



# **ENVIRONMENTAL AUDIT STATEMENT**

**2022-23**

**For**

## **GEVRA OPENCAST EXPANSION PROJECT**

**Under**

**(GEVRA AREA)**

**South Eastern Coalfields Limited**

**(A Mini Ratna Company)**

**Year of establishment – 1981- 82**

**Capacity of Mine - 52.500 MTPA**

**Project Area - 4184.486 Ha.**

**Central Mine Planning & Design Institute Limited  
Regional Institute – V, CMPDI Complex, Seepat Road,  
BILASPUR (C.G.)**

# ENVIRONMENTAL AUDIT STATEMENT (2022-23)

## GEVRA OPENCASST EXPANSION PROJECT

### CHAPTER-I

TABLE-1.1

|            |   |   |  |            |                     |
|------------|---|---|--|------------|---------------------|
| <b>1.0</b> | <b>General Information</b>                                    | : | Gevra Open cast expansion Project is located in Central part of Korba Coal fields, Gevra Area of SECL, Distt- Korba (C.G.) Topography is gently undulating. Climate of the area is tropical monsoon type with average annual rainfall being 1685 mm. |            |                     |
| <b>a)</b>  | <b>Extractable Reserves (as on 01.04.2023)</b>                | : | 265.724 Million Tonne  |            |                     |
| <b>b)</b>  | <b>Target output &amp; grade of coal (2023-24)</b>            | : | Coal- 60.00 MT / Grade "G-11"<br>O.B. – 75.01 M Cum  |            |                     |
| <b>c)</b>  | <b>Seams Worked</b>   | : | 03 (Three) nos.<br>Lower Kusmunda, Upper Kusmunda and E&F Seam   |            |                     |
| <b>d)</b>  | <b>Thickness of Seam Worked (in metres.)</b>                  | : | E & F Seam = 08.57 m to 14.87 m<br>Upper Kusmunda = 15.96 m to 30.20 m<br>Lower Kusmunda(Top split)= 27.11 m to 42.65 m<br>Lower Kusmunda (Bottom Split) = 03.14 m to 08.67 m  |            |                     |
| <b>e)</b>  | <b>Depth of Seams from the surface</b>                        | : | <b>L.K</b>   | <b>U.K</b> | <b>E&amp;F seam</b> |
|            | Minimum :   |   | 6.37 m   | 8.45 m     | 16.00 m             |
|            | Maximum:  |   | 318.00 m   | 185.00 m   | 136.00 m            |
| <b>f)</b>  | <b>Av. Stripping ratio mining purpose</b>                     | : | 1.31 cum/t (2022-23)   |            |                     |
| <b>g)</b>  | <b>No. of villages/ families affected or displaced</b>        | : | 18 villages / no. of families involved 3466 (Balance Families to be settled 1157)  |            |                     |
| <b>h)</b>  | <b>(i) Mining area (in Ha.)</b>                               | : | 2037.250   |            |                     |
|            | <b>(ii) Leasehold area other than mining purpose (in Ha.)</b> | : | 2147.236   |            |                     |
|            | <b>(iii) Total Leasehold Area (in Ha.)</b>                    | : | 4184.486   |            |                     |

**1.1 Brief Geology of Mine:**

The Gevra block is capped with 4m to 20m thick soil cover, the rock exposures are very scanty. The upper barakar formation of thickness more than 250 m in this block is fine to coarse grained sand stone with shale intercalation and coal seams.

The upper and lower Kusmunda seams are the two most important coal seams of this formation from the point of view of their thickness and continuity. The seam thickness of upper Kusmunda is 24.94 to 28.85 m. Lower Kusmunda top split is 27.96 to 45.20 m and bottom split is 3.14 meter to 16.16 meter.

**Details of major faults:-**

| S. No. | Fault No. | Strike direction | Direction of throw | Amount of throw in mtr. |
|--------|-----------|------------------|--------------------|-------------------------|
| 01.    | F1        | E—W              | towards south      | 300                     |
| 02.    | F10       | NW—S-E           | -do-               | 20-45                   |

**Details of minor faults:-**

| S. No. | Fault No. | Strike direction | Direction of throw | Amount of throw in mtr. |
|--------|-----------|------------------|--------------------|-------------------------|
| 01.    | F6        | WNW-ESE          | NNE                | 10-60                   |
| 02.    | F11       | NE-SW            | NW                 | 10—12                   |
| 03.    | F14       | ENE-WSE          | NNW                | 5-7                     |

**1.2 Mining Method****Description**

: Shovel-Dumper combination for O.B removal and pay loader- tipper combination and Surface miner for coal production.

Method of working – Conventional method of Open cast mining and deploying Surface Miner for coal extraction

**1.3 Present Status of the mine**

: Working Mine

**1. Production Figures**

:

| Year             | Production (in MT) | O.B. (in M cu. Mtr.) |
|------------------|--------------------|----------------------|
| 2018-19          | 42.251             | 58.580               |
| 2019-20          | 45.000             | 53.699               |
| 2020-21          | 40.568             | 52.493               |
| 2021-22          | 41.454             | 53.421               |
| 2022-23          | 52.499             | 68.595               |
| 2023-24 (Target) | 60.000             | 75.01                |

|    |                                  |   |  |
|----|----------------------------------|---|--|
| 2. | <b>No. of Inclines (Running)</b> | : | NA   |
| 3. | <b>Shafts</b>                    | : | NA   |
| 4. | <b>No. of quarries</b>           | : | One<br>Maximum Width along Strike, at Surface: 9180 m<br>Maximum length along dip, at surface 3290m                          |
| 5. | <b>Overburden</b>                | : | External O.B. dumps- 07 nos.<br>Internal O.B. dumps- 08 nos.   |
| 6. | <b>Main Consumers</b>            | : | State Electricity Boards and NTPC, Korba.  |
| 7. | <b>Mode of dispatch</b>          | : | Through Merry- Go-Round railway track.<br>The coal is dispatched to power houses of Maharashtra and Gujarat through railway. |

## CHAPTER-II

### FORM-V (See rule 14)

Environmental Statement for the Financial Year ending

31<sup>st</sup> March 2023

#### PART-A

|       |   |   |   |
|-------|---|---|---|
| (i)   | <b>Name and address of the mine</b>                                 | : | Gevra Open cast Expansion Project<br>P.O. Gevra Project<br>Dist. Korba<br>Chhattisgarh-495452 |
| (ii)  | <b>Industry category Primary (SIC Code) or Secondary (SIC Code)</b> | : | Primary   |
| (iii) | <b>Production capacity units</b>                                    | : | 52.50 Million Tonne   |
| (iv)  | <b>Year of establishment</b>  | : | 1981-82   |
| (v)   | <b>Date of the last environmental Statement Submitted</b>           | : | September 2022  |

## PART-B

### Water and Raw Materials Consumption

#### (i) Water Consumption (KLD)

**Industrial consumption:** Cat-I: 4207 KLD  
Cat-III:3764 KLD

**Domestic consumption:** 5982 KLD

| Name of Products | Process water consumption per product output  |   |
|------------------|---|---|
|                  | During the previous financial year 2021-22    | During the current financial year 2022-23 |
| Coal             | (Water is not required in opencast coal mine) |   |

#### (ii) Raw materials consumption

| *Name of raw materials | Name of products | Consumption of raw material per unit of output |   |
|------------------------|------------------|--|---|
|                        |                  | During the previous financial year 2021-22     | During the current financial year 2022-23 |
| Explosive              | Coal             | 0.686 kg/tonne                                 | 0.714 kg/tonne                            |
| P.O.L                  | Coal             | 0.0164 lit/tonne                               | 0.0219 lit/tonne                          |

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

## PART-C

### POLLUTANT DISCHARGED TO ENVIRONMENT/ UNIT OF OUTPUT (Parameters as specified in the consent issued)

| Pollutants (Including mine & colony discharge of water) | Quantity of pollutants discharged (mass/day) | Concentrations of pollutants in discharges (mass/ volume) | Percentage of variation from prescribed standards with reasons |
|---|--|---|--|
| (a) Air   | Not Quantified                               | Environmental Monitoring report enclosed                  | Environmental Monitoring report enclosed                       |
| (b) Water   |  |   |  |
| (i) Mine water pumped out                               | 3764   |   |  |
| (ii) Industrial water discharged                        | NIL  |   |  |
| (iii) Colony water discharged                           | 2367   |   |  |
| (c) Noise   | Report Enclosed                              |   |  |

## PART-D

### HAZARDOUS WASTES

(As specified under Hazardous Wastes/ Management Handling Rule, 1989)

| Hazardous Wastes                  | Total quantity   |   |
|-----------------------------------|--|---|
|                                   | During the previous financial year 2021-22                                 | During the current financial year 2022-23                                   |
| From Process                      | Used Oil: 168 KL<br>Waste Oil Filter: 4931 Nos.                            | Used Oil: 153.38 KL<br>Waste Oil Filter: 2581 Nos.                          |
| From Pollution control facilities | Waste Oil: 0.43 KL<br>Bottom Oily Sludge from ETP: 137.380 MT (Metric Ton) | Waste Oil: 0.310 KL<br>Bottom Oily Sludge from ETP: 127.795 MT (Metric Ton) |

Neither liquid nor solid hazardous wastes are generated during underground coal mining.

## PART-E

### SOLID WASTES

| Removal of overburden       | Total quantity                             |   |
|-----------------------------|--|---|
|                             | During the previous financial year 2021-22 | During the current financial year 2022-23 |
| Total O.B.                  | 53.269 M Cum                               | 68.595 M Cum                              |
| Total O.B. For back filling | 53.269 M Cum                               | 68.595 M Cum                              |
| Total O.B. disposed         | NIL  | NIL                                       |

## PART-F

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

| Description        | Qty. Kg / Year (22-23) | Collection Method                                 |
|--------------------|------------------------|---|
| Iron & Steel Scrap | 125680                 | Auctioned & disposed through an authorized agency |
| Copper Scrap       | 980                    | -   |
| Aluminum Scrap     | 5700                   | -   |
| Used Oil           | 247.380 KL             | Auctioned & disposed through an authorized agency |

## **PART-G**

### **Impact of the pollution abatement measure taken on conservation of natural resources and on the cost of production.**

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In order to carryout mining in the Eco-friendly manner, following pollution control measures have been implemented.

#### **(A) Air pollution control facilities and control measures adopted at Gevra Project:-**

1. Mobile Water Sprinklers of capacity 70 KL (15 Nos), 28 KL(1 No) and 9 KL (22 Nos, Contractual) are used for dust Suppression in mine haul roads and in coal tipper roads on regular basis.
2. Mist spray water sprinklers are provided in Conveyor belt, Transfer Points, Silo's and at 30,000 T Ground Bunker for effective dust suppression at CHP. Feeder breakers/crushers are also provided with mist spray water sprinklers.
3. Procured Truck Mounted mist blower/fog forming long range water sprinkler system with horizontal throw of 40 mtrs for effective dust suppression in coal stockyards and other mine premises.
4. Installation of Wind breaker/shield arrangement along the railway siding for reducing the dust propagation in upwind direction has been completed in September 2020.
5. Installation of plant guiding structure for Vertical Greenery system has been completed in March 2021 & the plantation work has been completed in Aug 2021.
6. Trucks are optimally loaded to prevent spillage on haul roads. Coal loaded trucks are covered with tarpaulins before leaving the mine premises.
7. Whenever the coal dust / slurry accumulate on Haul roads and other roads of Mine premises, the same is cleaned by the use of Graders & Loaders.
8. Dust extractors are provided in Drills to reduce dust emission.
9. Every year Extensive Plantation is being done on OB dumps and Plain Areas in consultation with CGRVVN. This act as dust & noise barrier between mine area and residential area. More than 44.34 lakhs saplings have been planted since 1986 in Gevra OCP including downwind direction.
10. Plantation work in Safety zone (all around the mine boundary with 7.5 m width) is in progress. About 28000 saplings have been planted covering length of 14 kms.
11. Thick green belts are developed around residential areas. Also plantation done along colony roads and around other mine infrastructures.
12. Employees are provided with LP Gas connections, restricting burning of coal for domestic use.
13. All approach roads to mine and all other roads which are in regular use are black topped. Internal roads & other permanent haul roads in side mine are WBM roads.
14. Production from Surface Miners reduced the requirement of drilling & blasting and further crushing at In Pit & Surface crushers.
15. CAAQMS is installed for regular monitoring of ambient air quality parameters.
16. Fortnightly monitoring of Air Quality is done by CMPDIL RI V.
17. Two nos. mechanized sweeping machine is put into operation for sweeping of colony roads.



**(B) Water Pollution control facilities and measures adopted at Gevra Project:-**

1. Oil and Grease trap (Effluent Treatment Plant) is in operation for treating workshop effluent (HEMM Washing). Treated effluent is reused for HEMM washing .Hence this is a Zero Discharge Plant.
2. Domestic Effluent Treatment Plant (DETP) of capacity 3 MLD is in operation for treating Domestic Effluent of the residential colonies.
3. Properly constructed storm water drains have been maintained in the colony.
4. Garland Drains are constructed all along the Mine Boundary.
5. The Extensive plantation in and around the mine lease area also helps in effective recharge of ground water table.
6. Settling ponds are provided for treating the mine water discharge as well as OB Dump run-off.
7. To augment groundwater recharge Rainwater Harvesting Structures are constructed.
8. Fortnightly monitoring of Water Quality is done by CMPDIL RI- V

**(C) Noise Pollution Control facilities and measures at Gevra Project:-**

1. Generally the blasting operations are carried out in between 12.00 noon to 4.00 PM.
2. Proper maintenance of HEMM to reduce the avoidable vibrations and noise.
3. Employees who are exposed to higher level of noise are provided with Ear Plugs.
4. Extensive Plantation done on overburden dumps, which act as noise barrier between mine area and residential area.
5. Thick green belts developed around residential areas. Also plantation done along colony roads and around other mine infrastructures. These green belts also act as noise barriers.
6. At crushers/feeder breakers synthetic liners are fitted in few hoppers to reduce noise generation.
7. HEMMs are provided with noise proof cabins for operators.
8. Shock tube initiation system of delay blasting is adopted for Coal & OB blasting to reduce blast related noise & vibrations.
9. Introduction of Surface Miners reduced the requirement of drilling & blasting and further crushing at In Pit & Surface crushers.

**Impact of Pollution Control measures on Cost of Production:**

During the year 2021 -22 the impact per tonne of coal is Rs. 13.24 per tonne, whereas expenditure on environmental related works comes to Rs. 27.60 per tonne.

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## PART-H

### **ADDITIONAL MEASURES / INVESTMENT PROPOSALS FOR ENVIRONMENTAL PROTECTION INCLUDING ABATEMENT OF POLLUTION, PREVENTION OF POLLUTION.**

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1. 9 nos. Long range Fogging machine of 40 m throw has been put into operation (Expenditure: Rs. 16.67 Cr)
  2. Wind breaker/barrier system along 1.5 km has been installed at the Railway siding. (Expenditure: Rs. 1.86 Crore)
  3. 2 nos. mechanized Sweeping machine has been put into operation. (Expenditure: Rs. 73.74 Lakhs)
  4. Vertical Greenery system along 700 m in the predominant downwind direction has been installed. (Expenditure: Rs.89.12 Lakhs)
  5. Fixed sprinklers 400 nos. with 25 m throw have been put into operation covering 12 KM along Coal Transportation road. (Expenditure: Rs.4.04 Cr)
  6. Tyre washing System at the exit point of Mine is in operation since Feb 2023. (Expenditure: Rs. 47.12 Lakhs)
  7. 6 nos. Rippers have been deployed in the Eastern Section of the mine for Blast Free Mining
- 

## PART-I

### **ANY OTHER PARTICULARS FOR IMPROVING THE QUALITY OF THE ENVIRONMENT**

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#### PROPOSED POLLUTION CONTROL MEASURES

- Miyawaki Forest has been proposed in 2 Ha. area (Project Cost approx Rs. 5 Crore)
  - 15 nos. Trolley mounted fog cannon have been proposed. (Approx. Cost: Rs. 13 Crore)
  - Wind Barrier wall has been proposed from Shramik Chouk to Dipka Chouk (Approx. cost Rs. 2 crore)
  - Additional 2 nos. wheel washing Arrangement has been proposed at the exit point of Mine (Rs. Approx. Cost 1 crore)
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# **ENVIRONMENTAL MONITORING REPORT**

**CENTRAL MINE PLANNING AND DESIGN INSTITUTE LIMITED**

Environment Laboratory, Regional Institute-V,  
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 website: [www.cmpdi.co.in](http://www.cmpdi.co.in)

**AIR QUALITY REPORT**

|       |         |      |       |           |                |
|-------|---------|------|-------|-----------|----------------|
| Month | JANUARY | Area | GEVRA | Report No | BSP/2023/01/03 |
|-------|---------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 06/02/2023   |
| Name of the Project  | GEVRA OC                               | Sample Reference No. | GEGA1- GEGA2 |

| Limit (in $\mu\text{g}/\text{m}^3$ )-24 hrs                                    | Parameter   |                  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |     |
|--|---|------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|-----|
|  | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000) |                  | A-O                 | 600                  | 300                                 | -                   | 120                 |         | 120 |
|  |   | A-N              | 500                 | 250                  | -                                   | 120                 | 120                 |         |     |
| Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) |   | B                | 200                 | 100                  | 60                                  | 80                  | 80                  |         |     |
| Method of analysis   |   |                  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |     |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ )                               |   |                  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |     |
| Station Name   | Station category                                  | Date of sampling | Date of analysis    |                      |                                     |                     |                     |         |     |
| 1. DETP/TA Office  | A-O   | 03.01.2023       | 08.01.2023          | 546                  | 238                                 | 65                  | 29                  | 36      |     |
|  |   | 06.01.2023       | 08.01.2023          | 560                  | 250                                 | 68                  | 36                  | 26      |     |
|  |   | 09.01.2023       | 13.01.2023          | 552                  | 242                                 | 66                  | 22                  | 29      |     |
|  |   | 12.01.2023       | 13.01.2023          | 561                  | 249                                 | 69                  | 25                  | 31      |     |
|  |   | 17.01.2023       | 27.01.2023          | 549                  | 240                                 | 67                  | 28                  | 22      |     |
|  |   | 19.01.2023       | 29.01.2023          | 544                  | 238                                 | 64                  | 26                  | 33      |     |
|  |   | 24.01.2023       | 30.01.2023          | 551                  | 245                                 | 65                  | 30                  | 21      |     |
|  |   | 27.01.2023       | 30.01.2023          | 542                  | 236                                 | 63                  | 28                  | 34      |     |
|  |   | 31.01.2023       | 03.02.2023          | 548                  | 247                                 | 66                  | 32                  | 25      |     |
| 2. Shakti Nagar  | B   | 03.01.2023       | 08.01.2023          | 165                  | 62                                  | 36                  | 26                  | 35      |     |
|  |   | 06.01.2023       | 08.01.2023          | 159                  | 60                                  | 32                  | 24                  | 28      |     |
|  |   | 09.01.2023       | 13.01.2023          | 161                  | 59                                  | 33                  | 28                  | 34      |     |
|  |   | 12.01.2023       | 13.01.2023          | 166                  | 64                                  | 35                  | 26                  | 32      |     |
|  |   | 17.01.2023       | 27.01.2023          | 160                  | 58                                  | 32                  | 23                  | 31      |     |
|  |   | 19.01.2023       | 29.01.2023          | 167                  | 63                                  | 37                  | 27                  | 34      |     |
|  |   | 24.01.2023       | 30.01.2023          | 158                  | 57                                  | 32                  | 24                  | 30      |     |
|  |   | 27.01.2023       | 30.01.2023          | 156                  | 55                                  | 31                  | 21                  | 28      |     |
|  |   | 31.01.2023       | 03.02.2023          | 161                  | 58                                  | 35                  | 25                  | 29      |     |

*B. S. G.*  
 Analyzed by

*D. Singh*  
 Checked By

*C. K. Vel.*  
 Manager- Environment

Note: 1) The results above relate to the samples tested.

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**AIR QUALITY REPORT**

|       |         |      |       |           |                |
|-------|---------|------|-------|-----------|----------------|
| Month | JANUARY | Area | GEVRA | Report No | BSP/2023/01/03 |
|-------|---------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 06/02/2023   |
| Name of the Project  | Gevra OC                               | Sample Reference No. | GEGA3- GEGA4 |

| Limit (in $\mu\text{g}/\text{m}^3$ )-24 hrs                                    | Parameter   |                  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |
|--|---|------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|
|  | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000) |                  | A-O                 | 600                  | 300                                 | -                   | 120                 |         |
|  |   | A-N              | 500                 | 250                  | -                                   | 120                 | 120                 |         |
| Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) |   | B                | 200                 | 100                  | 60                                  | 80                  | 80                  |         |
| Method of analysis   |   |                  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ )                               |   |                  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |
| Station Name   | Station category                                  | Date of sampling | Date of analysis    |                      |                                     |                     |                     |         |
| 3. Urja Nagar  | B   | 03.01.2023       | 08.01.2023          | 168                  | 63                                  | 38                  | 22                  | 27      |
|  |   | 06.01.2023       | 08.01.2023          | 163                  | 60                                  | 34                  | 26                  | 33      |
|  |   | 09.01.2023       | 13.01.2023          | 166                  | 64                                  | 36                  | 24                  | 30      |
|  |   | 12.01.2023       | 13.01.2023          | 160                  | 58                                  | 35                  | 25                  | 31      |
|  |   | 17.01.2023       | 27.01.2023          | 167                  | 65                                  | 37                  | 23                  | 28      |
|  |   | 19.01.2023       | 29.01.2023          | 158                  | 57                                  | 32                  | 21                  | 29      |
|  |   | 24.01.2023       | 30.01.2023          | 162                  | 62                                  | 34                  | 24                  | 32      |
|  |   | 27.01.2023       | 30.01.2023          | 159                  | 59                                  | 33                  | 21                  | 29      |
|  |   | 31.01.2023       | 03.02.2023          | 169                  | 66                                  | 39                  | 27                  | 33      |
| 4. Dy GM Office  | A-O   | 03.01.2023       | 08.01.2023          | 546                  | 239                                 | 65                  | 24                  | 31      |
|  |   | 06.01.2023       | 08.01.2023          | 539                  | 244                                 | 62                  | 32                  | 28      |
|  |   | 09.01.2023       | 13.01.2023          | 547                  | 241                                 | 63                  | 29                  | 36      |
|  |   | 12.01.2023       | 13.01.2023          | 556                  | 246                                 | 68                  | 27                  | 35      |
|  |   | 17.01.2023       | 27.01.2023          | 541                  | 242                                 | 65                  | 35                  | 27      |
|  |   | 19.01.2023       | 29.01.2023          | 548                  | 244                                 | 66                  | 32                  | 26      |
|  |   | 24.01.2023       | 30.01.2023          | 536                  | 236                                 | 62                  | 25                  | 29      |
|  |   | 27.01.2023       | 30.01.2023          | 533                  | 233                                 | 61                  | 28                  | 35      |
|  |   | 31.01.2023       | 03.02.2023          | 538                  | 237                                 | 64                  | 24                  | 32      |

*B. S. G.*  
 Analyzed by

*S. Singh*  
 Checked By

*C. K. Vel.*  
 Manager- Environment

Note: 1) The results above relate to the samples tested.

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 website: [www.cmpdi.co.in](http://www.cmpdi.co.in)

**AIR QUALITY REPORT**

|              |         |             |       |                  |                |
|--------------|---------|-------------|-------|------------------|----------------|
| <b>Month</b> | JANUARY | <b>Area</b> | GEVRA | <b>Report No</b> | BSP/2023/01/03 |
|--------------|---------|-------------|-------|------------------|----------------|

|                             |  |                             |              |
|-----------------------------|--|-----------------------------|--------------|
| <b>Name of the Customer</b> | South Eastern Coalfields Ltd, Bilaspur | <b>Date of Issue</b>        | 06/02/2023   |
| <b>Name of the Project</b>  | Gevra OC                               | <b>Sample Reference No.</b> | GEGA5- GEGA6 |

| Limit (in $\mu\text{g}/\text{m}^3$ ) - 24 hrs                     | Parameter  |                  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |  |
|---|--|------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|--|
|   | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)                              | A-O              | 600                 | 300                  | -                                   | 120                 | 120                 |         |  |
|   |  | A-N              | 500                 | 250                  | -                                   | 120                 | 120                 |         |  |
|   | Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) | B                | 200                 | 100                  | 60                                  | 80                  | 80                  |         |  |
| <b>Method of analysis</b>   |  |                  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |  |
| <b>Uncertainty Range (in <math>\mu\text{g}/\text{m}^3</math>)</b> |  |                  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |  |
| Station Name  | Station category   | Date of sampling | Date of analysis    |                      |                                     |                     |                     |         |  |
| 5. Bhilai Bazar Village   | B  | 04.01.2023       | 11.01.2023          | 168                  | 63                                  | 34                  | 22                  | 28      |  |
|   |  | 07.01.2023       | 11.01.2023          | 159                  | 59                                  | 30                  | 25                  | 29      |  |
|   |  | 10.01.2023       | 13.01.2023          | 163                  | 64                                  | 32                  | 24                  | 31      |  |
|   |  | 13.01.2023       | 13.01.2023          | 158                  | 58                                  | 33                  | 29                  | 24      |  |
|   |  | 18.01.2023       | 27.01.2023          | 167                  | 65                                  | 38                  | 35                  | 28      |  |
|   |  | 20.01.2023       | 27.01.2023          | 164                  | 62                                  | 35                  | 29                  | 23      |  |
|   |  | 23.01.2023       | 27.01.2023          | 162                  | 59                                  | 34                  | 31                  | 25      |  |
|   |  | 28.01.2023       | 03.02.2023          | 157                  | 57                                  | 31                  | 25                  | 29      |  |
| 6. Dhurena Village  | B  | 04.01.2023       | 11.01.2023          | 162                  | 59                                  | 36                  | 29                  | 21      |  |
|   |  | 07.01.2023       | 11.01.2023          | 163                  | 63                                  | 34                  | 31                  | 25      |  |
|   |  | 10.01.2023       | 13.01.2023          | 168                  | 65                                  | 37                  | 33                  | 28      |  |
|   |  | 13.01.2023       | 13.01.2023          | 161                  | 58                                  | 33                  | 28                  | 23      |  |
|   |  | 18.01.2023       | 27.01.2023          | 168                  | 63                                  | 35                  | 29                  | 34      |  |
|   |  | 20.01.2023       | 27.01.2023          | 164                  | 61                                  | 34                  | 25                  | 31      |  |
|   |  | 23.01.2023       | 27.01.2023          | 157                  | 57                                  | 31                  | 23                  | 30      |  |
|   |  | 28.01.2023       | 03.02.2023          | 159                  | 56                                  | 32                  | 27                  | 22      |  |
|   |  | 30.01.2023       | 03.02.2023          | 167                  | 62                                  | 36                  | 33                  | 26      |  |

*B. S. S.*  
Analyzed by

*[Signature]*  
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*C. K. Vel.*  
Manager-Environment

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**AIR QUALITY REPORT**

|       |         |      |       |           |                |
|-------|---------|------|-------|-----------|----------------|
| Month | JANUARY | Area | GEVRA | Report No | BSP/2023/01/03 |
|-------|---------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 06/02/2023   |
| Name of the Project  | Gevra OC                               | Sample Reference No. | GEGA7- GEGA8 |

| Parameter  |  |                  |                  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |
|--|--|------------------|------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|
| Limit (in $\mu\text{g}/\text{m}^3$ ) - 24hrs     | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)                              | A-O              |                  | 600                 | 300                  | -                                   | 120                 | 120                 |         |
|  |  | A-N              |                  | 500                 | 250                  | -                                   | 120                 | 120                 |         |
|  | Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) | B                |                  | 200                 | 100                  | 60                                  | 80                  | 80                  |         |
| Method of analysis                               |  |                  |                  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ ) |  |                  |                  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |
| Station Name                                     | Station category   | Date of sampling | Date of analysis |                     |                      |                                     |                     |                     |         |
| 7. Ganga Nagar Village                           | B  | 04.01.2023       | 11.01.2023       | 161                 | 63                   | 34                                  | 25                  | 32                  |         |
|  |  | 07.01.2023       | 11.01.2023       | 158                 | 59                   | 36                                  | 27                  | 35                  |         |
|  |  | 10.01.2023       | 13.01.2023       | 168                 | 62                   | 35                                  | 24                  | 33                  |         |
|  |  | 13.01.2023       | 13.01.2023       | 160                 | 58                   | 32                                  | 26                  | 31                  |         |
|  |  | 18.01.2023       | 27.01.2023       | 163                 | 61                   | 34                                  | 23                  | 32                  |         |
|  |  | 20.01.2023       | 27.01.2023       | 167                 | 64                   | 38                                  | 30                  | 35                  |         |
|  |  | 23.01.2023       | 27.01.2023       | 156                 | 57                   | 31                                  | 25                  | 29                  |         |
|  |  | 28.01.2023       | 03.02.2023       | 159                 | 58                   | 33                                  | 27                  | 34                  |         |
| 8. Ralia Village                                 | B  | 04.01.2023       | 11.01.2023       | 157                 | 59                   | 34                                  | 26                  | 32                  |         |
|  |  | 07.01.2023       | 11.01.2023       | 158                 | 55                   | 31                                  | 22                  | 30                  |         |
|  |  | 10.01.2023       | 13.01.2023       | 167                 | 65                   | 32                                  | 25                  | 29                  |         |
|  |  | 13.01.2023       | 13.01.2023       | 165                 | 63                   | 36                                  | 23                  | 34                  |         |
|  |  | 18.01.2023       | 27.01.2023       | 163                 | 59                   | 33                                  | 26                  | 30                  |         |
|  |  | 20.01.2023       | 27.01.2023       | 167                 | 63                   | 34                                  | 23                  | 33                  |         |
|  |  | 23.01.2023       | 27.01.2023       | 164                 | 60                   | 37                                  | 27                  | 32                  |         |
|  |  | 28.01.2023       | 03.02.2023       | 159                 | 57                   | 33                                  | 25                  | 31                  |         |
|  |  | 30.01.2023       | 03.02.2023       | 162                 | 59                   | 35                                  | 22                  | 29                  |         |

*B. S. S.*  
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*[Signature]*  
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*C. K. Vel.*  
Manager- Environment

Note: 1) The results above relate to the samples tested.  
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**NOISE QUALITY REPORT**

|                             |  |             |                             |                  |                |
|-----------------------------|--|-------------|-----------------------------|------------------|----------------|
| <b>Month</b>                | JANUARY                                | <b>Area</b> | GEVRA                       | <b>Report No</b> | BSP/2023/01/03 |
| <b>Name of the Customer</b> | South Eastern Coalfields Ltd, Bilaspur |             | <b>Date of Issue</b>        | 09/02/2023       |                |
| <b>Name of the Project</b>  | GEVRA OC                               |             | <b>Sample Reference No.</b> | GEGN1- GEGN8     |                |

| Parameter               |  |                     | The Noise Pollution (R & C) rules, 2000 |                | Remarks |
|-------------------------|--|---------------------|---|----------------|---------|
|                         |  |                     | Day Time                                | Night Time     |         |
| Limit (in dB(A)Leq      | Industrial area                                  | A                   | 75                                      | 70             |         |
|                         | Commercial area                                  | B                   | 65                                      | 55             |         |
|                         | Residential Area                                 | C                   | 55                                      | 45             |         |
|                         | Silence Zone                                     | D                   | 50                                      | 40             |         |
| Method of analysis      | CPCB Protocol For Ambient Level Noise Monitoring |                     |   |                |         |
| Station Name            | Station category                                 | Date of measurement | Value in dB(A)                          | Value in dB(A) |         |
| 1. DETP Control Room    | A  | 09.01.2023          | 61.3                                    | 45.1           |         |
|                         |  | 23.01.2023          | 58.8                                    | 44.4           |         |
| 2. Shakti Nagar         | C  | 09.01.2023          | 46.4                                    | 35.2           |         |
|                         |  | 23.01.2023          | 45.1                                    | 35.6           |         |
| 3. Urja Nagar           | C  | 09.01.2023          | 46.8                                    | 36.3           |         |
|                         |  | 23.01.2023          | 45.6                                    | 35.7           |         |
| 4. Dy.GM Office         | A  | 09.01.2023          | 60.3                                    | 44.4           |         |
|                         |  | 23.01.2023          | 59.7                                    | 45.1           |         |
| 5. Bhilai Bazar Village | C  | 09.01.2023          | 44.7                                    | 35.0           |         |
|                         |  | 23.01.2023          | 46.5                                    | 34.5           |         |
| 6. Dhurena Village      | C  | 09.01.2023          | 45.6                                    | 36.1           |         |
|                         |  | 23.01.2023          | 46.4                                    | 34.3           |         |
| 7. Ganga Nagar Village  | C  | 09.01.2023          | 46.2                                    | 35.2           |         |
|                         |  | 23.01.2023          | 44.9                                    | 34.8           |         |
| 8. Ralia Village        | C  | 09.01.2023          | 45.6                                    | 35.2           |         |
|                         |  | 23.01.2023          | 46.1                                    | 35.6           |         |

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**AIR QUALITY REPORT**

|       |          |      |       |           |                |
|-------|----------|------|-------|-----------|----------------|
| Month | FEBRUARY | Area | GEVRA | Report No | BSP/2023/02/03 |
|-------|----------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 09/03/2023   |
| Name of the Project  | GEVRA OC                               | Sample Reference No. | GEGA1- GEGA2 |

| Limit (in $\mu\text{g}/\text{m}^3$ )-24 hrs                                    | Parameter   |                  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |
|--|---|------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|
|  | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000) |                  | A-O                 | 600                  | 300                                 | -                   | 120                 |         |
|  |   | A-N              | 500                 | 250                  | -                                   | 120                 | 120                 |         |
| Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) |   | B                | 200                 | 100                  | 60                                  | 80                  | 80                  |         |
| Method of analysis   |   |                  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ )                               |   |                  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |
| Station Name   | Station category                                  | Date of sampling | Date of analysis    |                      |                                     |                     |                     |         |
| 1. DETP/TA Office  | A-O   | 03.02.2023       | 08.02.2023          | 571                  | 258                                 | 51                  | 31                  | 38      |
|  |   | 06.02.2023       | 08.02.2023          | 592                  | 268                                 | 59                  | 34                  | 36      |
|  |   | 09.02.2023       | 13.02.2023          | 584                  | 262                                 | 57                  | 36                  | 28      |
|  |   | 12.02.2023       | 13.02.2023          | 495                  | 251                                 | 48                  | 25                  | 33      |
|  |   | 17.02.2023       | 25.02.2023          | 512                  | 253                                 | 54                  | 23                  | 35      |
|  |   | 19.02.2023       | 25.02.2023          | 527                  | 271                                 | 56                  | 33                  | 32      |
|  |   | 24.02.2023       | 28.02.2023          | 498                  | 258                                 | 51                  | 28                  | 35      |
|  |   | 27.02.2023       | 01.03.2023          | 523                  | 259                                 | 55                  | 30                  | 37      |
| 2. Shakti Nagar  | B   | 03.02.2023       | 08.02.2023          | 188                  | 90                                  | 45                  | 28                  | 36      |
|  |   | 06.02.2023       | 08.02.2023          | 179                  | 87                                  | 34                  | 31                  | 37      |
|  |   | 09.02.2023       | 13.02.2023          | 177                  | 73                                  | 42                  | 29                  | 34      |
|  |   | 12.02.2023       | 13.02.2023          | 193                  | 85                                  | 49                  | 27                  | 38      |
|  |   | 17.02.2023       | 25.02.2023          | 187                  | 83                                  | 47                  | 26                  | 36      |
|  |   | 19.02.2023       | 25.02.2023          | 174                  | 78                                  | 37                  | 27                  | 35      |
|  |   | 24.02.2023       | 28.02.2023          | 198                  | 91                                  | 48                  | 31                  | 37      |
|  |   | 27.02.2023       | 01.03.2023          | 184                  | 83                                  | 42                  | 33                  | 39      |

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**AIR QUALITY REPORT**

|       |          |      |       |           |                |
|-------|----------|------|-------|-----------|----------------|
| Month | FEBRUARY | Area | GEVRA | Report No | BSP/2023/02/03 |
|-------|----------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 09/03/2023   |
| Name of the Project  | Gevra OC                               | Sample Reference No. | GEGA3- GEGA4 |

| Limit (in $\mu\text{g}/\text{m}^3$ )-24 hrs                                    | Parameter   |                  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |
|--|---|------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|
|  | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000) |                  | A-O                 | 600                  | 300                                 | -                   | 120                 |         |
|  |   | A-N              | 500                 | 250                  | -                                   | 120                 | 120                 |         |
| Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) |   | B                | 200                 | 100                  | 60                                  | 80                  | 80                  |         |
| Method of analysis   |   |                  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ )                               |   |                  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |
| Station Name   | Station category                                  | Date of sampling | Date of analysis    |                      |                                     |                     |                     |         |
| 3. Urja Nagar  | B   | 03.02.2023       | 08.02.2023          | 171                  | 72                                  | 34                  | 22                  | 31      |
|  |   | 06.02.2023       | 08.02.2023          | 184                  | 75                                  | 44                  | 25                  | 36      |
|  |   | 09.02.2023       | 13.02.2023          | 182                  | 78                                  | 42                  | 23                  | 33      |
|  |   | 12.02.2023       | 13.02.2023          | 165                  | 62                                  | 31                  | 27                  | 32      |
|  |   | 17.02.2023       | 25.02.2023          | 171                  | 77                                  | 33                  | 21                  | 30      |
|  |   | 19.02.2023       | 25.02.2023          | 162                  | 67                                  | 30                  | 24                  | 32      |
|  |   | 24.02.2023       | 28.02.2023          | 188                  | 81                                  | 44                  | 35                  | 26      |
|  |   | 27.02.2023       | 01.03.2023          | 164                  | 62                                  | 32                  | 33                  | 25      |
| 4. Dy GM Office  | A-O   | 03.02.2023       | 08.02.2023          | 528                  | 238                                 | 55                  | 23                  | 32      |
|  |   | 06.02.2023       | 08.02.2023          | 538                  | 231                                 | 57                  | 26                  | 35      |
|  |   | 09.02.2023       | 13.02.2023          | 547                  | 244                                 | 59                  | 34                  | 25      |
|  |   | 12.02.2023       | 13.02.2023          | 574                  | 255                                 | 64                  | 22                  | 34      |
|  |   | 17.02.2023       | 25.02.2023          | 501                  | 241                                 | 54                  | 26                  | 32      |
|  |   | 19.02.2023       | 25.02.2023          | 545                  | 252                                 | 57                  | 32                  | 35      |
|  |   | 24.02.2023       | 28.02.2023          | 489                  | 232                                 | 52                  | 28                  | 36      |
|  |   | 27.02.2023       | 01.03.2023          | 542                  | 247                                 | 60                  | 34                  | 44      |

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 Analyzed by

*S. Singh*  
 Checked By

*C. K. Vel.*  
 Manager- Environment

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**AIR QUALITY REPORT**

|              |          |             |       |                  |                |
|--------------|----------|-------------|-------|------------------|----------------|
| <b>Month</b> | FEBRUARY | <b>Area</b> | GEVRA | <b>Report No</b> | BSP/2023/02/03 |
|--------------|----------|-------------|-------|------------------|----------------|

|                             |  |                             |              |
|-----------------------------|--|-----------------------------|--------------|
| <b>Name of the Customer</b> | South Eastern Coalfields Ltd, Bilaspur | <b>Date of Issue</b>        | 09/03/2023   |
| <b>Name of the Project</b>  | Gevra OC                               | <b>Sample Reference No.</b> | GEGA5- GEGA6 |

| Limit (in $\mu\text{g}/\text{m}^3$ ) - 24 hrs                     | Parameter  |                  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |
|---|--|------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|
|   | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)                              | A-O              | 600                 | 300                  | -                                   | 120                 | 120                 |         |
|   |  | A-N              | 500                 | 250                  | -                                   | 120                 | 120                 |         |
|   | Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) | B                | 200                 | 100                  | 60                                  | 80                  | 80                  |         |
| <b>Method of analysis</b>   |  |                  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |
| <b>Uncertainty Range (in <math>\mu\text{g}/\text{m}^3</math>)</b> |  |                  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |
| Station Name  | Station category   | Date of sampling | Date of analysis    |                      |                                     |                     |                     |         |
| 5. Bhilai Bazar Village   | B  | 04.02.2023       | 11.02.2023          | 171                  | 67                                  | 35                  | 24                  | 36      |
|   |  | 07.02.2023       | 11.02.2023          | 158                  | 57                                  | 31                  | 35                  | 27      |
|   |  | 10.02.2023       | 13.02.2023          | 165                  | 62                                  | 33                  | 22                  | 31      |
|   |  | 13.02.2023       | 13.02.2023          | 159                  | 56                                  | 35                  | 28                  | 34      |
|   |  | 18.02.2023       | 27.02.2023          | 166                  | 66                                  | 37                  | 25                  | 36      |
|   |  | 20.02.2023       | 27.02.2023          | 163                  | 63                                  | 34                  | 29                  | 33      |
|   |  | 23.02.2023       | 27.02.2023          | 167                  | 59                                  | 35                  | 26                  | 35      |
| 6. Dhurena Village  | B  | 04.02.2023       | 11.02.2023          | 152                  | 55                                  | 31                  | 28                  | 20      |
|   |  | 07.02.2023       | 11.02.2023          | 164                  | 62                                  | 35                  | 32                  | 26      |
|   |  | 10.02.2023       | 13.02.2023          | 158                  | 57                                  | 34                  | 23                  | 34      |
|   |  | 13.02.2023       | 13.02.2023          | 162                  | 56                                  | 37                  | 38                  | 25      |
|   |  | 18.02.2023       | 27.02.2023          | 165                  | 62                                  | 36                  | 24                  | 33      |
|   |  | 20.02.2023       | 27.02.2023          | 168                  | 65                                  | 38                  | 25                  | 32      |
|   |  | 23.02.2023       | 27.02.2023          | 159                  | 59                                  | 34                  | 33                  | 22      |
|   |  | 26.02.2023       | 03.03.2023          | 155                  | 57                                  | 32                  | 23                  | 36      |

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**AIR QUALITY REPORT**

|              |          |             |       |                  |                |
|--------------|----------|-------------|-------|------------------|----------------|
| <b>Month</b> | FEBRUARY | <b>Area</b> | GEVRA | <b>Report No</b> | BSP/2023/02/03 |
|--------------|----------|-------------|-------|------------------|----------------|

|                             |  |                             |              |
|-----------------------------|--|-----------------------------|--------------|
| <b>Name of the Customer</b> | South Eastern Coalfields Ltd, Bilaspur | <b>Date of Issue</b>        | 09/03/2023   |
| <b>Name of the Project</b>  | Gevra OC                               | <b>Sample Reference No.</b> | GEGA7- GEGA8 |

| Parameter   |  |                         |                         | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |
|---|--|-------------------------|-------------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|
| Limit (in $\mu\text{g}/\text{m}^3$ ) - 24hrs                      | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)                              | A-O                     |                         | 600                 | 300                  | -                                   | 120                 | 120                 |         |
|   |  | A-N                     |                         | 500                 | 250                  | -                                   | 120                 | 120                 |         |
|   | Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) | B                       |                         | 200                 | 100                  | 60                                  | 80                  | 80                  |         |
| <b>Method of analysis</b>   |  |                         |                         | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |
| <b>Uncertainty Range (in <math>\mu\text{g}/\text{m}^3</math>)</b> |  |                         |                         |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |
| <b>Station Name</b>   | <b>Station category</b>  | <b>Date of sampling</b> | <b>Date of analysis</b> |                     |                      |                                     |                     |                     |         |
| 7. Ganga Nagar Village  | B  | 04.02.2023              | 11.02.2023              | 177                 | 72                   | 33                                  | 23                  | 32                  |         |
|   |  | 07.02.2023              | 11.02.2023              | 182                 | 75                   | 44                                  | 26                  | 33                  |         |
|   |  | 10.02.2023              | 13.02.2023              | 176                 | 73                   | 47                                  | 27                  | 35                  |         |
|   |  | 13.02.2023              | 13.02.2023              | 173                 | 61                   | 45                                  | 28                  | 38                  |         |
|   |  | 18.02.2023              | 27.02.2023              | 174                 | 63                   | 46                                  | 25                  | 36                  |         |
|   |  | 20.02.2023              | 27.02.2023              | 175                 | 69                   | 44                                  | 24                  | 34                  |         |
|   |  | 23.02.2023              | 27.02.2023              | 155                 | 56                   | 30                                  | 23                  | 31                  |         |
|   |  | 26.02.2023              | 03.03.2023              | 162                 | 50                   | 36                                  | 21                  | 32                  |         |
| 8. Ralia Village  | B  | 04.02.2023              | 11.02.2023              | 159                 | 54                   | 32                                  | 25                  | 33                  |         |
|   |  | 07.02.2023              | 11.02.2023              | 163                 | 58                   | 36                                  | 20                  | 31                  |         |
|   |  | 10.02.2023              | 13.02.2023              | 168                 | 64                   | 38                                  | 26                  | 34                  |         |
|   |  | 13.02.2023              | 13.02.2023              | 162                 | 61                   | 33                                  | 22                  | 32                  |         |
|   |  | 18.02.2023              | 27.02.2023              | 173                 | 67                   | 38                                  | 36                  | 24                  |         |
|   |  | 20.02.2023              | 27.02.2023              | 169                 | 64                   | 36                                  | 28                  | 36                  |         |
|   |  | 23.02.2023              | 27.02.2023              | 171                 | 66                   | 39                                  | 25                  | 33                  |         |
|   |  | 26.02.2023              | 03.03.2023              | 165                 | 62                   | 37                                  | 21                  | 29                  |         |

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*C. K. Vel.*  
 Manager- Environment

Note: 1) The results above relate to the samples tested.

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**AIR QUALITY REPORT**

|              |          |             |       |                  |                |
|--------------|----------|-------------|-------|------------------|----------------|
| <b>Month</b> | FEBRUARY | <b>Area</b> | GEVRA | <b>Report No</b> | BSP/2023/02/03 |
|--------------|----------|-------------|-------|------------------|----------------|

|                             |  |                             |               |
|-----------------------------|--|-----------------------------|---------------|
| <b>Name of the Customer</b> | South Eastern Coalfields Ltd, Bilaspur | <b>Date of Issue</b>        | 09/03/2023    |
| <b>Name of the Project</b>  | Gevra OC                               | <b>Sample Reference No.</b> | GEGA9- GEGA10 |

| Parameter   |  |                         |                         | PM <sub>100</sub>         | PM <sub>10</sub>           | PM <sub>2.5</sub>                               | SO <sub>2</sub>           | NO <sub>2</sub>           | Remarks |
|---|--|-------------------------|-------------------------|---------------------------|----------------------------|---|---------------------------|---------------------------|---------|
| Limit (in $\mu\text{g}/\text{m}^3$ )-<br>24hrs                    | Industrial Zone -(G.S.R. 742(E),<br>dated 25.9.2000)                                 | A-O                     |                         | 600                       | 300                        | -   | 120                       | 120                       |         |
|   |  | A-N                     |                         | 500                       | 250                        | -   | 120                       | 120                       |         |
|   | Residential Zone-(G.S.R. 826(E),<br>dated 16.11.2009 and GSR 176 (E),<br>02.04.1996) | B                       |                         | 200                       | 100                        | 60  | 80                        | 80                        |         |
| <b>Method of analysis</b>   |  |                         |                         | IS-5182<br>PART<br>4:2005 | IS-5182<br>PART<br>23:2006 | USEPA<br>CFR 40,<br>Appendix<br>L to Part<br>50 | IS-5182<br>PART<br>2:2001 | IS-5182<br>PART<br>6:2006 |         |
| <b>Uncertainty Range (in <math>\mu\text{g}/\text{m}^3</math>)</b> |  |                         |                         |                           | ±19.04                     |   | ±0.0687                   | ±0.4420                   |         |
| <b>Station Name</b>   | <b>Station category</b>  | <b>Date of sampling</b> | <b>Date of analysis</b> |                           |                            |   |                           |                           |         |
| 9. Newasa Village   | B  | 11.02.2023              | 13.02.2023              | 161                       | 63                         | 34  | 25                        | 32                        |         |
|   |  | 13.02.2023              | 15.02.2023              | 158                       | 59                         | 36  | 27                        | 35                        |         |
|   |  | 15.02.2023              | 17.02.2023              | 165                       | 62                         | 35  | 24                        | 33                        |         |
|   |  | 17.02.2023              | 13.02.2023              | 155                       | 58                         | 32  | 26                        | 31                        |         |
|   |  | 20.02.2023              | 27.02.2023              | 163                       | 61                         | 34  | 23                        | 34                        |         |
|   |  | 24.02.2023              | 27.02.2023              | 156                       | 57                         | 31  | 22                        | 29                        |         |
|   |  | 26.02.2023              | 03.03.2023              | 165                       | 60                         | 37  | 29                        | 36                        |         |
| 10. Rampur Village  | B  | 11.02.2023              | 13.02.2023              | 154                       | 56                         | 34  | 24                        | 31                        |         |
|   |  | 13.02.2023              | 15.02.2023              | 148                       | 51                         | 30  | 22                        | 28                        |         |
|   |  | 15.02.2023              | 17.02.2023              | 164                       | 65                         | 32  | 25                        | 29                        |         |
|   |  | 17.02.2023              | 13.02.2023              | 159                       | 60                         | 34  | 23                        | 32                        |         |
|   |  | 20.02.2023              | 27.02.2023              | 163                       | 59                         | 33  | 26                        | 30                        |         |
|   |  | 24.02.2023              | 27.02.2023              | 147                       | 53                         | 31  | 21                        | 27                        |         |
|   |  | 26.02.2023              | 03.03.2023              | 157                       | 57                         | 35  | 22                        | 29                        |         |

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*C. K. Vel.*  
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**AIR QUALITY REPORT**

| Month  | FEBRUARY   | Area             | GEVRA            |                           |                            | Report No                                       | BSP/2023/02/03            |                           |         |     |
|--|--|------------------|------------------|---------------------------|----------------------------|---|---------------------------|---------------------------|---------|-----|
| Name of the Customer                             | South Eastern Coalfields Ltd, Bilaspur   |                  |                  | Date of Issue             |                            | 09/03/2023                                      |                           |                           |         |     |
| Name of the Project                              | Gevra OC   |                  |                  | Sample Reference No.      |                            | GEGA11  |                           |                           |         |     |
| Parameter  |  |                  |                  | PM <sub>100</sub>         | PM <sub>10</sub>           | PM <sub>2.5</sub>                               | SO <sub>2</sub>           | NO <sub>2</sub>           | Remarks |     |
| Limit (in $\mu\text{g}/\text{m}^3$ )-<br>24hrs   | Industrial Zone -(G.S.R. 742(E),<br>dated 25.9.2000)                                 |                  |                  | A-O                       | 600                        | 300   | -                         | 120                       |         | 120 |
|  |  |                  |                  | A-N                       | 500                        | 250   | -                         | 120                       |         | 120 |
|  | Residential Zone-(G.S.R. 826(E),<br>dated 16.11.2009 and GSR 176 (E),<br>02.04.1996) |                  |                  | B                         | 200                        | 100   | 60                        | 80                        |         | 80  |
| Method of analysis                               |  |                  |                  | IS-5182<br>PART<br>4:2005 | IS-5182<br>PART<br>23:2006 | USEPA<br>CFR 40,<br>Appendix<br>L to Part<br>50 | IS-5182<br>PART<br>2:2001 | IS-5182<br>PART<br>6:2006 |         |     |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ ) |  |                  |                  |                           | ±19.04                     |   | ±0.0687                   | ±0.4420                   |         |     |
| Station Name                                     | Station category   | Date of sampling | Date of analysis |                           |                            |   |                           |                           |         |     |
| 11. Hardi Bazar                                  | B  | 02.02.2023       | 06.02.2023       | 139                       | 60                         | 37  | 27                        | 30                        |         |     |
|  |  | 07.02.2023       | 13.02.2023       | 151                       | 61                         | 35  | 22                        | 26                        |         |     |
|  |  | 09.02.2023       | 15.02.2023       | 137                       | 74                         | 46  | 20                        | 25                        |         |     |
|  |  | 15.02.2023       | 20.02.2023       | 154                       | 70                         | 39  | 22                        | 25                        |         |     |
|  |  | 17.02.2023       | 23.02.2023       | 166                       | 66                         | 40  | 27                        | 30                        |         |     |
|  |  | 22.02.2023       | 27.02.2023       | 144                       | 68                         | 37  | 26                        | 31                        |         |     |
|  |  | 24.02.2023       | 28.02.2023       | 159                       | 73                         | 42  | 29                        | 30                        |         |     |
|  |  | 28.02.2023       | 01.03.2023       | 139                       | 76                         | 46  | 34                        | 37                        |         |     |

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Manager- Environment

Note: 1) The results above relate to the samples tested.

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**NOISE QUALITY REPORT**

|                             |  |             |                             |                  |                |
|-----------------------------|--|-------------|-----------------------------|------------------|----------------|
| <b>Month</b>                | FEBRUARY                               | <b>Area</b> | GEVRA                       | <b>Report No</b> | BSP/2023/02/03 |
| <b>Name of the Customer</b> | South Eastern Coalfields Ltd, Bilaspur |             | <b>Date of Issue</b>        | 09/03/2023       |                |
| <b>Name of the Project</b>  | GEVRA OC                               |             | <b>Sample Reference No.</b> | GEGN1- GEGN8     |                |

| Parameter               |  |                     | The Noise Pollution (R & C) rules, 2000 |                | Remarks |
|-------------------------|--|---------------------|---|----------------|---------|
|                         |  |                     | Day Time                                | Night Time     |         |
| Limit (in dB(A)Leq      | Industrial area                                  | A                   | 75                                      | 70             |         |
|                         | Commercial area                                  | B                   | 65                                      | 55             |         |
|                         | Residential Area                                 | C                   | 55                                      | 45             |         |
|                         | Silence Zone                                     | D                   | 50                                      | 40             |         |
| Method of analysis      | CPCB Protocol For Ambient Level Noise Monitoring |                     |   |                |         |
| Station Name            | Station category                                 | Date of measurement | Value in dB(A)                          | Value in dB(A) |         |
| 1. DETP Control Room    | A  | 08.02.2023          | 61.5                                    | 45.2           |         |
|                         |  | 23.02.2023          | 58.9                                    | 44.6           |         |
| 2. Shakti Nagar         | C  | 08.02.2023          | 46.1                                    | 35.1           |         |
|                         |  | 23.02.2023          | 45.7                                    | 35.3           |         |
| 3. Urja Nagar           | C  | 08.02.2023          | 46.4                                    | 36.7           |         |
|                         |  | 23.02.2023          | 45.2                                    | 35.2           |         |
| 4. Dy.GM Office         | A  | 08.02.2023          | 60.6                                    | 44.5           |         |
|                         |  | 23.02.2023          | 59.5                                    | 45.0           |         |
| 5. Bhilai Bazar Village | C  | 08.02.2023          | 44.9                                    | 35.4           |         |
|                         |  | 23.02.2023          | 46.4                                    | 34.2           |         |
| 6. Dhurena Village      | C  | 08.02.2023          | 45.3                                    | 36.7           |         |
|                         |  | 23.02.2023          | 46.1                                    | 34.4           |         |
| 7. Ganga Nagar Village  | C  | 08.02.2023          | 46.5                                    | 35.3           |         |
|                         |  | 23.02.2023          | 44.8                                    | 34.5           |         |
| 8. Ralia Village        | C  | 08.02.2023          | 45.2                                    | 35.1           |         |
|                         |  | 23.02.2023          | 46.4                                    | 35.4           |         |

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**AIR QUALITY REPORT**

|       |       |      |       |           |                |
|-------|-------|------|-------|-----------|----------------|
| Month | MARCH | Area | GEVRA | Report No | BSP/2023/03/03 |
|-------|-------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 02.04.2023   |
| Name of the Project  | GEVRA OC                               | Sample Reference No. | GEGA1- GEGA2 |

| Parameter  |  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |     |
|--|--|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|-----|
| Limit (in $\mu\text{g}/\text{m}^3$ )-24 hrs      | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000)                              | A-O                 | 600                  | 300                                 | -                   | 120                 |         | 120 |
|  |  | A-N                 | 500                  | 250                                 | -                   | 120                 |         | 120 |
|  | Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) | B                   | 200                  | 100                                 | 60                  | 80                  |         | 80  |
| Method of analysis                               |  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |     |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ ) |  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |     |
| Station Name                                     | Station category   | Date of sampling    | Date of analysis     |                                     |                     |                     |         |     |
| 1. DETP/TA Office                                | A-O  | 03.03.2023          | 08.03.2023           | 576                                 | 261                 | 61                  | 28      | 35  |
|  |  | 06.03.2023          | 08.03.2023           | 584                                 | 265                 | 59                  | 31      | 37  |
|  |  | 09.03.2023          | 13.03.2023           | 589                                 | 268                 | 63                  | 23      | 29  |
|  |  | 12.03.2023          | 13.03.2023           | 497                                 | 221                 | 51                  | 26      | 34  |
|  |  | 17.03.2023          | 25.03.2023           | 526                                 | 233                 | 53                  | 23      | 31  |
|  |  | 19.03.2023          | 25.03.2023           | 534                                 | 251                 | 55                  | 33      | 22  |
|  |  | 24.03.2023          | 28.03.2023           | 509                                 | 228                 | 50                  | 38      | 27  |
|  |  | 24.03.2023          | 28.03.2023           | 512                                 | 231                 | 52                  | 29      | 36  |
|  |  | 27.03.2023          | 01.04.2023           | 534                                 | 242                 | 56                  | 33      | 27  |
| 2. Shakti Nagar                                  | B  | 03.03.2023          | 08.03.2023           | 187                                 | 88                  | 43                  | 27      | 36  |
|  |  | 06.03.2023          | 08.03.2023           | 184                                 | 84                  | 40                  | 32      | 38  |
|  |  | 09.03.2023          | 13.03.2023           | 179                                 | 75                  | 39                  | 26      | 34  |
|  |  | 12.03.2023          | 13.03.2023           | 189                                 | 86                  | 45                  | 22      | 36  |
|  |  | 17.03.2023          | 25.03.2023           | 182                                 | 84                  | 42                  | 25      | 38  |
|  |  | 19.03.2023          | 25.03.2023           | 178                                 | 77                  | 38                  | 28      | 35  |
|  |  | 22.03.2023          | 28.03.2023           | 194                                 | 92                  | 48                  | 21      | 32  |
|  |  | 24.03.2023          | 28.03.2023           | 188                                 | 87                  | 46                  | 35      | 28  |
|  |  | 27.03.2023          | 01.04.2023           | 189                                 | 86                  | 47                  | 30      | 23  |

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**AIR QUALITY REPORT**

|       |       |      |       |           |                |
|-------|-------|------|-------|-----------|----------------|
| Month | MARCH | Area | GEVRA | Report No | BSP/2023/03/03 |
|-------|-------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 02.04.2023   |
| Name of the Project  | Gevra OC                               | Sample Reference No. | GEGA3- GEGA4 |

| Limit (in $\mu\text{g}/\text{m}^3$ -24 hrs)                                    | Parameter   |                  | PM <sub>100</sub>   | PM <sub>10</sub>     | PM <sub>2.5</sub>                   | SO <sub>2</sub>     | NO <sub>2</sub>     | Remarks |
|--|---|------------------|---------------------|----------------------|-------------------------------------|---------------------|---------------------|---------|
|  | Industrial Zone -(G.S.R. 742(E), dated 25.9.2000) |                  | A-O                 | 600                  | 300                                 | -                   | 120                 |         |
|  |   | A-N              | 500                 | 250                  | -                                   | 120                 | 120                 |         |
| Residential Zone-(G.S.R. 826(E), dated 16.11.2009 and GSR 176 (E), 02.04.1996) |   | B                | 200                 | 100                  | 60                                  | 80                  | 80                  |         |
| Method of analysis   |   |                  | IS-5182 PART 4:2005 | IS-5182 PART 23:2006 | USEPA CFR 40, Appendix L to Part 50 | IS-5182 PART 2:2001 | IS-5182 PART 6:2006 |         |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ )                               |   |                  |                     | ±19.04               |                                     | ±0.0687             | ±0.4420             |         |
| Station Name   | Station category                                  | Date of sampling | Date of analysis    |                      |                                     |                     |                     |         |
| 3. Urja Nagar  | B   | 03.03.2023       | 08.03.2023          | 175                  | 71                                  | 39                  | 32                  | 25      |
|  |   | 06.03.2023       | 08.03.2023          | 182                  | 75                                  | 40                  | 26                  | 32      |
|  |   | 09.03.2023       | 13.03.2023          | 186                  | 77                                  | 41                  | 24                  | 30      |
|  |   | 12.03.2023       | 13.03.2023          | 166                  | 65                                  | 34                  | 25                  | 31      |
|  |   | 17.03.2023       | 25.03.2023          | 172                  | 70                                  | 37                  | 22                  | 28      |
|  |   | 19.03.2023       | 25.03.2023          | 163                  | 64                                  | 31                  | 23                  | 29      |
|  |   | 22.03.2023       | 28.03.2023          | 189                  | 81                                  | 44                  | 35                  | 27      |
|  |   | 25.03.2023       | 28.03.2023          | 185                  | 78                                  | 42                  | 31                  | 24      |
| 4. Dy GM Office  | A-O   | 03.03.2023       | 08.03.2023          | 536                  | 242                                 | 59                  | 24                  | 36      |
|  |   | 06.03.2023       | 08.03.2023          | 544                  | 236                                 | 63                  | 36                  | 28      |
|  |   | 09.03.2023       | 13.03.2023          | 552                  | 245                                 | 64                  | 32                  | 24      |
|  |   | 12.03.2023       | 13.03.2023          | 576                  | 253                                 | 67                  | 37                  | 29      |
|  |   | 17.03.2023       | 25.03.2023          | 521                  | 244                                 | 58                  | 35                  | 27      |
|  |   | 19.03.2023       | 25.03.2023          | 547                  | 249                                 | 61                  | 28                  | 34      |
|  |   | 22.03.2023       | 28.03.2023          | 478                  | 236                                 | 53                  | 34                  | 43      |
|  |   | 25.03.2023       | 28.03.2023          | 487                  | 239                                 | 55                  | 29                  | 37      |
|  |   | 27.03.2023       | 01.04.2023          | 546                  | 248                                 | 63                  | 31                  | 42      |

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Manager- Environment

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**AIR QUALITY REPORT**

|       |       |      |       |           |                |
|-------|-------|------|-------|-----------|----------------|
| Month | MARCH | Area | GEVRA | Report No | BSP/2023/03/03 |
|-------|-------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 02.04.2023   |
| Name of the Project  | Gevra OC                               | Sample Reference No. | GEGA5- GEGA6 |

| Limit (in $\mu\text{g}/\text{m}^3$ )-<br>24 hrs  | Parameter  |                  | PM <sub>100</sub>         | PM <sub>10</sub>           | PM <sub>2.5</sub>                               | SO <sub>2</sub>           | NO <sub>2</sub>           | Remarks |  |
|--|--|------------------|---------------------------|----------------------------|---|---------------------------|---------------------------|---------|--|
|  | Industrial Zone -(G.S.R. 742(E),<br>dated 25.9.2000)                                 | A-O              | 600                       | 300                        | -   | 120                       | 120                       |         |  |
|  |  | A-N              | 500                       | 250                        | -   | 120                       | 120                       |         |  |
|  | Residential Zone-(G.S.R. 826(E),<br>dated 16.11.2009 and GSR 176 (E),<br>02.04.1996) | B                | 200                       | 100                        | 60  | 80                        | 80                        |         |  |
| Method of analysis                               |  |                  | IS-5182<br>PART<br>4:2005 | IS-5182<br>PART<br>23:2006 | USEPA<br>CFR 40,<br>Appendix<br>L to Part<br>50 | IS-5182<br>PART<br>2:2001 | IS-5182<br>PART<br>6:2006 |         |  |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ ) |  |                  |                           | ±19.04                     |   | ±0.0687                   | ±0.4420                   |         |  |
| Station Name                                     | Station category   | Date of sampling | Date of analysis          |                            |   |                           |                           |         |  |
| 5. Bhilai Bazar Village                          | B  | 04.03.2023       | 11.03.2023                | 167                        | 65  | 39                        | 34                        | 26      |  |
|  |  | 07.03.2023       | 11.03.2023                | 152                        | 53  | 31                        | 25                        | 30      |  |
|  |  | 10.03.2023       | 13.03.2023                | 160                        | 61  | 37                        | 23                        | 28      |  |
|  |  | 13.03.2023       | 13.03.2023                | 154                        | 55  | 34                        | 24                        | 31      |  |
|  |  | 18.03.2023       | 27.03.2023                | 163                        | 62  | 38                        | 27                        | 33      |  |
|  |  | 20.03.2023       | 27.03.2023                | 156                        | 54  | 35                        | 23                        | 29      |  |
|  |  | 22.03.2023       | 27.03.2023                | 161                        | 59  | 37                        | 31                        | 25      |  |
|  |  | 24.03.2023       | 27.03.2023                | 165                        | 62  | 40                        | 26                        | 33      |  |
|  |  | 26.03.2023       | 03.04.2023                | 158                        | 56  | 34                        | 32                        | 27      |  |
| 6. Dhurena Village                               | B  | 04.03.2023       | 11.03.2023                | 155                        | 54  | 32                        | 25                        | 31      |  |
|  |  | 07.03.2023       | 11.03.2023                | 160                        | 61  | 37                        | 22                        | 29      |  |
|  |  | 10.03.2023       | 13.03.2023                | 157                        | 55  | 33                        | 28                        | 36      |  |
|  |  | 13.03.2023       | 13.03.2023                | 153                        | 52  | 32                        | 31                        | 24      |  |
|  |  | 18.03.2023       | 27.03.2023                | 162                        | 60  | 36                        | 34                        | 22      |  |
|  |  | 20.03.2023       | 27.03.2023                | 166                        | 63  | 39                        | 26                        | 33      |  |
|  |  | 22.03.2023       | 27.03.2023                | 154                        | 55  | 34                        | 21                        | 34      |  |
|  |  | 24.03.2023       | 27.03.2023                | 161                        | 58  | 35                        | 23                        | 31      |  |
|  |  | 26.03.2023       | 03.04.2023                | 156                        | 55  | 33                        | 27                        | 38      |  |

*B. S. S.*  
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Manager-Environment

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**AIR QUALITY REPORT**

|       |       |      |       |           |                |
|-------|-------|------|-------|-----------|----------------|
| Month | MARCH | Area | GEVRA | Report No | BSP/2023/03/03 |
|-------|-------|------|-------|-----------|----------------|

|                      |  |                      |              |
|----------------------|--|----------------------|--------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 02.04.2023   |
| Name of the Project  | Gevra OC                               | Sample Reference No. | GEGA7- GEGA8 |

| Limit (in $\mu\text{g}/\text{m}^3$ )-<br>24hrs   | Parameter  |                  |                  | PM <sub>100</sub>         | PM <sub>10</sub>           | PM <sub>2.5</sub>                               | SO <sub>2</sub>           | NO <sub>2</sub>           | Remarks |
|--|--|------------------|------------------|---------------------------|----------------------------|---|---------------------------|---------------------------|---------|
|  |  | A-O              | A-N              | 600                       | 300                        | -   | 120                       | 120                       |         |
|  | Industrial Zone -(G.S.R. 742(E),<br>dated 25.9.2000)                                 | A-O              | A-N              | 600                       | 300                        | -   | 120                       | 120                       |         |
|  | Residential Zone-(G.S.R. 826(E),<br>dated 16.11.2009 and GSR 176 (E),<br>02.04.1996) | B                |                  | 200                       | 100                        | 60  | 80                        | 80                        |         |
| Method of analysis                               |  |                  |                  | IS-5182<br>PART<br>4:2005 | IS-5182<br>PART<br>23:2006 | USEPA<br>CFR 40,<br>Appendix<br>L to Part<br>50 | IS-5182<br>PART<br>2:2001 | IS-5182<br>PART<br>6:2006 |         |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ ) |  |                  |                  |                           | ±19.04                     |   | ±0.0687                   | ±0.4420                   |         |
| Station Name                                     | Station category   | Date of sampling | Date of analysis |                           |                            |   |                           |                           |         |
| 7. Ganga Nagar Village                           | B  | 04.03.2023       | 11.03.2023       | 169                       | 64                         | 36  | 24                        | 31                        |         |
|  |  | 07.03.2023       | 11.03.2023       | 171                       | 69                         | 39  | 27                        | 34                        |         |
|  |  | 10.03.2023       | 13.03.2023       | 158                       | 55                         | 33  | 23                        | 29                        |         |
|  |  | 13.03.2023       | 13.03.2023       | 162                       | 62                         | 36  | 34                        | 27                        |         |
|  |  | 18.03.2023       | 27.03.2023       | 170                       | 66                         | 39  | 26                        | 32                        |         |
|  |  | 20.03.2023       | 27.03.2023       | 166                       | 62                         | 38  | 28                        | 35                        |         |
|  |  | 22.03.2023       | 27.03.2023       | 152                       | 53                         | 30  | 23                        | 30                        |         |
|  |  | 24.03.2023       | 27.03.2023       | 154                       | 55                         | 31  | 25                        | 33                        |         |
| 8. Ralia Village                                 | B  | 04.03.2023       | 11.03.2023       | 162                       | 58                         | 32  | 23                        | 32                        |         |
|  |  | 07.03.2023       | 11.03.2023       | 165                       | 61                         | 34  | 21                        | 27                        |         |
|  |  | 10.03.2023       | 13.03.2023       | 169                       | 63                         | 36  | 32                        | 24                        |         |
|  |  | 13.03.2023       | 13.03.2023       | 167                       | 65                         | 37  | 23                        | 31                        |         |
|  |  | 18.03.2023       | 27.03.2023       | 174                       | 69                         | 39  | 31                        | 26                        |         |
|  |  | 20.03.2023       | 27.03.2023       | 164                       | 60                         | 34  | 27                        | 33                        |         |
|  |  | 22.03.2023       | 27.03.2023       | 166                       | 62                         | 35  | 24                        | 29                        |         |
|  |  | 24.03.2023       | 27.03.2023       | 172                       | 68                         | 38  | 36                        | 27                        |         |
|  |  | 26.03.2023       | 03.04.2023       | 164                       | 59                         | 36  | 25                        | 33                        |         |

*B. S. S.*  
 Analyzed by

*[Signature]*  
 Checked By

*C. K. Vel*  
 Manager- Environment

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**AIR QUALITY REPORT**

|       |       |      |       |           |                |
|-------|-------|------|-------|-----------|----------------|
| Month | MARCH | Area | GEVRA | Report No | BSP/2023/03/03 |
|-------|-------|------|-------|-----------|----------------|

|                      |  |                      |               |
|----------------------|--|----------------------|---------------|
| Name of the Customer | South Eastern Coalfields Ltd, Bilaspur | Date of Issue        | 02.04.2023    |
| Name of the Project  | Gevra OC                               | Sample Reference No. | GEGA9- GEGA10 |

| Parameter  |  |                  |                  | PM <sub>100</sub>         | PM <sub>10</sub>           | PM <sub>2.5</sub>                               | SO <sub>2</sub>           | NO <sub>2</sub>           | Remarks |
|--|--|------------------|------------------|---------------------------|----------------------------|---|---------------------------|---------------------------|---------|
| Limit (in $\mu\text{g}/\text{m}^3$ )-<br>24hrs   | Industrial Zone -(G.S.R. 742(E),<br>dated 25.9.2000)                                 | A-O              |                  | 600                       | 300                        | -   | 120                       | 120                       |         |
|  |  | A-N              |                  | 500                       | 250                        | -   | 120                       | 120                       |         |
|  | Residential Zone-(G.S.R. 826(E),<br>dated 16.11.2009 and GSR 176 (E),<br>02.04.1996) | B                |                  | 200                       | 100                        | 60  | 80                        | 80                        |         |
| Method of analysis                               |  |                  |                  | IS-5182<br>PART<br>4:2005 | IS-5182<br>PART<br>23:2006 | USEPA<br>CFR 40,<br>Appendix<br>L to Part<br>50 | IS-5182<br>PART<br>2:2001 | IS-5182<br>PART<br>6:2006 |         |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ ) |  |                  |                  |                           | ±19.04                     |   | ±0.0687                   | ±0.4420                   |         |
| Station Name                                     | Station category   | Date of sampling | Date of analysis |                           |                            |   |                           |                           |         |
| 9. Newsa Village                                 | B  | 01.03.2023       | 05.03.2023       | 163                       | 62                         | 35  | 22                        | 31                        |         |
|  |  | 03.03.2023       | 05.03.2023       | 159                       | 58                         | 34  | 25                        | 29                        |         |
|  |  | 05.03.2023       | 07.03.2023       | 167                       | 64                         | 36  | 21                        | 30                        |         |
|  |  | 11.03.2023       | 13.03.2023       | 156                       | 55                         | 33  | 23                        | 32                        |         |
|  |  | 14.03.2023       | 17.03.2023       | 161                       | 60                         | 34  | 24                        | 31                        |         |
|  |  | 16.03.2023       | 21.03.2023       | 152                       | 54                         | 31  | 23                        | 28                        |         |
|  |  | 25.03.2023       | 27.03.2023       | 155                       | 56                         | 32  | 28                        | 21                        |         |
|  |  | 27.03.2023       | 27.03.2023       | 158                       | 57                         | 33  | 30                        | 23                        |         |
| 10. Rampur Village                               | B  | 01.03.2023       | 05.03.2023       | 155                       | 54                         | 33  | 23                        | 30                        |         |
|  |  | 03.03.2023       | 05.03.2023       | 147                       | 50                         | 31  | 25                        | 31                        |         |
|  |  | 05.03.2023       | 07.03.2023       | 162                       | 61                         | 37  | 32                        | 25                        |         |
|  |  | 11.03.2023       | 13.03.2023       | 157                       | 58                         | 32  | 24                        | 32                        |         |
|  |  | 14.03.2023       | 17.03.2023       | 160                       | 60                         | 35  | 27                        | 34                        |         |
|  |  | 16.03.2023       | 21.03.2023       | 151                       | 52                         | 33  | 22                        | 28                        |         |
|  |  | 25.03.2023       | 27.03.2023       | 145                       | 48                         | 30  | 26                        | 21                        |         |
|  |  | 27.03.2023       | 27.03.2023       | 148                       | 51                         | 32  | 24                        | 29                        |         |
| 29.03.2023                                       | 03.04.2023   | 159              | 54               | 36                        | 28                         | 33  |                           |                           |         |

*B. S. S.*  
 Analyzed by

*D. Singh*  
 Checked By

*C. K. Vel*  
 Manager- Environment

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**AIR QUALITY REPORT**

|              |       |             |       |                  |                |
|--------------|-------|-------------|-------|------------------|----------------|
| <b>Month</b> | MARCH | <b>Area</b> | GEVRA | <b>Report No</b> | BSP/2023/03/03 |
|--------------|-------|-------------|-------|------------------|----------------|

|                             |  |                             |            |
|-----------------------------|--|-----------------------------|------------|
| <b>Name of the Customer</b> | South Eastern Coalfields Ltd, Bilaspur | <b>Date of Issue</b>        | 02.04.2023 |
| <b>Name of the Project</b>  | Gevra OC                               | <b>Sample Reference No.</b> | GEGA11     |

| Parameter  |  |                         |                         | PM <sub>100</sub>         | PM <sub>10</sub>           | PM <sub>2.5</sub>                               | SO <sub>2</sub>           | NO <sub>2</sub>           | Remarks |
|--|--|-------------------------|-------------------------|---------------------------|----------------------------|---|---------------------------|---------------------------|---------|
| Limit (in $\mu\text{g}/\text{m}^3$ )-<br>24hrs   | Industrial Zone -(G.S.R. 742(E),<br>dated 25.9.2000)                                 | A-O                     |                         | 600                       | 300                        | -   | 120                       | 120                       |         |
|  |  | A-N                     |                         | 500                       | 250                        | -   | 120                       | 120                       |         |
|  | Residential Zone-(G.S.R. 826(E),<br>dated 16.11.2009 and GSR 176 (E),<br>02.04.1996) | B                       |                         | 200                       | 100                        | 60  | 80                        | 80                        |         |
| Method of analysis                               |  |                         |                         | IS-5182<br>PART<br>4:2005 | IS-5182<br>PART<br>23:2006 | USEPA<br>CFR 40,<br>Appendix<br>L to Part<br>50 | IS-5182<br>PART<br>2:2001 | IS-5182<br>PART<br>6:2006 |         |
| Uncertainty Range (in $\mu\text{g}/\text{m}^3$ ) |  |                         |                         |                           | ±19.04                     |   | ±0.0687                   | ±0.4420                   |         |
| <b>Station Name</b>                              | <b>Station category</b>  | <b>Date of sampling</b> | <b>Date of analysis</b> |                           |                            |   |                           |                           |         |
| 11. Hardi Bazar                                  | B  | 02.03.2023              | 06.03.2023              | 129                       | 62                         | 40  | 29                        | 33                        |         |
|  |  | 06.03.2023              | 13.03.2023              | 150                       | 63                         | 37  | 25                        | 30                        |         |
|  |  | 10.03.2023              | 15.03.2023              | 136                       | 76                         | 40  | 22                        | 26                        |         |
|  |  | 13.03.2023              | 20.03.2023              | 150                       | 71                         | 33  | 25                        | 29                        |         |
|  |  | 17.03.2023              | 22.03.2023              | 160                       | 69                         | 46  | 27                        | 32                        |         |
|  |  | 22.03.2023              | 27.03.2023              | 146                       | 64                         | 39  | 26                        | 33                        |         |
|  |  | 25.03.2023              | 28.03.2023              | 161                       | 76                         | 43  | 29                        | 36                        |         |
|  |  | 28.03.2023              | 01.04.2023              | 153                       | 67                         | 30  | 24                        | 31                        |         |
|  |  | 30.03.2023              | 03.04.2023              | 136                       | 79                         | 47  | 35                        | 39                        |         |

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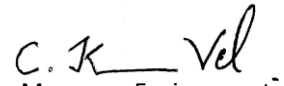
**NOISE QUALITY REPORT**

|                             |  |             |                             |                  |                |
|-----------------------------|--|-------------|-----------------------------|------------------|----------------|
| <b>Month</b>                | MARCH                                  | <b>Area</b> | GEVRA                       | <b>Report No</b> | BSP/2023/03/03 |
| <b>Name of the Customer</b> | South Eastern Coalfields Ltd, Bilaspur |             | <b>Date of Issue</b>        | 02.04.2023       |                |
| <b>Name of the Project</b>  | GEVRA OC                               |             | <b>Sample Reference No.</b> | GEGN1- GEGN8     |                |

| Parameter               |  |                     | The Noise Pollution (R & C) rules, 2000 |                | Remarks |
|-------------------------|--|---------------------|---|----------------|---------|
| Limit (in dB(A))Leq     | Industrial area                                  | A                   | Day Time                                | Night Time     |         |
|                         | Commercial area                                  | B                   | 75                                      | 70             |         |
|                         | Residential Area                                 | C                   | 65                                      | 55             |         |
|                         | Silence Zone                                     | D                   | 55                                      | 45             |         |
| Method of analysis      | CPCB Protocol For Ambient Level Noise Monitoring |                     |   |                |         |
| Station Name            | Station category                                 | Date of measurement | Value in dB(A)                          | Value in dB(A) |         |
| 1. DETP Control Room    | A  | 08.03.2023          | 60.5                                    | 44.2           |         |
|                         |  | 23.03.2023          | 59.9                                    | 45.6           |         |
| 2. Shakti Nagar         | C  | 08.03.2023          | 45.1                                    | 36.1           |         |
|                         |  | 23.03.2023          | 44.7                                    | 34.3           |         |
| 3. Urja Nagar           | C  | 08.03.2023          | 45.4                                    | 35.7           |         |
|                         |  | 23.03.2023          | 44.2                                    | 36.2           |         |
| 4. Dy.GM Office         | A  | 08.03.2023          | 58.6                                    | 45.5           |         |
|                         |  | 23.03.2023          | 60.5                                    | 46.0           |         |
| 5. Bhilai Bazar Village | C  | 08.03.2023          | 45.9                                    | 36.4           |         |
|                         |  | 23.03.2023          | 44.4                                    | 35.2           |         |
| 6. Dhurena Village      | C  | 08.03.2023          | 46.3                                    | 35.7           |         |
|                         |  | 23.03.2023          | 44.1                                    | 35.4           |         |
| 7. Ganga Nagar Village  | C  | 08.03.2023          | 45.5                                    | 36.3           |         |
|                         |  | 23.03.2023          | 45.8                                    | 35.5           |         |
| 8. Ralia Village        | C  | 08.03.2023          | 46.2                                    | 36.1           |         |
|                         |  | 23.03.2023          | 45.4                                    | 36.4           |         |

  
 Sampled By

  
 Checked By

  
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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 23583   | <b>Report Issue Date</b>             | 21-02-2023                         |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur                 | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | NITESH  | <b>Date of Sampling</b>              | 07-01-2023                         |
| <b>Sampling Location</b> | MLD water filter plant (Water after treatment) Gevra OC | <b>Sampling Plan</b>                 | AS PER MONTHLY PLAN                |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 09-01-2023                         |
|                          |   | <b>Sample ID</b>                     | 15366                              |
|                          |   | <b>Sampling Method</b>               | CMPDIL/BSP/LSOP                    |
|                          |   | <b>Date of Analysis</b>              | From 09-01-2023 To 18-01-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 100.00         | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 55.310         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 19.49          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 3.38           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.72           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.08           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 1.99           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.12           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 41.28          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 430.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 267.54         | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 1.96           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.09           | ±0.0013@0.01            |

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

Reported By  
Santosh Kumar Singh      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :21-02-2023 12:13:47

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |  |                                      |                                    |
|--------------------------|--|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 24230  | <b>Report Issue Date</b>             | 25-02-2023                         |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur                     | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | Imte   | <b>Date of Sampling</b>              | 29-01-2023                         |
| <b>Sampling Location</b> | 4.5 MLD Water Filter Plant (Water Before Treatment) Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan                |
| <b>Sample Condition</b>  | APPROPRIATE  | <b>Date of Receipt of Sample</b>     | 30-01-2023                         |
|                          |  | <b>Sample ID</b>                     | 15728                              |
|                          |  | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                     |
|                          |  | <b>Date of Analysis</b>              | From 06-02-2023 To 24-02-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 170.00         | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 47.294         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 12.00          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 3.38           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.13           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.06           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.07           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 0.67           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.24           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 23.89          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 348.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 214.03         | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 1.56           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 1.1            | ±0.0013@0.01            |

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

Reported By  
Manojkumar Baghel

Reviewed and Approved  
M. Reagan  
Manager (Env)  
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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 23592   | <b>Report Issue Date</b>             | 21-02-2023                         |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur                             | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | NITESH  | <b>Date of Sampling</b>              | 07-01-2023                         |
| <b>Sampling Location</b> | Well water Executive colony near<br>Shivmandir, Urja Nagar Gevra OC | <b>Sampling Plan</b>                 | AS PER<br>MONTHLY PLAN             |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 09-01-2023                         |
|                          |   | <b>Sample ID</b>                     | 15367                              |
|                          |   | <b>Sampling Method</b>               | CMPDIL/BSP/LSOP                    |
|                          |   | <b>Date of Analysis</b>              | From 09-01-2023 To 18-01-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 85.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 41.683         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 15.50          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 1.85           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.75           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.06           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.08           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 1.87           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.18           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 37.60          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 360.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 205.80         | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.91           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.07           | ±0.0013@0.01            |

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

Reported By  
Santosh Kumar Singh      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :21-02-2023 12:13:47

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 23610   | <b>Report Issue Date</b>             | 21-02-2023                         |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur               | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | NITESH  | <b>Date of Sampling</b>              | 07-01-2023                         |
| <b>Sampling Location</b> | Well water workers colony near<br>Ajad Chowk Gevra OC | <b>Sampling Plan</b>                 | AS PER<br>MONTHLY PLAN             |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 09-01-2023                         |
|                          |   | <b>Sample ID</b>                     | 15369                              |
|                          |   | <b>Sampling Method</b>               | CMPDIL/BSP/LSOP                    |
|                          |   | <b>Date of Analysis</b>              | From 09-01-2023 To 18-01-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 70.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 44.088         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 18.99          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 4.92           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.79           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.09           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 2.06           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.09           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 32.68          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 370.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 209.92         | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.48           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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

Reported By  
Santosh Kumar Singh      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :21-02-2023 12:13:47

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |  |                                      |                                    |
|--------------------------|--|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 23556  | <b>Report Issue Date</b>             | 21-02-2023                         |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur           | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | NITESH   | <b>Date of Sampling</b>              | 07-01-2023                         |
| <b>Sampling Location</b> | Colony tap water DAV Public School, Gevra Gevra OC | <b>Sampling Plan</b>                 | AS PER MONTHLY PLAN                |
| <b>Sample Condition</b>  | APPROPRIATE  | <b>Date of Receipt of Sample</b>     | 09-01-2023                         |
|                          |  | <b>Sample ID</b>                     | 15363                              |
|                          |  | <b>Sampling Method</b>               | CMPDIL/BSP/LSOP                    |
|                          |  | <b>Date of Analysis</b>              | From 09-01-2023 To 18-01-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 80.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 43.286         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 15.50          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120.C       | 1.0 - 500        | 5                | 15                | 4.92           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.66           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.08           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 1.78           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.29           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530.C       | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 37.78          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 364.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 209.92         | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.42           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.07           | ±0.0013@0.01            |

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

Reported By  
Santosh Kumar Singh      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :21-02-2023 12:13:47

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |  |                                      |                                    |
|--------------------------|--|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 23601  | <b>Report Issue Date</b>             | 21-02-2023                         |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur  | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | NITESH   | <b>Date of Sampling</b>              | 07-01-2023                         |
| <b>Sampling Location</b> | Well water of Vijay nagar<br>Rehabilitation village of Mayaram<br>Kawan Gevra OC | <b>Sampling Plan</b>                 | AS PER<br>MONTHLY PLAN             |
| <b>Sample Condition</b>  | APPROPRIATE  | <b>Date of Receipt of Sample</b>     | 09-01-2023                         |
|                          |  | <b>Sample ID</b>                     | 15368                              |
|                          |  | <b>Sampling Method</b>               | CMPDIL/BSP/LSOP                    |
|                          |  | <b>Date of Analysis</b>              | From 09-01-2023 To 18-01-2023      |

| Sr. No | Parameter                                | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|--|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |  |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO <sub>3</sub>     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 60.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                             | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                               | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                             | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 6.413          | ±2.512@99.8             |
| 5      | Chlorides mg/l                           | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 10.50          | ±6.551@253.5            |
| 6      | Colour Hazen                             | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 3.38           | ±1.05@ 49.86            |
| 7      | Copper mg/l                              | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                            | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.61           | ±0.014@0.98             |
| 9      | Iron mg/l                                | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.06           | ±0.0782@7.95            |
| 10     | Lead mg/l                                | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l                           | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.06           | ±0.026@2.44             |
| 12     | Nitrate mg/l                             | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 10.02          | ±0.528@20.41            |
| 13     | Odour none                               | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                            | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.20           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l                  | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l              | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                            | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                            | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | BDL            | ±0.640@19.88            |
| 19     | Total Chromium mg/l                      | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml                | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l              | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 215.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO <sub>3</sub> | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 92.61          | ±11.545@612.8           |
| 23     | Turbidity NTU                            | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.28           | ±0.855@41.58            |
| 24     | Zinc mg/l                                | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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

**Reported By**  
Santosh Kumar Singh      Deepanwita Bin

**Reviewed and Approved**  
M. Reagan  
Manager (Env)  
Date&Time :21-02-2023 12:13:47

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 23565   | <b>Report Issue Date</b>             | 21-02-2023                         |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur                     | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | NITESH  | <b>Date of Sampling</b>              | 07-01-2023                         |
| <b>Sampling Location</b> | Drinking water Ganga Nagar<br>Handpump Govt school Gevra OC | <b>Sampling Plan</b>                 | AS PER<br>MONTHLY PLAN             |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 09-01-2023                         |
|                          |   | <b>Sample ID</b>                     | 15364                              |
|                          |   | <b>Sampling Method</b>               | CMPDIL/BSP/LSOP                    |
|                          |   | <b>Date of Analysis</b>              | From 09-01-2023 To 18-01-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 40.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 33.667         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 9.00           | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120.C       | 1.0 - 500        | 5                | 15                | 3.38           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | BDL            | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.07           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 17.99          | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.36           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530.C       | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | BDL            | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 187.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 59.68          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.57           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.11           | ±0.0013@0.01            |

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

Reported By  
Santosh Kumar Singh      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :21-02-2023 12:13:47

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 23574   | <b>Report Issue Date</b>             | 21-02-2023                         |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur                     | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | NITESH  | <b>Date of Sampling</b>              | 07-01-2023                         |
| <b>Sampling Location</b> | Drinking water Nehru Nagar<br>Handpump Govt school Gevra OC | <b>Sampling Plan</b>                 | AS PER<br>MONTHLY PLAN             |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 09-01-2023                         |
|                          |   | <b>Sample ID</b>                     | 15365                              |
|                          |   | <b>Sampling Method</b>               | CMPDIL/BSP/LSOP                    |
|                          |   | <b>Date of Analysis</b>              | From 09-01-2023 To 18-01-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 65.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 36.874         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 53.98          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 4.92           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.83           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.08           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 10.50          | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.11           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 19.17          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 323.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 139.94         | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.11           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.14           | ±0.0013@0.01            |

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

Reported By  
Santosh Kumar Singh      Deepanwita Bin

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :21-02-2023 12:13:47

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |  |   |                     |                                      |                               |                                    |  |
|--------------------------|--|---|---------------------|--------------------------------------|-------------------------------|------------------------------------|--|
| <b>Unique Report No.</b> |  | 26289                                   |                     | <b>Report Issue Date</b>             |                               |                                    |  |
| <b>Customer Name</b>     |  | South Estern Coal Field Ltd<br>Bilaspur |                     | <b>Address &amp; Contact Details</b> |                               | SEEPAT ROAD BILASPUR<br>7752241927 |  |
| <b>Sampling By</b>       | Nitesh   | <b>Date of Sampling</b>                 | 05-02-2023          | <b>Sample ID</b>                     | 15789                         |                                    |  |
| <b>Sampling Location</b> | 4.5 MLD Water Filter Plant (Water Before Treatment) Gevra OC | <b>Sampling Plan</b>                    | As per monthly plan | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                |                                    |  |
| <b>Sample Condition</b>  | APPROPRIATE  | <b>Date of Receipt of Sample</b>        | 06-02-2023          | <b>Date of Analysis</b>              | From 06-02-2023 To 10-03-2023 |                                    |  |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 65.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 33.667         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 13.50          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 1.85           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.80           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | BDL            | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 4.13           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.22           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | NIL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 25.92          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 260.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 24.10          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.57           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.11           | ±0.0013@0.01            |

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

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Santosh Kumar Singh

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |  |                     |                                      |                               |                                    |  |
|--------------------------|---|--|---------------------|--------------------------------------|-------------------------------|------------------------------------|--|
| <b>Unique Report No.</b> |   | 26313                                    |                     | <b>Report Issue Date</b>             |                               |                                    |  |
| <b>Customer Name</b>     |   | South Eastern Coal Field Ltd<br>Bilaspur |                     | <b>Address &amp; Contact Details</b> |                               | SEEPAT ROAD BILASPUR<br>7752241927 |  |
| <b>Sampling By</b>       | Nitesh  | <b>Date of Sampling</b>                  | 05-02-2023          | <b>Sample ID</b>                     | 15793                         |                                    |  |
| <b>Sampling Location</b> | MLD water filter plant (Water after treatment) Gevra OC | <b>Sampling Plan</b>                     | As per monthly plan | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                |                                    |  |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>         | 06-02-2023          | <b>Date of Analysis</b>              | From 06-02-2023 To 10-03-2023 |                                    |  |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 100.00         | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 17.635         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 6.50           | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120.C       | 1.0 - 500        | 5                | 15                | 2.62           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.15           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.09           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.09           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 1.82           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.19           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530.C       | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | NIL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 4.73           | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 140.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 38.15          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.57           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.09           | ±0.0013@0.01            |

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Santosh Kumar Singh

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                        |  |
|--------------------------|---|--------------------------------------|------------------------|--|
| <b>Unique Report No.</b> | 26319   | <b>Report Issue Date</b>             |                        |  |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur                             | <b>Address &amp; Contact Details</b> |                        | SEEPAT ROAD BILASPUR<br>7752241927                       |
| <b>Sampling By</b>       | Nitesh  | <b>Date of Sampling</b>              | 05-02-2023             | <b>Sample ID</b><br>15794                                |
| <b>Sampling Location</b> | Well water Executive colony near<br>Shivmandir, Urja Nagar Gevra OC | <b>Sampling Plan</b>                 | As per monthly<br>plan | <b>Sampling Method</b><br>CMPDI/BSP/LSOP                 |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-02-2023             | <b>Date of Analysis</b><br>From 06-02-2023 To 10-03-2023 |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 15.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 7.214          | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 32.49          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 3.38           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.56           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.07           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.07           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 18.97          | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.22           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | NIL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 5.65           | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 152.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 4.02           | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.59           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.14           | ±0.0013@0.01            |

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Santosh Kumar Singh

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |   |                     |                                      |                               |                                    |  |
|--------------------------|---|---|---------------------|--------------------------------------|-------------------------------|------------------------------------|--|
| <b>Unique Report No.</b> |   | 26331                                   |                     | <b>Report Issue Date</b>             |                               |                                    |  |
| <b>Customer Name</b>     |   | South Estern Coal Field Ltd<br>Bilaspur |                     | <b>Address &amp; Contact Details</b> |                               | SEEPAT ROAD BILASPUR<br>7752241927 |  |
| <b>Sampling By</b>       | Nitesh  | <b>Date of Sampling</b>                 | 05-02-2023          | <b>Sample ID</b>                     | 15796                         |                                    |  |
| <b>Sampling Location</b> | Well water workers colony near<br>Ajad Chowk Gevra OC | <b>Sampling Plan</b>                    | As per monthly plan | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                |                                    |  |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>        | 06-02-2023          | <b>Date of Analysis</b>              | From 06-02-2023 To 10-03-2023 |                                    |  |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 55.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 29.659         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 12.00          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 4.15           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.90           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.06           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.06           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 4.87           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.24           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | NIL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 25.10          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 215.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 20.08          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.45           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.06           | ±0.0013@0.01            |

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Reported By  
Santosh Kumar Singh

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                        |  |
|--------------------------|---|--------------------------------------|------------------------|--|
| <b>Unique Report No.</b> | 26295   | <b>Report Issue Date</b>             |                        |  |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur              | <b>Address &amp; Contact Details</b> |                        | SEEPAT ROAD BILASPUR<br>7752241927                       |
| <b>Sampling By</b>       | Nitesh  | <b>Date of Sampling</b>              | 05-02-2023             | <b>Sample ID</b><br>15790                                |
| <b>Sampling Location</b> | Colony tap water DAV Public<br>School, Gevra Gevra OC | <b>Sampling Plan</b>                 | As per monthly<br>plan | <b>Sampling Method</b><br>CMPDI/BSP/LSOP                 |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-02-2023             | <b>Date of Analysis</b><br>From 06-02-2023 To 10-03-2023 |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 60.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 32.866         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 10.50          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120.C       | 1.0 - 500        | 5                | 15                | 2.62           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.16           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | BDL            | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 2.52           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 6.92           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530.C       | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | NIL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 27.31          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 231.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 22.09          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.42           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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

Reported By  
Santosh Kumar Singh

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |  |   |                     |                                      |                               |                                    |  |
|--------------------------|--|---|---------------------|--------------------------------------|-------------------------------|------------------------------------|--|
| <b>Unique Report No.</b> |  | 26325                                   |                     | <b>Report Issue Date</b>             |                               |                                    |  |
| <b>Customer Name</b>     |  | South Estern Coal Field Ltd<br>Bilaspur |                     | <b>Address &amp; Contact Details</b> |                               | SEEPAT ROAD BILASPUR<br>7752241927 |  |
| <b>Sampling By</b>       | Nitesh   | <b>Date of Sampling</b>                 | 05-02-2023          | <b>Sample ID</b>                     | 15795                         |                                    |  |
| <b>Sampling Location</b> | Well water of Vijay nagar<br>Rehabilitation village of Mayaram<br>Kawan Gevra OC | <b>Sampling Plan</b>                    | As per monthly plan | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                |                                    |  |
| <b>Sample Condition</b>  | APPROPRIATE  | <b>Date of Receipt of Sample</b>        | 06-02-2023          | <b>Date of Analysis</b>              | From 06-02-2023 To 10-03-2023 |                                    |  |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 65.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 29.659         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 100.47         | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 1.85           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.62           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.06           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.06           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 49.52          | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 6.84           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | NIL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 2.51           | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 220.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 24.10          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 1.96           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.10           | ±0.0013@0.01            |

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

**Reported By**  
Santosh Kumar Singh

**Reviewed and Approved**  
M. Reagan  
Manager (Env)  
Date&Time :

**JSA**

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |   |                     |                                      |                               |                                    |  |
|--------------------------|---|---|---------------------|--------------------------------------|-------------------------------|------------------------------------|--|
| <b>Unique Report No.</b> |   | 26301                                   |                     | <b>Report Issue Date</b>             |                               |                                    |  |
| <b>Customer Name</b>     |   | South Estern Coal Field Ltd<br>Bilaspur |                     | <b>Address &amp; Contact Details</b> |                               | SEEPAT ROAD BILASPUR<br>7752241927 |  |
| <b>Sampling By</b>       | Nitesh  | <b>Date of Sampling</b>                 | 05-02-2023          | <b>Sample ID</b>                     | 15791                         |                                    |  |
| <b>Sampling Location</b> | Drinking water Ganga Nagar<br>Handpump Govt school Gevra OC | <b>Sampling Plan</b>                    | As per monthly plan | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                |                                    |  |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>        | 06-02-2023          | <b>Date of Analysis</b>              | From 06-02-2023 To 10-03-2023 |                                    |  |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 65.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 34.469         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 11.00          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 3.38           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.82           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | BDL            | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 9.66           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.14           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | NIL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 18.31          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 192.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 24.10          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.76           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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Reported By  
Santosh Kumar Singh

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                     |  |
|--------------------------|---|--------------------------------------|---------------------|--|
| <b>Unique Report No.</b> | 26307   | <b>Report Issue Date</b>             |                     |  |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur                     | <b>Address &amp; Contact Details</b> |                     | SEEPAT ROAD BILASPUR<br>7752241927                       |
| <b>Sampling By</b>       | Nitesh  | <b>Date of Sampling</b>              | 05-02-2023          | <b>Sample ID</b><br>15792                                |
| <b>Sampling Location</b> | Drinking water Nehru Nagar<br>Handpump Govt school Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan | <b>Sampling Method</b><br>CMPDI/BSP/LSOP                 |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-02-2023          | <b>Date of Analysis</b><br>From 06-02-2023 To 10-03-2023 |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 145.00         | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 49.699         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 29.49          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 1.85           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.10           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | BDL            | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.07           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 23.75          | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.15           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | NIL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 3.52           | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 267.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 56.22          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.22           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.01           | ±0.0013@0.01            |

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Reported By  
Santosh Kumar Singh

Reviewed and Approved  
M. Reagan  
Manager (Env)  
Date&Time :

JSA

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |  |                                      |                                    |
|--------------------------|--|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 27151  | <b>Report Issue Date</b>             | 27-03-2023                         |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur                     | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | Bharat Kumar, Sunil Kumar                                    | <b>Date of Sampling</b>              | 04-03-2023                         |
| <b>Sampling Location</b> | 4.5 MLD Water Filter Plant (Water Before Treatment) Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan                |
| <b>Sample Condition</b>  | APPROPRIATE  | <b>Date of Receipt of Sample</b>     | 06-03-2023                         |
|                          |  | <b>Sample ID</b>                     | 16156                              |
|                          |  | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                     |
|                          |  | <b>Date of Analysis</b>              | From 04-03-2023 To 22-03-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 50.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 13.794         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 7.88           | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 7.23           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.35           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.06           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.06           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 1.17           | ±0.528@20.41            |
| 13     | Odour none                   | Site    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Site    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.03           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Site    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 10.63          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Site    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 80.00          | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 51.45          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 4.24           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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

Reported By  
R.K Thakur Santosh Kumar Singh

Reviewed and Approved  
Kumaravel .C  
Manager (Env)  
Date&Time :27-03-2023 03:49:40

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 27187   | <b>Report Issue Date</b>             | 27-03-2023                         |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur                | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | Bharat Kumar, Sunil Kumar                               | <b>Date of Sampling</b>              | 04-03-2023                         |
| <b>Sampling Location</b> | MLD water filter plant (Water after treatment) Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan                |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-03-2023                         |
|                          |   | <b>Sample ID</b>                     | 16160                              |
|                          |   | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                     |
|                          |   | <b>Date of Analysis</b>              | From 07-03-2023 To 20-03-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 55.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 13.464         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 6.27           | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120.C       | 1.0 - 500        | 5                | 15                | 2.62           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.29           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.06           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.06           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 0.83           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 6.99           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530.C       | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 46.60          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 206.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 64.26          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 3.14           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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

Reported By  
D.Dayakar Santosh Kumar Singh

Reviewed and Approved  
Kumaravel .C  
Manager (Env)  
Date&Time :27-03-2023 03:49:40

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 27196   | <b>Report Issue Date</b>             | 27-03-2023                         |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur                            | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | Bharat Kumar, Sunil Kumar   | <b>Date of Sampling</b>              | 04-03-2023                         |
| <b>Sampling Location</b> | Well water Executive colony near<br>Shivmandir, Urja Nagar Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan                |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-03-2023                         |
|                          |   | <b>Sample ID</b>                     | 16161                              |
|                          |   | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                     |
|                          |   | <b>Date of Analysis</b>              | From 07-03-2023 To 20-03-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 15.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 8.712          | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 27.00          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 2.62           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.83           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.07           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.07           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 15.73          | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 6.98           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 7.74           | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 229.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 74.30          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.94           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.07           | ±0.0013@0.01            |

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

Reported By  
D.Dayakar Santosh Kumar Singh

Reviewed and Approved  
Kumaravel .C  
Manager (Env)  
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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 27214   | <b>Report Issue Date</b>             | 27-03-2023                         |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur              | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | Bharat Kumar, Sunil Kumar                             | <b>Date of Sampling</b>              | 04-03-2023                         |
| <b>Sampling Location</b> | Well water workers colony near<br>Ajad Chowk Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan                |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-03-2023                         |
|                          |   | <b>Sample ID</b>                     | 16163                              |
|                          |   | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                     |
|                          |   | <b>Date of Analysis</b>              | From 07-03-2023 To 20-03-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 55.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 26.136         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 31.82          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120.C       | 1.0 - 500        | 5                | 15                | 4.15           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.52           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.06           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.06           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 8.52           | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.03           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530.C       | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 31.15          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 199.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 98.39          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 1.92           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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

**Reported By**  
**D.Dayakar Santosh Kumar Singh**

**Reviewed and Approved**  
**Kumaravel .C**  
**Manager (Env)**  
 Date&Time :27-03-2023 03:49:40

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 27160   | <b>Report Issue Date</b>             | 27-03-2023                         |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur               | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | Bharat Kumar, Sunil Kumar                             | <b>Date of Sampling</b>              | 04-03-2023                         |
| <b>Sampling Location</b> | Colony tap water DAV Public<br>School, Gevra Gevra OC | <b>Sampling Plan</b>                 | As per monthly<br>plan             |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-03-2023                         |
|                          |   | <b>Sample ID</b>                     | 16157                              |
|                          |   | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                     |
|                          |   | <b>Date of Analysis</b>              | From 04-03-2023 To 22-03-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 55.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 14.605         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | BDL            | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 3.38           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.32           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.09           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.09           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 0.91           | ±0.528@20.41            |
| 13     | Odour none                   | Site    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Site    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.10           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Site    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 21.19          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Site    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 96.00          | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 59.68          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.12           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.09           | ±0.0013@0.01            |

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

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R.K Thakur Santosh Kumar Singh

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Kumaravel .C  
Manager (Env)  
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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |  |                                      |                                    |  |
|--------------------------|--|--------------------------------------|------------------------------------|--|
| <b>Unique Report No.</b> | 27205  | <b>Report Issue Date</b>             | 27-03-2023                         |  |
| <b>Customer Name</b>     | South Estern Coal Field Ltd<br>Bilaspur  | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |  |
| <b>Sampling By</b>       | Bharat Kumar, Sunil Kumar  | <b>Date of Sampling</b>              | 04-03-2023                         | <b>Sample ID</b><br>16162                                |
| <b>Sampling Location</b> | Well water of Vijay nagar<br>Rehabilitation village of Mayaram<br>Kawan Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan                | <b>Sampling Method</b><br>CMPDI/BSP/LSOP                 |
| <b>Sample Condition</b>  | APPROPRIATE  | <b>Date of Receipt of Sample</b>     | 06-03-2023                         | <b>Date of Analysis</b><br>From 07-03-2023 To 20-03-2023 |

| Sr. No | Parameter                                | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|--|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |  |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO <sub>3</sub>     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 25.00          | ±0.19696@10.0           |
| 2      | Arsenic mg/l                             | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                               | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                             | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 20.592         | ±2.512@99.8             |
| 5      | Chlorides mg/l                           | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 85.82          | ±6.551@253.5            |
| 6      | Colour Hazen                             | Main    | APHA, 23rd Edition,2017, 2120. C      | 1.0 - 500        | 5                | 15                | 3.38           | ±1.05@ 49.86            |
| 7      | Copper mg/l                              | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                            | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 0.32           | ±0.014@0.98             |
| 9      | Iron mg/l                                | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | BDL            | ±0.0782@7.95            |
| 10     | Lead mg/l                                | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l                           | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                             | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 45.66          | ±0.528@20.41            |
| 13     | Odour none                               | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                            | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 7.05           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l                  | Main    | APHA, 23rd Edition,2017, 5530. C      | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l              | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                            | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                            | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 15.80          | ±0.640@19.88            |
| 19     | Total Chromium mg/l                      | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml                | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l              | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 273.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO <sub>3</sub> | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 90.36          | ±11.545@612.8           |
| 23     | Turbidity NTU                            | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.12           | ±0.855@41.58            |
| 24     | Zinc mg/l                                | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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

Reported By  
D.Dayakar Santosh Kumar Singh

Reviewed and Approved  
Kumaravel .C  
Manager (Env)  
Date&Time :27-03-2023 03:49:40

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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 27169   | <b>Report Issue Date</b>             | 27-03-2023                         |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur                    | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | Bharat Kumar, Sunil Kumar                                   | <b>Date of Sampling</b>              | 04-03-2023                         |
| <b>Sampling Location</b> | Drinking water Ganga Nagar<br>Handpump Govt school Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan                |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-03-2023                         |
|                          |   | <b>Sample ID</b>                     | 16158                              |
|                          |   | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                     |
|                          |   | <b>Date of Analysis</b>              | From 07-03-2023 To 20-03-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 360.00         | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 19.008         | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 13.02          | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120.C       | 1.0 - 500        | 5                | 15                | 21.08          | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | BDL            | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | BDL            | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | BDL            | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 33.63          | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 6.98           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530.C       | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 22.48          | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 146.00         | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 60.24          | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.53           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | BDL            | ±0.0013@0.01            |

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

Reported By  
D.Dayakar Santosh Kumar Singh

Reviewed and Approved  
Kumaravel .C  
Manager (Env)  
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**TEST & SAMPLING REPORT OF (DRINKING WATER)**

|                          |   |                                      |                                    |
|--------------------------|---|--------------------------------------|------------------------------------|
| <b>Unique Report No.</b> | 27178   | <b>Report Issue Date</b>             | 27-03-2023                         |
| <b>Customer Name</b>     | South Eastern Coal Field Ltd<br>Bilaspur                    | <b>Address &amp; Contact Details</b> | SEEPAT ROAD BILASPUR<br>7752241927 |
| <b>Sampling By</b>       | Bharat Kumar, Sunil Kumar                                   | <b>Date of Sampling</b>              | 04-03-2023                         |
| <b>Sampling Location</b> | Drinking water Nehru Nagar<br>Handpump Govt school Gevra OC | <b>Sampling Plan</b>                 | As per monthly plan                |
| <b>Sample Condition</b>  | APPROPRIATE   | <b>Date of Receipt of Sample</b>     | 06-03-2023                         |
|                          |   | <b>Sample ID</b>                     | 16159                              |
|                          |   | <b>Sampling Method</b>               | CMPDI/BSP/LSOP                     |
|                          |   | <b>Date of Analysis</b>              | From 07-03-2023 To 20-03-2023      |

| Sr. No | Parameter                    | Test At | Method of Analysis                    | Range of Testing | IS 10500:2012    |                   | Observed Value | UOM (at 95% C.L&K=1.96) |
|--------|------------------------------|---------|---------------------------------------|------------------|------------------|-------------------|----------------|-------------------------|
|        |                              |         |                                       |                  | Acceptable Limit | Permissible Limit |                |                         |
| 1      | Alkalinity mg/l as CaCO3     | Main    | IS 3025(Part 23):1986,R 2003          | 5.0 - 1000.0     | 200              | 1000              | 355.00         | ±0.19696@10.0           |
| 2      | Arsenic mg/l                 | Main    | IS 3025 (Part 37):1988,R 2003         | 0.002 - 0.040    | 0.01             | 0.05              | BDL            | ±0.0081@0.018           |
| 3      | Boron mg/l                   | Main    | APHA, 23rd Edition,2017, 4500-B       | 0.5 - 14.0       | 0.5              | 1                 | BDL            | ±0.310@5.16             |
| 4      | Calcium mg/l                 | Main    | IS 3025 (Part 40): 1991, R : 2009     | 5.0 - 500.0      | 75               | 200               | 172.656        | ±2.512@99.8             |
| 5      | Chlorides mg/l               | Main    | IS 3025(Part 32):1988 , R : 2007      | 5.0 - 1000.0     | 250              | 1000              | 338.93         | ±6.551@253.5            |
| 6      | Colour Hazen                 | Main    | APHA, 23rd Edition,2017, 2120.C       | 1.0 - 500        | 5                | 15                | 4.15           | ±1.05@ 49.86            |
| 7      | Copper mg/l                  | Main    | IS 3025 (Part 42) : 1992 R : 2009     | 0.03 - 10.0      | 0.05             | 1.5               | BDL            | ±0.13@4.90              |
| 8      | Fluoride mg/l                | Main    | APHA, 23rd Edition,2017, 4500, F- D   | 0.1 - 5.0        | 1.0              | 1.5               | 1.53           | ±0.014@0.98             |
| 9      | Iron mg/l                    | Main    | IS 3025 (Part 53) :2003, R:2009       | 0.05 - 15.0      | 0.3              | No Relaxation     | 0.07           | ±0.0782@7.95            |
| 10     | Lead mg/l                    | Main    | APHA, 23rd Edition,2017, 3113B        | 0.0050 - 0.1000  | 0.01             | No relaxation     | BDL            | ±0.000266@0.005         |
| 11     | Manganese mg/l               | Main    | IS 3025 (Part 59) : 2006              | 0.05 - 5.0       | 0.1              | 0.3               | 0.07           | ±0.026@2.44             |
| 12     | Nitrate mg/l                 | Main    | APHA, 23rd Edition,2017, 4500, B      | 0.5 - 45         | 45               | No Relaxation     | 46.13          | ±0.528@20.41            |
| 13     | Odour none                   | Main    | IS 3025 (Part 5):1983                 | -                | Agreeable        | Agreeable         | Agreeable      | Not applicable          |
| 14     | pH Value none                | Main    | IS 3025 (Part 11):1983, R : 2012      | 4.00 - 10.00     | 6.5 - 8.5        | No Relaxation     | 6.98           | ±0.127@7.01             |
| 15     | Phenolic compounds mg/l      | Main    | APHA, 23rd Edition,2017, 5530.C       | 0.001 - 0.2      | 0.001            | 0.002             | BDL            | ±0.0204 at 0.1004       |
| 16     | Residual Free Chlorine mg/l  | Main    | APHA, 23rd Edition,2017, 4500G        | 0.1 - 10.0       | 0.2              | 1                 | BDL            | ±0.0082@0.1             |
| 17     | Selenium mg/l                | Main    | IS 3025 (Part 56):2003                | 0.001 - 0.040    | 0.01             | No Relaxation     | BDL            | ±0.000938@0.001         |
| 18     | Sulphate mg/l                | Main    | APHA, 23rd Edition,2017, 4500-SO42- E | 2.0 - 40.0       | 200              | 400               | 141.72         | ±0.640@19.88            |
| 19     | Total Chromium mg/l          | Main    | IS 3025 ( Part 52 ) : 2003            | 0.05 - 15.0      | 0.05             | No relaxation     | BDL            | ±0.004@0.05             |
| 20     | Total Coliform MPN/100 ml    | Main    | APHA, 23rd Edition, 9221 B            | -                | Nil              | No Relaxation     | BDL            | Not specified           |
| 21     | Total Dissolved Solids mg/l  | Main    | IS 3025 (Part 16):1984 R : 2006       | 30.0 - 2000.0    | 500              | 2000              | 1430.00        | ±4.473@592.0            |
| 22     | Total Hardness mg/l as CaCO3 | Main    | IS 3025 (Part 21):2009                | 4.0 - 2000.0     | 200              | 600               | 706.82         | ±11.545@612.8           |
| 23     | Turbidity NTU                | Main    | IS 3025 (Part 10):1984, R : 2006      | 1.0 - 100.0      | 1                | 5                 | 2.33           | ±0.855@41.58            |
| 24     | Zinc mg/l                    | Main    | IS 3025 ( Part 49 ) : 1994, R : 2009  | 0.01 - 2.0       | 5                | 15                | 0.07           | ±0.0013@0.01            |

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D.Dayakar Santosh Kumar Singh

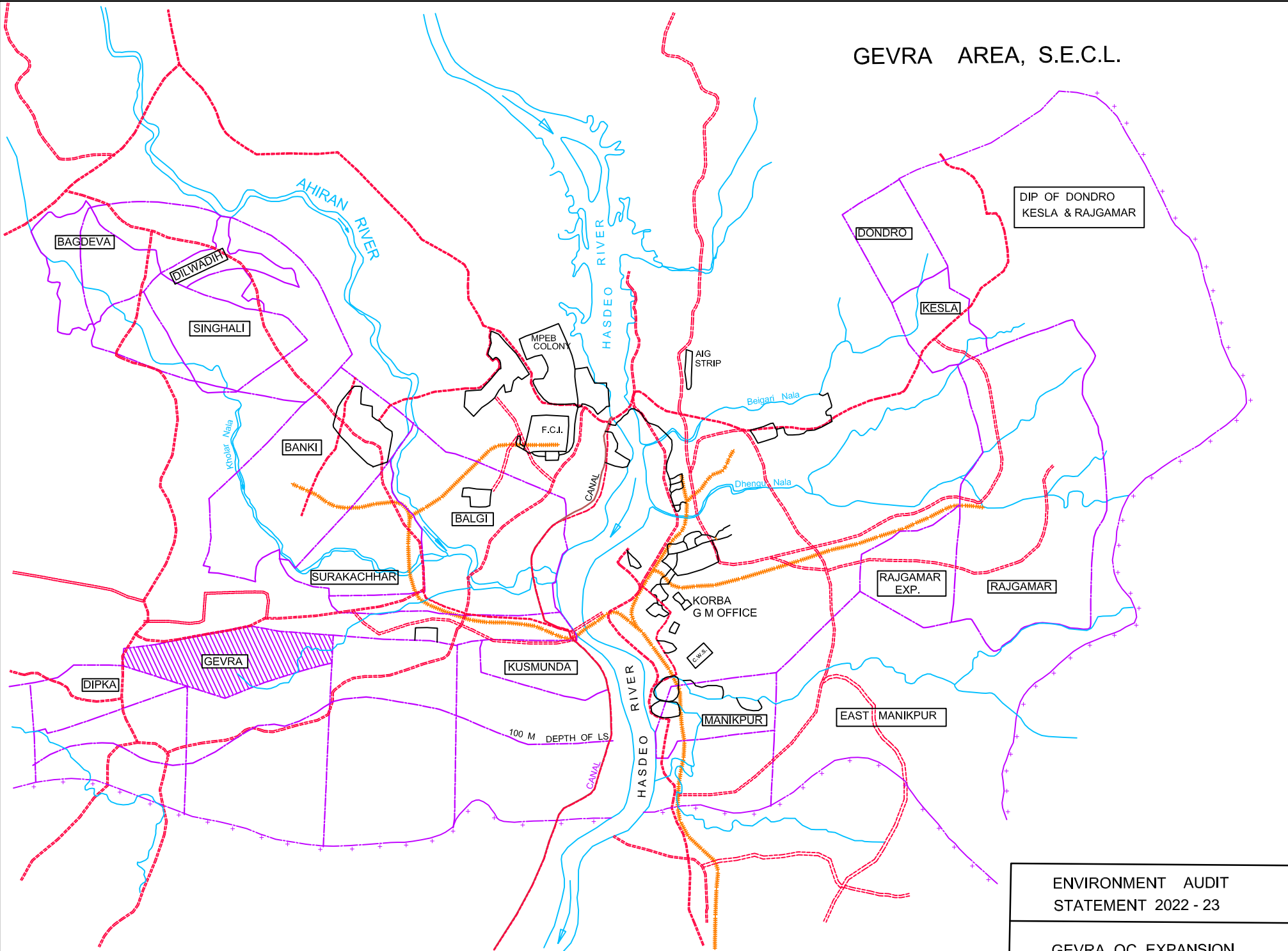
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Manager (Env)  
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ENVIRONMENT AUDIT  
STATEMENT 2022 - 23

GEVRA OC EXPANSION