : BES/0001702	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0220	
Sampling Date : 26/02/2024 to 27/02/2024		Sample Receiving & Registration Date : 29/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 22 °C	R.Humidity : 65 %	Barometric Pressure: 727 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/02/2024	Test End Date : 07/03/2024
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	08.46
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.25
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	76.28
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	42.81

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration: -

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- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Surveshwar Nagar, Ili Road, Dajra, P.O - Hahat, Dist - Ranchi, Jharkhand. Pin - 834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT **AMBIENT AIR QUALITY** (Manatu Village)

Form No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001172F	Report Issue Date : 09/03/2024
Job Card No : BES/0001703	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: -	M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311
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General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0220	
Sampling Date : 27/02/2024 to 28/02/2024		Sample Receiving & Registration Date : 29/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 64 %	Barometric Pressure: 725 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/02/2024	Test End Date : 07/03/2024
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	10.39
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	12.27
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	66.41
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	31.96

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-I of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Baria, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340406751, 9608708172



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Format No: 7.BF-04

TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000001173F	Report Issue Date : 09/03/2024
Job Card No : BES/0001704	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0220	
Sampling Date : 27/02/2024 to 28/02/2024		Sample Receiving & Registration Date : 29/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 64 %	Barometric Pressure: 725 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/02/2024	Test End Date : 07/03/2024
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	68.41
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	10.34
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	68.61
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	29.45

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PC-I of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager



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Format No: 7.BE-C4

TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001174F	Report Issue Date : 09/03/2024
Job Card No : BES/0001705	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0220	
Sampling Date : 27/02/2024 to 28/02/2024		Sample Receiving & Registration Date : 29/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 64 %	Barometric Pressure: 725 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/02/2024	Test End Date : 07/03/2024
Sampling Location : Jordag Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	12.46
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	19.75
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	78.22
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	50.21

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001175F	Report Issue Date : 09/03/2024
Job Card No : BES/0001706	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/FEB/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0220	
Sampling Date : 27/02/2024 to 28/02/2024		Sample Receiving & Registration Date : 29/02/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 23 °C	R.Humidity : 64 %	Barometric Pressure: 725 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 29/02/2024	Test End Date : 07/03/2024
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	19.38
02	Oxides of Nitrogen (NO _x)	µg/m ³	24 Hours	IS 5182 Part-06	80	28.96
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	75.61
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	37.29

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Baseria Village)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001286F	Report Issue Date : 06/04/2024
Job Card No : BES/0001883	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/01	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address : - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr Singh & Team		Sampling Plan Reference : BES/0245	
Sampling Date : 11/03/2024 to 12/03/2024		Sample Receiving & Registration Date : 15/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 25 °C	R.Humidity : 59 %	Barometric Pressure: 710 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Baseria Village (NTPC Camp) - Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	12.14
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.22
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	81.44
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	35.50

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B 29016/20/90/PCI-L of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Hazra, P.O. - Hazra - Ranchi, Jharkhand. Pin - 834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT

Format No: 7.8F-04

AMBIENT AIR QUALITY

(BGR Work Shop)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001287F	Report Issue Date : 06/04/2024
Job Card No : BES/0001884	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/ MAR/AAQ/02	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0245	
Sampling Date : 11/03/2024 to 12/03/2024		Sample Receiving & Registration Date : 15/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicle Surrounding Activities	
Metrological Information	Temp: 25 °C	R.Humidity : 59 %	Barometric Pressure: 710 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : BGR Work Shop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	14.86
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.11
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	84.68
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	40.36

---END OF REPORT---

- Norms:** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India. Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration:** -

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Tested by



Authorized Signatory

Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Bengwari Nadi Tola)

Format No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001288F	Report Issue Date : 06/04/2024
Job Card No : BES/00001885	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/ MAR/AAQ/03	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0245	
Sampling Date : 11/03/2024 to 12/03/2024		Sample Receiving & Registration Date : 15/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 25 °C	R.Humidity : 59 %	Barometric Pressure: 710 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Bengwari Nadi Tola - Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	12.36
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.54
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	90.12
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	49.33

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

Declaration:-

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Tested by



Authorized Signatory

Technical Manager



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TEST REPORT **AMBIENT AIR QUALITY** (Tarhesa Village)

Format No: 7-BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001289F	Report Issue Date : 06/04/2024
Job Card No : BES/0001886	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/04	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0245	
Sampling Date : 11/03/2024 to 12/03/2024		Sample Receiving & Registration Date : 15/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 25 °C	R.Humidity : 59 %	Barometric Pressure: 710 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
SI No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	09.40
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	16.42
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	80.42
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	45.61

—END OF REPORT—

- Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCL-I of 18th November 2009)

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Itki Road, Dajra, P.O - Hahad, Dist - Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com, Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT AMBIENT AIR QUALITY (Manatu Village)

Form No: 7.8F-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001290F	Report Issue Date : 06/04/2024
Job Card No : BES/0001887	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/05	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0245	
Sampling Date : 12/03/2024 to 13/03/2024		Sample Receiving & Registration Date : 15/03/2024	
Sample Condition : OK. Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 24 °C	R.Humidity : 61 %	Barometric Pressure: 712 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	11.66
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	13.44
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	69.35
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	34.69

—END OF REPORT—

- **Norms** : NAAQS (National Ambient Air Quality Standards as per published in the gazette of India. Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

• **Declaration:** -

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory

Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Dajra, P.O - Belhal, Dist - Ranchi, Jharkhand. Pin-834005
Email Id :- biocratenv@gmail.com Mobile No - 7360019812, 8340466751, 9608708172



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Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)



TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

Format No: 7-BF-04

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001291F	Report Issue Date : 06/04/2024
Job Card No : BES/0001888	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/06	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0245	
Sampling Date : 12/03/2024 to 13/03/2024		Sample Receiving & Registration Date : 15/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 24 °C	R.Humidity : 61 %	Barometric Pressure: 712 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	09.37
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	11.67
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	71.32
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	32.76

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PC-I of 18th November 2009)

Declaration: -

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Tested by



Authorized Signatory
Technical Manager

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TEST REPORT

Format No: 7.BF-04

AMBIENT AIR QUALITY

(Jordag Village)

FIRST FORTNIGHT	
Unique Lab Report No : TC1203923000001292F	Report Issue Date : 06/04/2024
Job Card No : BES/0001889	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/07	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0245	
Sampling Date : 12/03/2024 to 13/03/2024		Sample Receiving & Registration Date : 15/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 24 °C	R.Humidity : 61 %	Barometric Pressure: 712 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Jordag School – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	14.70
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	20.01
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	81.14
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	54.49

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

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Tested by



Authorized Signatory

Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Dugra, P.O - Hishal, Dist - Ranchi, Jharkhand Pin-834005
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TEST REPORT

Format No: 7.BF-04

AMBIENT AIR QUALITY

(Kerandari Village)

FIRST FORTNIGHT

Unique Lab Report No : TC1203923000001293F	Report Issue Date : 06/04/2024
Job Card No : BES/0001890	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/08	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish Kr. Singh & Team		Sampling Plan Reference : BES/0245	
Sampling Date : 12/03/2024 to 13/03/2024		Sample Receiving & Registration Date : 15/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 24 °C	R.Humidity : 61 %	Barometric Pressure: 712 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 15/03/2024	Test End Date : 30/03/2024
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	20.87
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	29.47
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	79.38
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	40.11

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PC-I of 18th November 2009)

- Declaration: -**

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04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Iki Road, Dugra, P.O - Hehal, Dist - Ranchi, Jharkhand Pin-834005
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TEST REPORT

Format No: 7 RF-04

AMBIENT AIR QUALITY

(Baseria Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000001373F	Report Issue Date : 06/04/2024
Job Card No : BES/0002024	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/09	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0265	
Sampling Date : 27/03/2024 to 28/03/2024		Sample Receiving & Registration Date : 30/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 57 %	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5°C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/03/2024	Test End Date : 05/04/2024
Sampling Location : Baseria Village (NTPC Camp) – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	12.00
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	18.31
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	85.47
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	38.20

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)
- Declaration: -**
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 04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Biki Road, Hajira, P.O. - Dehri, Dist - Ranchi, Jharkhand. Pin - 834005
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TEST REPORT

Format No: 7.BF-04

AMBIENT AIR QUALITY

(BGR Workshop)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001374F	Report Issue Date : 06/04/2024
Job Card No : BES/0002025	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/10	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0265	
Sampling Date : 27/03/2024 to 28/03/2024		Sample Receiving & Registration Date : 30/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 57 %	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/03/2024	Test End Date : 05/04/2024
Sampling Location : BGR Workshop – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	14.71
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	21.15
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	87.27
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	42.10

---END OF REPORT---

- Norms :** NAAQS (National Ambient Air Quality Standards) as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration: -**

- Reported results are related only to the item tested.
- This report is the property of laboratory & should not be used unless advised.
- Items tested are as per the standard requirements.
- All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Surveshwari Nagar, Iki Road, Durg, P.O - Hefal, Dist - Ranchi, Jharkhand. Pin - 834005
Email Id :- biocratenv@gmail.com Mobile No - 7369019812, 8340466751, 9608708172



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TEST REPORT

Format No: 7.BF-04

AMBIENT AIR QUALITY

(Bengwari Nadi Tola)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000001375F	Report Issue Date : 06/04/2024
Job Card No : BES/0002026	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/11	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0265	
Sampling Date : 27/03/2024 to 28/03/2024		Sample Receiving & Registration Date : 30/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 57 %	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/03/2024	Test End Date : 05/04/2024
Sampling Location : Bengwari Nadi Tola – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	12.26
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	18.70
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	88.46
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	47.55

—END OF REPORT—

- Norms:** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCH of 18th November 2009)

- Declaration:** -

01. Reported results are related only to the item tested.
02. This report is the property of laboratory & should not be used unless advised.
03. Items tested are as per the standard requirements.
04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add: - Surveshwari Nagar, Itki Road, Dugra, P.O. - Hehal, Dist - Ranchi, Jharkhand. Pin -834005
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TEST REPORT

Format No: 7.RF-04

AMBIENT AIR QUALITY

(Tarhesa Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000001376F	Report Issue Date : 06/04/2024
Job Card No : BES/0002027	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/12	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazarihag, Jharkhand 825311

General Information

Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0265	
Sampling Date : 27/03/2024 to 28/03/2024		Sample Receiving & Registration Date : 30/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 26 °C	R.Humidity : 57 %	Barometric Pressure: 711 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/03/2024	Test End Date : 05/04/2024
Sampling Location : Tarhesa Village – Core Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	11.80
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	17.36
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	86.21
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	48.74

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PCI-L of 18th November 2009)

- Declaration: -**

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Tested by



Authorized Signatory
Technical Manager

Add: - Sarveshwari Nagar, Jiki Road, Dajra, P.O - Hehal, Dist - Ranchi, Jharkhand. Pin -834005
Email Id :- biocratenv@gmail.com Mobile No:- 7369019812, 8340466751, 9608708172



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TEST REPORT

Format No: 7.BF-C4

AMBIENT AIR QUALITY

(Manatu Village)

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001377F	Report Issue Date : 06/04/2024
Job Card No : BES/0002028	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/13	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0265	
Sampling Date : 28/03/2024 to 29/03/2024		Sample Receiving & Registration Date : 30/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 55 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/03/2024	Test End Date : 05/04/2024
Sampling Location : Manatu Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	12.28
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	14.63
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	74.19
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	36.24

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PC-I of 18th November 2009)
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Tested by



Authorized Signatory
Technical Manager



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TEST REPORT AMBIENT AIR QUALITY (Pahra Village)

Format No: J-RE-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001378F	Report Issue Date : 06/04/2024
Job Card No : BES/0002029	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/14	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd. Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0265	
Sampling Date : 28/03/2024 to 29/03/2024		Sample Receiving & Registration Date : 30/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 55 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/03/2024	Test End Date : 05/04/2024
Sampling Location : Pahra Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	09.26
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	12.70
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	77.75
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	35.52

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India; Extraordinary, CPCB Notification No B.29016/20/00/PCI-L of 18th November 2009)
- Declaration: -**
 01. Reported results are related only to the item tested.
 02. This report is the property of laboratory & should not be used unless advised.
 03. Items tested are as per the standard requirements.
 04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager



BIOCRAT ENVIRONMENTAL SERVICES (BIOCRAT ENVIRONMENTAL LAB)

Accredited by NABL & Registered by
Jharkhand State Pollution Control Board (JSPCB)
Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)



TEST REPORT AMBIENT AIR QUALITY (Jordag Village)

Format No: 7.BF-04

SECOND FORTNIGHT	
Unique Lab Report No : TC1203923000001379F	Report Issue Date : 06/04/2024
Job Card No : BES/0002030	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/15	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/WO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0265	
Sampling Date : 28/03/2024 to 29/03/2024		Sample Receiving & Registration Date : 30/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 55 %	Barometric Pressure: 709 mmHg

Sample Description	
Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/03/2024	Test End Date : 05/04/2024
Sampling Location : Jordag Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result						
Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	14.70
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	21.01
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	86.55
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	51.61

—END OF REPORT—

- Norms :** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No 8.29016/20/90/PC-14 of 18th November 2009)
- Declaration: -**
 - Reported results are related only to the item tested.
 - This report is the property of laboratory & should not be used unless advised.
 - Items tested are as per the standard requirements.
 - All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

Add :- Surveedwari Nagar, Iki Road, Dajra, P.O :- Helan, Ranchi, Jharkhand, Pin-834005
Email Id :- biocratenvy@gmail.com Mobile No :- 7369019812, 8340466751, 9608708172



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Jharkhand State Pollution Control Board (JSPCB)
Certified by: ISO 9001:2015(QMS) & ISO 45001:2018(OHSAS)



Format No: 7.8F-04

TEST REPORT AMBIENT AIR QUALITY (Kerandari Village)

SECOND FORTNIGHT

Unique Lab Report No : TC1203923000001380F	Report Issue Date : 06/04/2024
Job Card No : BES/0002031	Discipline : Chemical
Field Data Sheet Code : BES/BGR/KRD/MAR/AAQ/16	Group : Atmospheric Pollution
Type of Industry : Coal Mines	Product / Material of Test : Ambient Air
Work Order No : BGR/KRD/VO/0226/ENVIRONMENT MONITORING/BES/2023-24	Work Order Date : 24/06/2023

Client Name & Address: - M/s NTPC Ltd.
Kerandari Coal Mining Project, Sikri, Barkagaon, Hazaribag, Jharkhand 825311

General Information

General Information			
Protocol : Ambient Air		Type of Sample: Ambient Air	
Sample Collected By : Manish kr. Singh & Team		Sampling Plan Reference : BES/0265	
Sampling Date : 28/03/2024 to 29/03/2024		Sample Receiving & Registration Date : 30/03/2024	
Sample Condition : OK, Preserved & Sealed		Emission Due to: Movement of Vehicles & Surrounding Activities	
Metrological Information	Temp: 27 °C	R.Humidity : 55 %	Barometric Pressure: 709 mmHg

Sample Description

Sample Temperature at the time of receiving : 5 °C	Temperature at the time of Analysis : 25 ± 2 °C
Test Start Date : 30/03/2024	Test End Date : 05/04/2024
Sampling Location : Kerandari Village – Buffer Zone	
Predominant Wind Direction : From NW towards SE	Customer Representative Name : Mr. Prakash Kumar

Analysis Result

Sl No	Specific Test Performed	Unit	Time Weighted Average	Test Method No	Norms NAAQS 2009	Result
01	Sulphur Dioxide (SO ₂)	µg/m ³	24 Hours	IS 5182 Part-02	80	21.34
02	Oxides of Nitrogen (NO ₂)	µg/m ³	24 Hours	IS 5182 Part-06	80	28.38
03	Respirable Suspended Particulate Matter (PM ₁₀)	µg/m ³	24 Hours	IS 5182 Part 23	100	75.61
04	Fine Particulate Matter (PM _{2.5})	µg/m ³	24 Hours	IS 5182 Part 24	60	38.61

—END OF REPORT—

- Norms:** NAAQS (National Ambient Air Quality Standards as per published in the gazette of India: Extraordinary, CPCB Notification No B.29016/20/90/PC-I, of 18th November 2009)

- Declaration:** -

01. Reported results are related only to the item tested.
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04. All parameters in this report conforms to the specific standard.

Tested by



Authorized Signatory
Technical Manager

POLLUTION CONTROL MEASURES



Crusher with fixed water sprinkling system



Transportation vehicles covered with tarpaulin





Wet Drilling



Settling Pond



Plantation