

Letter No.: HIL/EC/GP- IV/5/II/2021-22 / 121

20th May, 2022

The Integrated Regional Office,
Ministry of Environment Forests & Climate Change (MoEF & CC) Aranya Bhawan,
North Block, Sector – 19, Naya Raipur,
Atal Nagar, Chhattisgarh, 492002

Subject: Half Yearly EC Compliance Report for 1 MTPA Under Ground Captive Coal Mine, Gare Palma IV/5 Coal Mines of Hindalco Industries Limited, Village – Milupara, Tehsil – Tamnar, District – Raigarh, Chhattisgarh.

Respected Sir,

This has reference to the Environment Clearance Letter no. – J-11015/8/1998- IA –II. (M) dated 16.04.2015 (Transferred in favour of HIL). We are submitting herewith the Half Yearly EC Compliance Report along with Environmental Monitoring Report (Hard & Soft) for the period from **October 2021** to March 2022 for your kind perusal please.

The receipt of the report may kindly be acknowledged.

Yours faithfully,

For Hindalco Industries Limited,

Govind Kumar

(Mine Agent- GP IV/5 CM)

Encl.: As Above.

- CC.: 1. Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhawan, Raipur Chhattisgarh.
 - 2. Regional Officer, Chhattisgarh Environment Conservation Board, TV tower Road, Raigarh (CG).
 - 3. Member Secretary, CPCB Parivesh Bhawan, East Arjun Nagar Delhi 110032
 - 4. The Regional Director, Regional Directorate (Central), Bhopal, Central Pollution Control Board (MoEF & CC, GOI), "Parivesh Bhawan" Paryavaran Parishar, E 5, Arera Colony, Bhopal (MP), 462016
 - 5. The Director (Monitoring Cell), Ministry of Environment, Forest & Climate Change, IPB, Aliganj, Jorbagh Road, New Delhi 110003

Compliance Report on conditions of Environment Clearance for Gare-Palma IV/5 coal mining project Transfer by Ministry of Environment, Forests & Climate Change vide letter no. J-11015/8/1998-IA. II (M) Dated: - 16th April 2015 for Under Ground Mining 1.0 Million Ton/Annum Production Capacity.

| Sr. No. | Conditions | Status |
|------------|---|--------|
| 1 | Any change in scope of work will attract the | Noted. |
| | provisions of Environment Protection Act (EPA), | |
| | 1986 and Environment Impact Assessment | |
| | Notification, 2006 in conjunction with the | |
| | subsequent amendments/circulars. | |
| 2 | All conditions stipulated in the EC letter No.J- | Noted. |
| | 11015/8/1998-IA.II (M) dated 31st August, 2000 | |
| | shall remain unchanged. | |
| 3 | The successful bidder shall be liable, if any, for any | Noted. |
| | act of violation of the EPA 1986/EIA Notification | |
| | 2006/subsequent amendments and circulars which | |
| | it has inherited during the transfer. | |
| 4 | Successful bidder shall be liable for compliance of all | Noted. |
| | court directions, if any. | |

Compliance Report on conditions of Environment Clearance for Gare-Palma IV/5 coal mining project given by Ministry of Environment, Forests & Climate Change vide letter no. J-11015/8/1998-IA. II (M) Dated: - 31st August 2000 for Under Ground Mining 1.0 Million Ton/Annum Production Capacity

| Sr. No. | Conditions | Status | | | |
|---------|--|---|--|--|--|
| A. S | pecific Conditions | | | | |
| i | Regular Monitoring of subsidence movement on the surface over working areas and impact on water bodies/ vegetation/ structures/ surroundings should be continued till movement ceases completely. In case of observation of any high rates of subsidence movement, appropriate measures should be taken to avoid loss of life and materials. Cracks should be effectively plugged with ballast and clayey soil/ suitable material. | The method of mining at Gare Palma IV/5 coal mine is Bord & Pillar. Regular monitoring of subsidence movement on the surface over and around the working area and impact on natural pattern, water bodies, vegetation, structure, roads and surroundings is being done by internal expert. During the observation no subsidence movement has been observed. In future, if any subsidence movement is found, appropriate effective corrective measures will be taken to avoid loss of life and material. Cracks will be effectively plugged with ballast | | | |

| | | and clayey soil/suitable material if observed. The subsidence study was already carried out for working panel by CSIR – Central Institute of Mining & Fuel Research Dhanbad in May 2019 for GP IV/5 Coal mines. |
|-----|--|---|
| ii | Adequate underground barrier should be left in consultation with the Director General of Mines & Safety (DGMS). Depillaring should also be carried out after taking approval from DGMS. | Adequate underground barrier as required are being maintained between the working face and the river in consultation with DGMS and also at other places whenever required. Depillaring operation was not carried out during last six months. |
| iii | Garland drains should be constructed around the waste rock and ore stockpiles to prevent surface run-off. | Garland drain have been constructed around the coal stock yard to prevent the surface run-off. |
| iv | A Green Belt of adequate width should be raised by planting the local species along the mine boundary, Waste rock dumps, ore stockpile, ventilation fan road and selected open areas in consultation with local DFO/Agriculture Department. Density of tree should be at least 2500 plants per ha. | Plantation in mines area is being done. At present 49604 nos. of trees have been planted within the Mine boundary and other places. Trees species planted are Neem, Mahua, Jamun, Mango, Guava, Imli,. Drumstick, Teak, Shivan / Ghamar, Sisham, Sirus, Bamboo, Peltafarm, Nilgiri, Amla, Saptaparni, Kathal, kassod tree, Arjuna & Kachnar etc. in consultation with DFO. Plantation has been carried out @2500 per hectare and will also be ensure in future. Plantation details enclosed as Annexure –1. |
| V | Compensation to the 14 land losers from whom private land will be acquired should be paid as per the state government norms. | Compensation to the 14 land losers has been paid by the company. |
| vi | The project authority should conduct a subsidence estimation study and submit the report to the Ministry within six months. | Subsidence estimation study report has been submitted to the Ministry by Prior allottee. |
| vii | The project proponent will construct "Check dams "at the sites proposed by the State Ground water Department in their report. While undertaking the proposed | As per requirement the check dam site will be constructed in consultation with state forest department and Ground water |

| | mining, the construction of the check dams should be carried out in with Ground water survey department, Government of MP (presently Chhattisgarh) and should have necessary financial provision and technical expertise. This should be communicated to the MoEF and CGWB. | survey department, Government of Chhattisgarh and will be communicated to MOEF& CC and CGWA. |
|----------|--|---|
| viii | Regular monitoring of the Ground water level and quality should be carried out by establishing a network of existing wells and constructing new Piezometer during the mining operations. The interval of monitoring should be four times a year- Pre monsoon (April to May), Monsoon (August), Post Monsoon (November) and winter (January). The data thus collected may be sent regularly to MoEF and CGWB for information. | Being Complied. Regular monitoring of groundwater level and quality of the area is being carried out by establishing a network of existing wells/Piezometers. The Ground water level (from October 2021 to March 2022) and quality Monitoring report of Postmonsoon (November 2021) and winter (January 2022) is attached as Annexure No2. |
| | | Quarterly monitoring report of Ground Water Level (from October 2021 to December 2021) and (from January 2022 to March 2022) & GW Quality Monitoring for the month of Post- monsoon (November 2021) and winter (January 2022) has been submitted to MoEF & CC, CPCB and CECB on quarterly within one month of monitoring basis. Attached as Annexure No. – 3. |
| ix | Digital processing of the entire lease using remote sensing technique should be regularly once in three years for monitoring land use pattern and report submitted to MoEF and its regional officer. | Report on Assessment of Land Use / Land Cover using High Resolution Satellite Imagery for the GP Mine IV/5 Coal Mine was carried out by IndiGEO Consultants, Bangalore in the month of December 2019 and the report was submitted to your office dated 27 May 2020. |
| х | A detailed mine decommissioning plan should be submitted to the MoEF, five years in advance for approval. | Detailed mine decommissioning plan will be submitted to the Ministry of Environment and forests, five years in advance for approval as applicable. |
| B. Gener | al Conditions | |

| i | No change in mining technology and scope | Noted and being complied |
|------|--|--|
| 1 | No change in mining technology and scope of working should be made without prior | Noted and being complied. |
| | approval of the MoEF. | |
| ii | No change in the calendar plan including | Noted. |
| | excavation quantum of mineral coal and | |
| | waste should be made. | |
| iii | Four ambient air quality stations should be | Four ambient air quality |
| | established in the core zone as well as the | monitoring stations (Core Zone) & |
| | buffer zone for RPM, SPM, SO2, NOx & CO | Four ambient air quality |
| | Monitoring. Location of stations should be | monitoring stations (Buffer Zone) |
| | decided based on the meteorology data, | have been established and regular |
| | topographical features and environmental and ecologically sensitive targets in | monitoring is being carried out. Reports are being periodically |
| | consultation with the State Pollution | furnished to CECB. |
| | Control Board. | Copy of AAQ Monitoring Report |
| | | from the period October 2021 to |
| | | March 2022 is enclosed as |
| | | Annexure –4. |
| • | Data of ambient sin smalls (DDM CDM | Form ambient six 199 |
| iv | Data of ambient air quality (RPM, SPM, SO2, NOx & CO) should be regularly | Four ambient air quality |
| | submitted to the Ministry including its | monitoring stations (Core Zone) & Four ambient air quality |
| | Regional Officer at Bhopal (Currently | monitoring stations (Buffer Zone) |
| | Raipur) and the State Pollution Control | have been established and regular |
| | Board & Central Pollution Control Board | monitoring is being carried out. |
| | (Currently Raipur). | Reports are being periodically |
| | | furnished to CECB. |
| | | Copy of AAQ Monitoring Report |
| | | from the period October 2021 to |
| V | Drill should be wet operated. | March 2022 is already enclosed. Complied. |
| vi | Fugitive dust emission from all the sources | Fixed type water sprinkler has been |
| | should be controlled, regularly monitored | provided at all along the roads, and |
| | and the data recorded properly. Water | loading points etc. to control the |
| | spraying arrangement on haul roads, | fugitive dust emission. |
| | Wagons, loading dump trucks (loading and | Photographs of fixed type of water |
| | unloading) should be provided and | sprinklers at GP IV/5 Coal Mines is |
| :: | properly maintained. | attached as Annexure – 4A |
| vii | Adequate measures should be taken for control of noise level below 80db in the | Ear muffs/plugs has been provided to the all workers engaged in |
| | work environment. Workers engaged in | blasting and drilling operations, |
| | blasting and drilling operation, operations | operations of HEMM etc. The Noise |
| | of HEMM etc. should be provided with ear | monitoring report for the period |
| | plugs/ muffs | from October 2021 to March 2022 |
| | | is enclosed as Annexure - 5 . |
| viii | Industrial waste water (workshop and | We have constructed 05 Nos. of |
| VIII | waste water from the mine) should be | settling pond & 02 nos of ETP |

| | properly collected and treated so as to conform on the standards prescribed under GSR 422 dated 19.05.1993 and 31.12.1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluents in to the pond. | (Capacity 200 m3 / Hr Each) along with Lamella clarifier with chemical dosing arrangement for the treatment of mine seepage water, the treated water is being used for spraying / sprinkling on mines roads and also for greenbelt development inside the mine premises & remaining treated water from ETP is being distributed to the nearby villagers for irrigation & agriculture purpose (other than drinking). Copy of Analysis Report (ETP Inlet & Outlet) for the period from October 2021 to March 2022 is attached as Annexure — 6 Photographs of Treatment Facility at GP IV/5 Coal Mines is attached as Annexure — 6A Also HIL provided the Sewage Treatment Plant of capacity 50 m3/day at Kondkel to treat the domestic waste water generated from Toilets, bathroom etc. Copy of Analysis Report (Inlet & Out of STP) for the period from October 2021 to March 2022 is attached as Annexure — 6AA Photographs of Sewage Treatment Plant installed at GP IV/5 Coal Mines (Kondkel) is attached as |
|-----|---|---|
| i., | Acid mine water if any has to be treated | Annexure – 6AAA |
| ix | Acid mine water if any has to be treated and disposed off after conforming to the standards prescribed by the competent authority. | There is no acid mine water. Provided ETP (Capacity 200 m3 / Hr Each) along with Lamella clarifier with chemical dosing arrangement for the treatment of mine seepage water and the analysis report of treated water quality are being periodically furnished to SPCB. |
| х | Environmental laboratory should be established with adequate number and type of pollution monitoring and analysis | We have engaged CECB & MoEF&CC approved and NABL accredited Laboratory I.e. M/s Ultimate Envirolytical Solutions |

| | equipment in consultation with the State Pollution Control Board | Raipur to carried out the mine environmental parameters monitoring. Approval letter of Monitoring Agency from CECB Raipur, MoEF&CC & NABL accredited Laboratory certificate is attached as Annexure No. – 7 |
|------|--|--|
| xi | Personnel working in dust area should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance of the workers should be undertaken periodically to observe any contractions due to exposure to coal dust and take corrective measures if needed. | Personnel working in dusty areas are wearing protective respiratory devices and they have also been provided with adequate training and information on safety and health aspect. Occupational health surveillance program of the workers is being undertaken periodically to observe any contraction due to exposure to coal dust and corrective measures will been taken accordingly. |
| xii | A separate environmental management cell with suitable qualified personnel should be set up under the control of a senior executive who will report directly to the Head of the Organization. | A separate Environmental Management Department is functioning at Coal Mine under the direct control of a senior executive. |
| xiii | The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to Ministry. | The funds earmarked for environmental protection measures has been budgeted separately and not been diverted for other purposes. Environmental Expenditure details from October 2021 to March 2022 is enclosed as Annexure – 8 |
| xiv | The Regional Officer of the ministry located at Bhopal (currently Raipur) shall monitor compliance of the stipulated conditions. The project authorities should extent full co-operation to the officer (s) of the Regional Officer by furnishing requisite data information / monitoring reports | Agreed and cooperation will be extended on time to time. |
| xv | A copy of the clearance letter will be marked to concerned Panchayat/ local NGO if any from whom suggestion / representation has been received while processing the proposal | Complied by Prior Allottee. |

| xvi | State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and Collector's Office/ Tehsildar's office for 30 days | Complied by Prior Allottee. |
|------|---|-----------------------------|
| xvii | The project authorities should advertise at least two local newspapers widely circulated around the project one of which shall be in vernacular language of the locality concerned informing that the project has been accorded environmental clearance and the copy of the clearance letter is available with the State Pollution Control Board and may also be seen at web site of the MoEF at http://envfor.nic.in | Complied by Prior Allottee. |

Annexure-1

Hindalco Industries Limited Green Belt Development Status

| Year wise plantation detail of Gare Palma IV/5 Coal Mine | | | | | | | | |
|--|--------------------------------|----------------------------------|-------------------|-----------------------------|---|----------------------------------|--|--|
| Year | Location | No. of Tree Planted (Approx.) | Survival Rate (%) | Number of Plant Survived | Area Covered in Plantation (hectare) | Sapling Details | | |
| Upto 2015 | | 30000 | 82.00 | 24600 | 9.84 | | | |
| 2016 | | 2000 | 85.00 | 1700 | 0.68 | | | |
| 2017 | Coal mine | 5000 | 80.00 | 4000 | 1.60 | Neem, Mahua, , Jamun, Mango, | | |
| 2018 | lease area | 5000 | 85.00 | 4250 | 1.70 | Guava, Imli,. Drumstick, Teak, | | |
| 2019 | | 5000 | 90.00 | 4500 | 1.80 | Shivan / Ghamar, Sisham, Sirus, | | |
| 2020 | | 1100 | 100.00 | 1100 | 0.44 | Bamboo, Peltafarm, Nilgiri, Amla | | |
| 2021 | | 1504 | 98.00 | 1474 | 0.59 | Saptaparni, Kathal, kassod tree, | | |
| 49604 Total | | 49604 | 83.91 | 41624 | 16.6 | Arjuna & Kachnar etc | | |
| ote : Gap filling of plant | ts is a continous _l | process | | | | | | |

Green Belt Development Photographs

















Annexure-2

Ground Water Level Monitoring Report in and around the Coal Mine Area (From Oct 2021 to Dec 2021)

| Sr. No. | Location | Types of Structure | In Meters | | |
|------------|---|--------------------|--|--|--|
| | | | Ground Water level (BGL) Oct 2021 | Ground Water level (BGL) Nov 2021 | Ground Water level (BGL) Dec 2021 |
| 1 | Bankheta (Near HIL Office) | Borewell/ AWLR | 7.10 | 9.82 | 10.65 |
| 2 | Banjikhol (Near Office) | Borewell/ AWLR | 24.33 | 24.29 | 24.35 |
| 3 | Milupara (Near Office) | Borewell/ AWLR | 9.12 | 9.70 | 10.42 |
| 4 | HIL Staff Quarter | Borewell/ AWLR | 4.40 | 4.72 | 5.65 |
| 5 | Milupara Village (PHC-HIL) | Dugwell | 1.66 | 2.70 | 2.74 |
| 6 | Sakta Village (Near Primary School) | Dugwell | 2.30 | 2.70 | 2.97 |
| 7 | Sidarpara Village (Near Primary School) | Dugwell | 7.13 | 7.90 | 8.50 |
| 8 | Beljor Village | Dugwell | 5.16 | 5.80 | 5.70 |



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| Name & Address Of TO, | REPORT NO LAB REF NO | | UES/TR/21-22/04189 UES/21-22/W/07511 | | | | |
|---|------------------------------------|-------------------|---|---------------------------|----------------|-------------------------|--|
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, | | | DATE OF SAMPLING | 23 | 3/11/2021 | | |
| VILLAGE - BANKHET | | | DATE OF RECEIPT | | 24/11/2021 | | |
| POST -MILUPARA, DISTT RAIGARH (C.G.) 496107. | | | DATE OF REPORT | | 01/12/2021 | | |
| | | | DATE OF ANALYSIS | START: 24/11/2021 END: 27 | | END: 27/11/2021 | |
| | | S | AMPLE DETAILS | | | | |
| SAMPLE TYPE | GROUNDWATER | | ORDER /REFERENCE: | | N/PO/SRV/2122/ | 0045, DTD. 24-JULY-2021 | |
| CUSTMER SAMPLE ID | BANKHETA MINE (PIEZOMETER) AWLR | 2 | SAMPLE CONDITION AT RECEIPT | OK OK | | | |
| PACKING OF SAMPLE 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN SEALED 1 L X 1 NO. GLASS BOTTLE | | | SAMPLE COLLECTED BY | CHEMIST | | | |
| IS:3025(PART I):1987 RA 2003; APHA 22ND ED. 2012, 1060-B, 1-39 | | QUANTITY RECEIVED | | 5 LTR | | | |

| | | | TEST REPORT | | | |
|-----|---|----------------|---|---------------------|----------------------|-----------|
| SR. | PARAMETER | | | AS PER IS | 10500:2012 | RESULT |
| NO. | | PARAMETER UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 |
| 2 | Odour | l - | IS 3025(part-5) | Agreeable | Agreeable | Agreeable |
| 3 | Taste | | IS 3025(part-8) | Agreeable | Agreeable | Agreeable |
| 4 | рН | - | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxatio n | 7.93 |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 1.12 |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 162.0 |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 0.2 | 1 | N.D. |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | - | - | 100.2 |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 98.2 |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | - | 2.0 |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 34.0 |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2-44,45 | 200 | 600 | 48.0 |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | - | | 26.0 |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | - | - | 22.0 |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | 75 | 200 | 10.4 |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 5.34 |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 nd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 15.9 |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 11.4 |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ -B, 4-122 | 45 | NoRelaxatio n | 0.21 |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P-C, 4-153 | - | - | N.D. |



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| Report | No. | 041 | 89 |
|--------|-----|-----|----|
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| | | | TEST REPORT | | | |
|-------|--|-------------------|---|---|----------------------------|--------|
| SR. | | | | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na-B, 3-97 | | - | 16.4 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500-K-B, 3-87 | - | - | 1.18 |
| 23 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4- 25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxatio n | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.10 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | N.D. |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.01 | NoRelaxatio n | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxatio n | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 | 2012,3112-B, 3-23 0.001 No. | | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxatio n | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxatio n | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxatio n | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | - | - | N.D. |
| 1icro | biological Analysis | | \$ | | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | detectable in ml sample | Absent |
| 2 | Faecal Coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | | detectable in ml sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be detectable in any 100ml sample | | Absent |
| esti | cides | | L. | | L. | |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p DDD | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 5 | O,p DDD | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | µg/L | US EPA 508-1995 | | 2 | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.04189

| TEST REPORT | | | | | | | | | |
|-------------|--------------------|--------|-------------------|---------------------|----------------------|--------|--|--|--|
| SR. | | i in a | | | 10500:2012 | | | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | |
| 7 | Alpha-HCH | μg/L | US EPA 508-1995 | 0. | 0.01 | | | | |
| 8 | Beta-HCH | μg/L | US EPA 508-1995 | 0. | 04 | N.D. | | | |
| 9 | Delta HCH | μg/L | US EPA 508-1995 | 0. | 04 | N.D. | | | |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | 0 | .4 | N.D. | | | |
| 11 | Beta-Endosulfan | μg/L | US EPA 508-1995 | 0 | .4 | N.D. | | | |
| 12 | Endosulfansulphate | µg/L | US EPA 508-1995 | 0 | .4 | N.D. | | | |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | 1 | | N.D. | | | |
| 14 | Ethion | μg/L | US EPA 8141A-1994 | 3 | | N.D. | | | |
| 15 | Chloropyrifos | μg/L | US EPA 8141A-1994 | 30 | | N.D. | | | |
| 16 | Phorate | μg/L | US EPA 8141A-1994 | 2 | | N.D. | | | |
| 17 | Phoratesulphoxide | μg/L | US EPA 8141A-1994 | | - | N.D. | | | |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | - | - | N.D. | | | |
| 19 | 2,4-D | μg/L | US EPA 515.1-1995 | 3 | 0 | N.D. | | | |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 2 | 0 | N.D. | | | |
| 21 | Atrazine | μg/L | US EPA 532-2000 | 2 | 2 | N.D. | | | |
| 22 | Methyl parathion | μg/L | US EPA 8141A-1994 | 0. | .3 | N.D. | | | |
| 23 | Methyl paraxone | μg/L | US EPA 8141A-1994 | - | | N.D. | | | |
| 24 | Malathion | μg/L | US EPA 8141A-1994 | 190 | | N.D. | | | |
| 25 | Malaoxon | µg/L | US EPA 8141A-1994 | - | - | | | | |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0.03 | | N.D. | | | |
| 27 | Dieldrin | μg/L | US EPA 508-1995 | 0.0 | N.D. | | | | |

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

REVIEWED BY

Terms & conditions

> The report for publication, arbitration or as legal dispute is forbidden.

> Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

AUTHORIZED SIGNATORY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Cus | stomer | REP | PORT NO | UES | UES/TR/21-22/04190 UES/21-22/W/07512 23/11/2021 24/11/2021 01/12/2021 | | |
|--|--|----------|-----------------------------|------------------------------|---|------------------------|--|
| TO, | STRIES LIMITED, | LAB | REF NO | UES | | | |
| GARE PALMA - IN | PRINCIPLE AND PARTY AND PRINCIPLE AND PRINCI | DAT | TE OF SAMPLING | 23/ | | | |
| VILLAGE - BANK | the state of the s | DAT | E OF RECEIPT | 24/ | | | |
| POST -MILUPARA | ٨, | DAT | TE OF REPORT | 01/: | | | |
| DISTT RAIGAR | H (C.G.) 496107. | DAT | DATE OF ANALYSIS | | START: 24/11/2021 END: 27/11/2021 | | |
| | | SAME | PLE DETAILS | | | | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE | ORDER /REFERENCE: N/PO/SRV/2 | | 22/0045, DTD. 24-JULY- | |
| CUSTMER SAMPLE ID | BANJIKHOL MINE (PIEZOMET | ER) AWLR | SAMPLE CONDITION AT RECEIPT | | T OK | | |
| PACKING OF SAMPLE 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | | SEALED | SAMPLE COLLECTI | ED BY | BY CHEMIST | | |
| SAMPLING PROCEDURE IS:3025(PART I):1987 RA 2003; APHA 22ND ED. 2012, 1060-B,1-39 | | | QUANTITY RECEIVED | | 5 LTR | | |

Report No.04190

| TEST REPORT | | | | | | | | | |
|-------------|---|--------|---|---------------------|----------------------|----------|--|--|--|
| SR. | | | | AS PER IS | 10500:2012 | | | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 | | | |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeabl | | | |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeabl | | | |
| 4 | pH | - | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxation | 6.84 | | | |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 2.3 | | | |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 169.4 | | | |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 0.2 | 1 | N.D. | | | |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | N= 1 | - | 104.2 | | | |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 102.4 | | | |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | - | 1.8 | | | |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 44.0 | | | |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2-44,45 | 200 | 600 | 78.0 | | | |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | - | - | 38.0 | | | |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | - | - | 40.0 | | | |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | 75 | 200 | 15.2 | | | |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 9.72 | | | |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 nd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 14.9 | | | |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 11.3 | | | |
| 19 | Nitrate (as NO ₃) | mg/Lit | B,4-122 | | NoRelaxation | 2.1 | | | |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P-C, 4-153 | - | - * | N.D. | | | |



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| | | | TEST REPORT | | | |
|-------|--|-------------------|---|---------------------|------------------------------|----------|
| SR. | | | | AS PER IS | 10500:2012 | fat Page |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500–Na-B, 3-97 | - | - | 8.2 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500-K-B, 3-87 | - | - | 0.21 |
| 23 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4-25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxation | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | N.D. |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | N.D. |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.01 | NoRelaxation | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxation | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.001 | NoRelaxation | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxation | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxation | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxation | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39): 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003, | - | - | N.D. |
| 1icro | biological Analysis | | | | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | etectable in any I sample | Absent |
| 2 | Faecal Coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | | etectable in any I sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | | etectable in any sample | Absent |
| estic | ides | | | | | |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | μg/L | US EPA 508-1995 | 1 | | N.D. |
| 3 | p,pDDE | μg/L | US EPA 508-1995 | 1 | | N.D. |
| 4 | p,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 5 | O,p DDD | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | μg/L | US EPA 508-1995 | | 2 | N.D. |
| 7 | Alpha-HCH | μg/L | US EPA 508-1995 | 0. | .01 | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.04190

| | TEST REPORT | | | | | | | | | |
|-----|--------------------|------|-------------------|---------------------|----------------------|--------|--|--|--|--|
| SR. | | | | AS PER IS | 10500:2012 | | | | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | | |
| 8 | Beta-HCH | μg/L | US EPA 508-1995 | 0. | 0.04 | | | | | |
| 9 | Delta HCH | μg/L | US EPA 508-1995 | 0. | 04 | N.D. | | | | |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | 0 | .4 | N.D. | | | | |
| 11 | Beta-Endosulfan | μg/L | US EPA 508-1995 | 0 | .4 | N.D. | | | | |
| 12 | Endosulfansulphate | μg/L | US EPA 508-1995 | 0 | .4 | N.D. | | | | |
| 13 | Monocrotophos | μg/L | US EPA 8141A-1994 | | 1 | N.D. | | | | |
| 14 | Ethion | μg/L | US EPA 8141A-1994 | 3 | | N.D. | | | | |
| 15 | Chloropyrifos | μg/L | US EPA 8141A-1994 | 30 | | N.D. | | | | |
| 16 | Phorate | μg/L | US EPA 8141A-1994 | | 2 | | | | | |
| 17 | Phoratesulphoxide | μg/L | US EPA 8141A-1994 | | - | N.D. | | | | |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | | - | N.D. | | | | |
| 19 | 2,4-D | μg/L | US EPA 515.1-1995 | 3 | 0 | N.D. | | | | |
| 20 | Alachlor | μg/L | US EPA 508- 1995 | 2 | 0 | N.D. | | | | |
| 21 | Atrazine | μg/L | US EPA 532-2000 | | 2 | N.D. | | | | |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0. | .3 | N.D. | | | | |
| 23 | Methyl paraxone | μg/L | US EPA 8141A-1994 | | - | | | | | |
| 24 | Malathion | μg/L | US EPA 8141A-1994 | 19 | 90 | N.D. | | | | |
| 25 | Malaoxon | μg/L | US EPA 8141A-1994 | | - | N.D. | | | | |
| 26 | Aldrin | μg/L | US EPA 508- 1995 | 0.03 | | N.D. | | | | |
| 27 | Dieldrin | μg/L | US EPA 508-1995 | 0.03 | | | | | | |

Note: mg/lit.: milligram per liter, N.D.- Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

REVIEWED BY

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

----End of the test report---



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Cu. | stomer | REPO | RT NO | UES/TR/21- | 22/0 | 4225 |
|--|--|--|--------------------------------|---|-------|--------------------------------------|
| TO, | | LAB . | REF NO | F NO UES/21-22/W/07585 | | |
| HINDALCO INDUSTR | entropy of the state of the sta | DATE | DATE OF SAMPLING 24/11/202 | | | |
| GARE PALMA – IV/5, | | DATE | OF RECEIPT | 25/11/2021 | | |
| U/G COAL MINE,VILL | AGE – MILUPARA, | DATE | OF REPORT | 01/12/2021 START: 25/11/2021 END: 29/11/2021 | | |
| BLOCK-TAMNAR, DISTT RAIGARH (C | G) 496107 | DATE | OF ANALYSIS | | | END: 29/11/2021 |
| | | SAMPL | E DETAILS | | | |
| SAMPLE TYPE | GROUND WATER | THE WAS A WILL WAS A STATE OF THE STATE OF T | ORDER /REFERENCE: | | | PO/SRV/2122/0049, D. 24-JULY-2021 |
| CUSTMER SAMPLE ID | NEAR MILUPARA MINES O PIEZOMETER -AWLR | OFFICE | SAMPLE CONDITION AT RECEIPT | | ок | |
| PACKING OF SAMPLE | 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | SEALED | SAMPLE COLLI | ECTED BY | СНІ | EMIST |
| IS:3025(PART I):1987 RA 2003; APHA 22ND ED. 2012, 1060-B, 1-39 | | | QUANTITY RECEIVED | | 5 LTR | |

REPORT NO. - 04225

| | TEST REPORT | | | | | | | | | |
|-----|--|--------|---|---------------------|----------------------|------------|--|--|--|--|
| SR. | | | | AS PER IS | 10500:2012 | and motion | | | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | | |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 | | | | |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeable | | | | |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeable | | | | |
| 4 | рН | - | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxation | 6.54 | | | | |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 2.0 | | | | |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 188.6 | | | | |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G,4 - 69 | 0.2 | 1 | N.D. | | | | |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | - | - | 120.2 | | | | |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 114.6 | | | | |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | 7 | 5.6 | | | | |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 26.0 | | | | |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2-44,45 | 200 | 600 | 58.0 | | | | |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | - | - | 32.0 | | | | |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | - | - | 26.0 | | | | |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | 75 | 200 | 12.8 | | | | |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 6.3 | | | | |
| 17 | Chloride (as Cl) | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-B, 4-72 | 250 | 1000 | 15.9 | | | | |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ - E,4-190 | 200 | 400 | 11.3 | | | | |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ -B, 4-122 | 45 | NoRelaxation | 2.2 | | | | |



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| | | | TEST REPORT | | | |
|------------|---|----------------|---|--|----------------------|--------|
| | | | | AS PER IS | 10500:2012 | 11/11 |
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P-C, 4-153 | - | - | N.D. |
| 20 | Sodium (as Na) | mg/Lit | APHA 22ndEd.2012,3500-Na-B, 3-97 | - | - | 7.2 |
| 21 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500-K-B, 3-87 | - | - | 0.39 |
| 22 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4- 25 | 0.5 | 1.0 | N.D. |
| 23 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxation | N.D. |
| 24 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.09 |
| 25 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | N.D. |
| 26 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.01 | NoRelaxation | N.D. |
| 27 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 28 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 29 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.05 | 1.5 | N.D. |
| 30 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd,3- 105 | 0.003 | NoRelaxation | N.D. |
| 31 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.001 | NoRelaxation | N.D. |
| 32 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 33 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxation | N.D. |
| 34 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxation | N.D. |
| 35 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 36 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 37 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxation | N.D. |
| 38 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 39 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | - | - | N.D. |
| Micro | obiological Analysis | | | | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | detectable in any | Absent |
| 2 | Faecal coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | Shall not be detectable in any 100 ml sample | | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be o | detectable in any | Absent |
| Pesti | cides | | • | | | |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p DDD | μg/L | US EPA 508-1995 | | 1 | N.D. |
| | | | | ., | | |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

PEROPT NO - 04225

| | TEST REPORT | | | | | | | | | |
|---------------|------------------------|------|-------------------|---------------------|----------------------|--------|--|--|--|--|
| | | | | AS PER IS | 10500:2012 | | | | | |
| SR. PARAMETER | | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | | |
| 5 | O,p DDD | μg/L | US EPA 508-1995 | 1 | | N.D. | | | | |
| 6 | Gamma-HCH (Lindane) | μg/L | US EPA 508-1995 | | 2 | | | | | |
| 7 | Alpha-HCH | μg/L | US EPA 508-1995 | 0 | .01 | N.D. | | | | |
| 8 | Beta-HCH | μg/L | US EPA 508-1995 | 0 | .04 | N.D. | | | | |
| 9 | Delta HCH | μg/L | US EPA 508-1995 | 0 | .04 | N.D. | | | | |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | | 0.4 | N.D. | | | | |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | | 0.4 | N.D. | | | | |
| 12 | Endosulfansulphat e | μg/L | US EPA 508-1995 | 0.4 | | N.D. | | | | |
| 13 | Monocrotophos | μg/L | US EPA 8141A-1994 | 1 | | N.D. | | | | |
| 14 | Ethion | μg/L | US EPA 8141A-1994 | 3 | | N.D. | | | | |
| 15 | Chloropyrifos | μg/L | US EPA 8141A-1994 | | 30 | N.D. | | | | |
| 16 | Phorate | μg/L | US EPA 8141A-1994 | | 2 | N.D. | | | | |
| 17 | Phoratesulphoxide | μg/L | US EPA 8141A-1994 | | - | N.D. | | | | |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | | - | N.D. | | | | |
| 19 | 2,4-D | μg/L | US EPA 515.1-1995 | | 30 | N.D. | | | | |
| 20 | Alachlor | μg/L | US EPA 508- 1995 | | 20 | N.D. | | | | |
| 21 | Atrazine | μg/L | US EPA 532-2000 | | 2 | N.D. | | | | |
| 22 | Methyl parathion | μg/L | US EPA 8141A-1994 | (| 0.3 | N.D. | | | | |
| 23 | Methyl paraxone | μg/L | US EPA 8141A-1994 | | - | N.D. | | | | |
| 24 | Malathion | μg/L | US EPA 8141A-1994 | | .90 | N.D. | | | | |
| 25 | Malaoxon | μg/L | US EPA 8141A-1994 | | - | | | | | |
| 26 | Aldrin | μg/L | US EPA 508- 1995 | 0 | 0.03 | | | | | |
| 27 | Dieldrin | μg/L | US EPA 508-1995 | 0.03 | | N.D. | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected

REMARKS: RESULTS ARE AS ABOVE

REVIEWED BY

ithis & Conditions
The report for publication, arbitration or as legal dispute is forbidden.
Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.
This is for information as the party has asked for above test(s) only

End of the test report-

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

01/12/21



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Cu TO, HINDALCO INDUSTR GARE PALMA – IV/5, U/G COAL MINE,VILL BLOCK-TAMNAR, | IES LIMITED, MILUPARA | DATE | RT NO REF NO OF SAMPLING OF RECEIPT OF REPORT | F NO UES/21-22 F SAMPLING 24/11/2022 F RECEIPT 25/11/2022 F REPORT 01/12/2022 | | |
|--|---|-------------------|---|---|------|------------------------------------|
| DISTT RAIGARH (C | .G.) 496107 | | OF ANALYSIS | START: 25/11/ | 2021 | END: 29/11/2021 |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERE | NCE: | | 0/SRV/2122/0049, . 24-JULY-2021 |
| CUSTMER SAMPLE ID | STAFF QUARTER-BANJIKHOL PIEZOMETER (AWLR) | | SAMPLE CONDITION AT RECEIPT | | OK | . 27 JUH 2021 |
| PACKING OF SAMPLE | 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | SEALED | SAMPLE COLLEC | TED BY | СНЕЗ | MIST |
| SAMPLING PROCEDURE | IS:3025(PART I):1987 RA APHA 22ND ED. 2012, 1060 | QUANTITY RECEIVED | | 5 LTR | | |

REPORT NO. 04224

| | | | TEST REPORT | | | | |
|-----|---|--------|---|----------------------------|----------------------------------|----------------------|--------|
| SR. | PARAMETER | UNIT | | ACCEPTABL DRINKING WATE | E LIMIT FOR R (IS 10500:2012) | | |
| NO. | | | PARAMETER ON METADO | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 | |
| 2 | Odour | - | IS 3025:(part-5) | Agreeable | Agreeable | Agreeable | |
| 3 | Taste | - | IS 3025:(part-8) | Agreeable | Agreeable | Agreeable | |
| 4 | pH | - | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxati on | 6.85 | |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 1.20 | |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 226.0 | |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 0.2 | 1 | N.D. | |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | - | - | 146.6 | |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 134.8 | |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | - | 11.8 | |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 38.0 | |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2-44,45 | 200 | 600 | 82.0 | |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | - | - | 44.0 | |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | - | - | 38.0 | |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | 75 | 200 | 17.6 | |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 9.23 | |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 nd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 34.9 | |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ - E,4-190 | 200 | 400 | 23.8 | |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ - B,4-122 | 45 | NoRelaxati on | 0.74 | |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P-C, 4-153 | - | - | N.D. | |



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| | | | TEST REPORT | | | 100 |
|------------|--|----------------|---|--|--|--------|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | And the second s | E LIMIT FOR R (IS 10500:2012) Permissible limit | RESULT |
| 21 | Sodium (as Na) | mg/Lit | APHA 22ndEd.2012,3500-Na-B, 3-97 | - | - | 6.1 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500–K-B, 3-87 | - | - | 2.1 |
| 23 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4- | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxati on | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.17 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | N.D. |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.01 | NoRelaxati on | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxati on | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.001 | NoRelaxati on | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxati on | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxati on | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxati on | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39): 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | - | - | N.D. |
| Microl | piological Analysis | | | | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | detectable in nl sample | Absent |
| 2 | Faecal coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | any 100 r | detectable in nl sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | | detectable in nl sample | Absent |
| Pestic | ides | | | | | |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p DDD | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | μg/L | US EPA 508-1995 | | 2 | N.D. |
| 7 | Alpha-HCH | μg/L | US EPA 508-1995 | 0. | 01 | N.D. |



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REPORT NO 04224

| | | | TEST REPORT | | | |
|------------|--------------------|------|-------------------|--|-------------|--------|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | ACCEPTABLI DRINKING WATER Acceptable | Permissible | RESULT |
| 0 | Beta-HCH | | US EPA 508-1995 | Limit 0.0 | limit | N.D. |
| 8 | | μg/L | | | | N.D. |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0.0 | | |
| 10 | Alpha-Endosulfan | µg/L | US EPA 508-1995 | 0. | | N.D. |
| 11 | Beta-Endosulfan | μg/L | US EPA 508-1995 | 0. | | N.D. |
| 12 | Endosulfansulphate | μg/L | US EPA 508-1995 | 0. | | N.D. |
| 13 | Monocrotophos | μg/L | US EPA 8141A-1994 | 1 | | N.D. |
| 14 | Ethion | μg/L | US EPA 8141A-1994 | 3 | 3 | |
| 15 | Chloropyrifos | μg/L | US EPA 8141A-1994 | 30 | 30 | |
| 16 | Phorate | μg/L | US EPA 8141A-1994 | 2 | | N.D. |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | - | | N.D. |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | - | | N.D. |
| 19 | 2,4-D | μg/L | US EPA 515.1-1995 | 30 | 0 | N.D. |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 20 | 0 | N.D. |
| 21 | Atrazine | μg/L | US EPA 532-2000 | 2 | | N.D. |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0. | 3 | N.D. |
| 23 | Methyl paraxone | μg/L | US EPA 8141A-1994 | - | | N.D. |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 19 | 0 | N.D. |
| 25 | Malaoxon | μg/L | US EPA 8141A-1994 | - | | N.D. |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0.0 |)3 | N.D. |
| 27 | Dieldrin | μg/L | US EPA 508-1995 | 0.0 |)3 | N.D. |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

REVIEWED BY

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.
 Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
 This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The | Gustomer | REP | ORT NO | UES/TR/21-22/04226 | | | |
|--|--|---------------|---------------------------------|--------------------|-----------------|--------------------------------|--|
| TO, | | LAB | REF NO | UES/21-22/W/07586 | | | |
| HINDALCO INDUSTR | · | DAT | E OF SAMPLING | 24/11/2 | 24/11/2021 | | |
| GARE PALMA - IV/5, | | DAT | E OF RECEIPT | 25/11/2 | 021 | | |
| U/G COAL MINE, VILL | AGE – MILUPARA, | DAT | E OF REPORT | 01/12/2021 | | | |
| BLOCK-TAMNAR, DISTT RAIGARH (C | DAT | E OF ANALYSIS | START: 25/11/2021 END: 29/11/20 | | END: 29/11/2021 | | |
| | | SAMPI | E DETAILS | | 1940 | | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | | | SRV/2122/0049, 24-JULY-2021 | |
| CUSTMER SAMPLE ID | MILUPARA VILLAGE NEAR P HIL (DUGWELL) | PHC- | SAMPLE CONDITION AT RECEIPT | | ок | | |
| PACKING OF SAMPLE 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | | SEALED | SAMPLE COLLECTED BY | | СНЕМІ | ST | |
| SAMPLING PROCEDURE IS:3025 (PART I):1987 RA 2003; APHA 22ND ED. 2012,1060-B,1-39 | | | QUANTITY RECEIVED 5 LTR | | k | | |

REPORT NO. - 04226

| | | | TEST REPORT | | | |
|-----|---|------------------|--|---------------------|----------------------|-----------|
| SR. | | TELL | | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | PARAMETER UNIT N | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeable |
| 3 | Taste | _ | IS 3025(part-8) | Agreeable | Agreeable | Agreeable |
| 4 | рН | - | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxatio n | 6.97 |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 1.86 |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 274.0 |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 – 69 | 0.2 | 1 | N.D. |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | - | - | 177.4 |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 164.8 |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | - | 12.6 |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 40.0 |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 92.0 |
| 13 | Calcium Hardness (as CaCO3) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca- B,3-67 | - | - | 54.0 |
| 14 | Magnesium Hardness (as CaCO3) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg- B,3-84 | - | - | 38.0 |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca- B,3-67 | 75 | 200 | 21.6 |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500–Mg-B, 3-84 | 30 | 100 | 9.23 |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 nd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 18.9 |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ - E, 4-190 | 200 | 400 | 25.2 |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ - B,4-122 | 45 | NoRelaxatio n | 4.2 |
| 20 | Phosphate (as P) | mg/Lit | APHA 22ndEd.2012,4500-P-C, 4-153 | - | - | N.D. |



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| | | | TEST REPORT | | | |
|-------|--|-------------------|---|---------------------|-------------------------|--------|
| SR. | | | | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na- B, 3-97 | - | - | 6.4 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500-K-B, 3-87 | - | - | 1.2 |
| 23 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4-25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3- 18 | 0.3 | NoRelaxatio n | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.03 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.1 | 0.3 | 0.15 |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.01 | NoRelaxatio n | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxatio n | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3- 23 | 0.001 | NoRelaxatio n | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxatio n | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxatio n | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5- 53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxatio | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | n No | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | | Relaxation - | N.D. |
| Micro | biological Analysis | | 2003 | I | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | etectable in any sample | Absent |
| 2 | Faecal coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | | etectable in any | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be de | etectable in any sample | Absent |
| Pesti | cides | | | 1001111 | | |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |



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| | | | TEST REPORT | T i a | | | |
|------------|---------------------|------|-------------------|---------------------|----------------------|--------|--|
| SR. | | | | AS PER IS 1 | AS PER IS 10500:2012 | | |
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | |
| 5 | O,p DDD | μg/L | US EPA 508-1995 | 1 | | N.D. | |
| 6 | Gamma-HCH (Lindane) | μg/L | US EPA 508-1995 | 2 | 2 | N.D. | |
| 7 | Alpha-HCH | μg/L | US EPA 508-1995 | 0.0 | 01 | N.D. | |
| 8 | Beta-HCH | μg/L | US EPA 508-1995 | 0.0 | 04 | N.D. | |
| 9 | Delta HCH | μg/L | US EPA 508-1995 | 0.0 | 04 | N.D. | |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | 0. | 4 | N.D. | |
| 11 | Beta-Endosulfan | μg/L | US EPA 508-1995 | 0. | 4 | N.D. | |
| 12 | Endosulfansulphate | μg/L | US EPA 508-1995 | 0. | 4 | N.D. | |
| 13 | Monocrotophos | μg/L | US EPA 8141A-1994 | 1 | | N.D. | |
| 14 | Ethion | μg/L | US EPA 8141A-1994 | 3 | | N.D. | |
| 15 | Chloropyrifos | μg/L | US EPA 8141A-1994 | 3 | 0 | N.D. | |
| 16 | Phorate | μg/L | US EPA 8141A-1994 | | | N.D. | |
| 17 | Phoratesulphoxide | μg/L | US EPA 8141A-1994 | - | | N.D. | |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | - | | N.D. | |
| 19 | 2,4-D | μg/L | US EPA 515.1-1995 | 3 | 0 | N.D. | |
| 20 | Alachlor | μg/L | US EPA 508- 1995 | 2 | 0 | N.D. | |
| 21 | Atrazine | μg/L | US EPA 532-2000 | 2 | | N.D. | |
| 22 | Methyl parathion | μg/L | US EPA 8141A-1994 | 0. | 3 | N.D. | |
| 23 | Methyl paraxone | μg/L | US EPA 8141A-1994 | - | - | | |
| 24 | Malathion | μg/L | US EPA 8141A-1994 | 190 | | N.D. | |
| 25 | Malaoxon | μg/L | US EPA 8141A-1994 | - | | N.D. | |
| 26 | Aldrin | μg/L | US EPA 508- 1995 | 0.0 |)3 | N.D. | |
| 27 | Dieldrin | μg/L | US EPA 508-1995 | 0.0 | 03 | N.D. | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.
 Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
 This is for information as the party has asked for above test(s) only.

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PREPARED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS 1/12/21

AUTHORIZED SIGNATORY

----End of the test report----



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Cus | tomer | | REPORT NO | UES/TR/21-22/0 | 4191 |
|-------------------------------------|---|--------|--------------------------------|---------------------------------------|----------------------|
| TO, | | 5 | LAB REF NO | 513 | |
| HINDALCO INDUST | RIES LIMITED, | | DATE OF SAMPLING | 23/11/2021 | |
| GARE PALMA - IV/4 | 4, COAL MINE, VILLAC | 3E - | DATE OF RECEIPT 24/11/2021 | | |
| BANKHETA, POST | -MILUPARA, | | DATE OF REPORT | 01/12/2021 | |
| DISTT RAIGARH | (C.G.) 496107. | | DATE OF ANALYSIS | START: 24/11/2021 | END: 27/11/2021 |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | N/PO/SRV/2122/004 | 5, DTD. 24-JULY-2021 |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | N/PO/SRV/2122/0045, DTD. 24-JULY-2021 | |
| | | | SAMPLE CONDITION | | |
| CUSTMER SAMPLE ID | SAKTA VILLAGE, (DUGWE | ELL) | SAMPLE CONDITION AT RECEIPT | ок | |
| CUSTMER SAMPLE ID PACKING OF SAMPLE | SAKTA VILLAGE, (DUGWE 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | SEALED | | OK CHEMIST | |

| Report | BTA | 041 | 01 |
|--------|-----|-----|----|
| | | | |

| | | | TEST REPORT | | | |
|-----|---|--------|---|---------------------|----------------------|-----------|
| SR. | Professional Profession | | | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | 2.4 |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeable |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeable |
| 4 | рН | - | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxatio n | 7.35 |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 2.4 |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 246.4 |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 0.2 | 1 | N.D. |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | - | - | 157.0 |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 152.4 |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | - | 4.6 |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 78.0 |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 104.0 |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | _ | - | 48.0 |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | - | - | 56.0 |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | 75 | 200 | 19.2 |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 13.6 |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-B, 4-72 | 250 | 1000 | 19.9 |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 27.5 |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ -B, 4-122 | 45 | NoRelaxatio n | 0.73 |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P- C,4-153 | - | - | N.D. |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na- B,3-97 | _ | - | 15.1 |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| | | | TEST REPORT | | | |
|-------|--|-------------------|---|---------------------|-------------------------|---|
| SR. | | 152100116 | Carameter Company of the | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 22 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500-K-B, 3-87 | = | - | 0.68 |
| 23 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4-25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxatio n | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D. 4-84 & 87 | 1 | 1.5 | 0.11 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.1 | 0.3 | 0.09 |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.01 | NoRelaxatio n | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxatio n | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3- 23 | 0.001 | NoRelaxatio n | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxatio n | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxatio n | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5- | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | µg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxatio n | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | - | - Veravacion | N.D. |
| Micro | biological Analysis | | 2003 | I | -L | - III |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | etectable in any sample | Absent |
| 2 | Faecal coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | | etectable in any sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be de | etectable in any sample | Absent |
| Pesti | cides | | • | | | |
| 1 | p,p DDT | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p DDD | μg/L | US EPA 508-1995 | | 1 . | N.D. |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | μg/L | US EPA 508-1995 | | 2 | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.04191

| | | | TEST REPORT | | | |
|-----|--------------------|------|-------------------|---------------------|----------------------|-------------|
| SR. | | | | AS PER IS | 10500:2012 | Sie Walding |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 7 | Alpha-HCH | µg/L | US EPA 508-1995 | 0.0 | 01 | N.D. |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | 0.0 | 04 | N.D. |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0.0 | 04 | N.D. |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | 0. | .4 | N.D. |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | 0. | .4 | N.D. |
| 12 | Endosulfansulphate | µg/L | US EPA 508-1995 | 0. | .4 | N.D. |
| 13 | Monocrotophos | μg/L | US EPA 8141A-1994 | 1 | L | N.D. |
| 14 | Ethion | µg/L | US EPA 8141A-1994 | 3 | 3 | N.D. |
| 15 | Chloropyrifos | µg/L | US EPA 8141A-1994 | 30 | | N.D. |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | | 2 | |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | | • | N.D. |
| 18 | Phoratesulphone | µg/L | US EPA 8141A-1994 | - | | N.D. |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 3 | 0 | N.D. |
| 20 | Alachlor | μg/L | US EPA 508- 1995 | 2 | 0 | N.D. |
| 21 | Atrazine | µg/L | US EPA 532-2000 | 2 | 2 | N.D. |
| 22 | Methyl parathion | μg/L | US EPA 8141A-1994 | 0. | 3 | N.D. |
| 23 | Methyl paraxone | μg/L | US EPA 8141A-1994 | - | | N.D. |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 19 | 90 | N.D. |
| 25 | Malaoxon | μg/L | US EPA 8141A-1994 | - | | N.D. |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0.0 | 03 | N.D. |
| 27 | Dieldrin | μg/L | US EPA 508-1995 | 0.0 | 03 | N.D. |

Note: mg/lit.: milligram per liter, N.D.- Not Detected. REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

REVIEWED BY

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-End of the test report-----



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The | Customer | ORT NO | T NO UES/TR/21-22/04227 | | | |
|--|------------------------|--------------------------------|-------------------------|--------------------------|--------------------------------|--|
| TO, | | REF NO UES/2 | | -22/W/07587 | | |
| HINDALCO INDUSTR | IES LIMITED, | DATE | OF SAMPLING | 24/11/2021 25/11/2021 | | |
| GARE PALMA - IV/5, | | DATE | OF RECEIPT | | | |
| U/G COAL MINE, VILL | AGE – MILUPARA, | DATE | DATE OF REPORT | | 01/12/2021 | |
| BLOCK-TAMNAR, DISTT RAIGARH (C | DATI | DATE OF ANALYSIS | | START:25/11/2021 | | |
| | | SAMPI | E DETAILS | | | |
| SAMPLE TYPE | GROUND WATER | ORDER /REFERE | INCE: | | SRV/2122/0049, 24-JULY-2021 | |
| CUSTMER SAMPLE ID | SIDARPARA VILLAGE (DUG | SAMPLE CONDITION AT RECEIPT | | ок | | |
| PACKING OF SAMPLE 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | | | SAMPLE COLLECTED BY | | CHEMIST | |
| SAMPLING PROCEDURE IS:3025 (PART I):1987 RA 2003; APHA 22ND ED. 2012,1060-B,1-39 | | | QUANTITY RECEIVED | | 5 LTR | |

REPORT NO. - 04227

| | TEST REPORT | | | | | | | | | |
|-----|---|--------|---|---------------------|----------------------|-----------|--|--|--|--|
| SR. | PARAMETER | UNIT | METHOD OF TEST | AS PER IS | | | | | | |
| NO. | | | | Acceptable Limit | Permissible limit | RESULT | | | | |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 | | | | |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeable | | | | |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeable | | | | |
| 4 | рН | - | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxati on | 7.54 | | | | |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 0.43 | | | | |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 332.0 | | | | |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 0.2 | 1 | N.D. | | | | |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | - | - | 207.0 | | | | |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 204.4 | | | | |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | - | 2.6 | | | | |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 58.0 | | | | |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2-44,45 | 200 | 600 | 92.0 | | | | |
| 13 | Calcium Hardness (as CaCO3) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca- B,3-67 | - | - | 54.0 | | | | |
| 14 | Magnesium Hardness (as CaCO3) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg- B,3-84 | - | - | 38.0 | | | | |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca- B,3-67 | 75 | 200 | 21.6 | | | | |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 9.23 | | | | |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 nd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 18.9 | | | | |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 15.3 | | | | |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ - B,4-122 | 45 | NoRelaxati on | 4.1 | | | | |
| 20 | Phosphate (as P) | mg/Lit | APHA 22ndEd.2012,4500-P-C, 4-153 | - | - | N.D. | | | | |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| | | | TEST REPORT | | | |
|--------|---|--------|---|--|----------------------|---|
| SR. | | | | AS PER IS | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESUL |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na-B, 3-97 | 7- | - | 13.5 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500–K-B, 3-87 | - | - | 0.9 |
| 23 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500–B-B, 4- 25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxati on | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.12 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | 0.09 |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.01 | NoRelaxati on | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxati on | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 0.001 | | NoRelaxati on | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 0.01 0.05 | | N.D. | |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 2,3114-C, 3-38 0.01 NoRelaxati | | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxati on | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxati on | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | - | - | N.D. |
| Microl | biological Analysis | 1 | 4 | | | |
| 1 | MPN/ | | IS:1622:1981: RA:2019 | Shall not be detectable in any 100 ml sample | | Absent |
| 2 | Faecal coliform MPN/ 100ml | | IS:1622:1981: RA:2019 | Shall not be detectable in any 100 ml sample | | Absent |
| 3 | MDN/ | | IS:1622:1981:RA:2019 | Shall not be detectable in any 100ml sample | | Absent |
| Pestic | ides | | 4. | ,7 2 0 0 11 | | *************************************** |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | 1 | | N.D. |
| 2 | o.p DDT | μg/L | US EPA 508-1995 1 | | | N.D. |
| 3 | p,pDDE | μg/L | US EPA 508-1995 | 1 | | N.D. |
| 4 | p,p DDD | µg/L | US EPA 508-1995 | 1 | | N.D. |
| 5 | O,p DDD | μg/L | US EPA 508-1995 | 1 | | N.D. |
| 6 | Gamma-HCH (Lindane) | μg/L | | | N.D. | |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| | TEST REPORT | | | | | | | | |
|-----|--------------------|------|-------------------|---------------------|----------------------|--------|--|--|--|
| SR. | | | AS PER IS 1 | | | | | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | |
| 7 | Alpha-HCH | μg/L | US EPA 508-1995 | 0.01 | | N.D. | | | |
| 8 | Beta-HCH | μg/L | US EPA 508-1995 | 0.04 | | N.D. | | | |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0.0 |)4 | N.D. | | | |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | 0. | 4 | N.D. | | | |
| 11 | Beta-Endosulfan | μg/L | US EPA 508-1995 | 0. | 4 | N.D. | | | |
| 12 | Endosulfansulphate | μg/L | US EPA 508-1995 | 0. | 4 | N.D. | | | |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | 1 | | N.D. | | | |
| 14 | Ethion | μg/L | US EPA 8141A-1994 | 3 | | N.D. | | | |
| 15 | Chloropyrifos | μg/L | US EPA 8141A-1994 | 30 | | N.D. | | | |
| 16 | Phorate | μg/L | US EPA 8141A-1994 | 2 | | N.D. | | | |
| 17 | Phoratesulphoxide | μg/L | US EPA 8141A-1994 | - | | N.D. | | | |
| 18 | Phoratesulphone | µg/L | US EPA 8141A-1994 | - | | N.D. | | | |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 30 | | N.D. | | | |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 20 | | N.D. | | | |
| 21 | Atrazine | µg/L | US EPA 532-2000 | 2 | 2 | | | | |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0.3 | | N.D. | | | |
| 23 | Methyl paraxone | µg/L | US EPA 8141A-1994 | - | | N.D. | | | |
| 24 | Malathion | μg/L | US EPA 8141A-1994 | 190 | | N.D. | | | |
| 25 | Malaoxon | µg/L | US EPA 8141A-1994 | - | | N.D. | | | |
| 26 | Aldrin | μg/L | US EPA 508- 1995 | 0.03 | | N.D. | | | |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0.03 | | N.D. | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected. REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.
 Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
 This is for information as the party has asked for above test(s) only.

REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-End of the test report-----



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Cus | tamer | | REPORT NO | REPORT NO UES/TR/21-22/04192 | | |
|--|--|------------|-----------------------------|---------------------------------------|--|--|
| TO, | | | LAB REF NO | 514 | | |
| HINDALCO INDUST | RIES LIMITED, | | DATE OF SAMPLING 23/11/2021 | | | |
| GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107. | | | DATE OF RECEIPT | 24/11/2021 | | |
| | | | DATE OF REPORT | 01/12/2021 | | |
| | | | DATE OF ANALYSIS | START: 24/11/2021 END: 27/11/2021 | | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | N/PO/SRV/2122/0045, DTD. 24-JULY-2021 | | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | N/PO/SRV/2122/0045, DTD. 24-JULY-202 | | |
| CUSTMER SAMPLE ID BELJOR VILLAGE (DUGWELL) | | AT RECEIPT | OK | | | |
| CUSIMER SAMPLE ID | The state of the s | | ALL AUGUST E | | | |
| PACKING OF SAMPLE | 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | SEALED | SAMPLE COLLECTED BY | CHEMIST | | |

Report No.04192

| | PARAMETER | UNIT | | AS PER IS | | |
|------------|---|--------|---|---------------------|----------------------|-----------|
| SR. NO. | | | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeable |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeable |
| 4 | pH | - | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxatio n | 7.53 |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 0.36 |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 564.0 |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 0.2 | 1 | N.D. |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | - | - | 351.0 |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 346.2 |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | - | 4.8 |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 166.0 |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2-44,45 | 200 | 600 | 192.0 |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | | - | 112.0 |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | = | - | 80.0 |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500–Ca-B, 3-67 | 75 | 200 | 44.8 |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500–Mg-B, 3-84 | 30 | 100 | 19.4 |
| 17 | Chloride (as Cl) | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-B, 4-72 | 250 | 1000 | 46.9 |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 27.3 |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500−NO ₃ -B, 4-122 | 45 | NoRelaxatio n | 1.56 |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P- C,4-153 | - | - | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.04192

| | | | TEST REPORT | | | |
|-------|--|----------------|---|---------------------|----------------------------|---|
| SR. | | | | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na- B,3-97 | - | - | 5.6 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500-K-B, 3-87 | - | - | 1.18 |
| 23 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4-25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxatio n | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.09 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.1 | 0.3 | 0.14 |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.01 | NoRelaxatio n | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxatio n | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3- 23 | 0.001 | NoRelaxatio n | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3- | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxatio n | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxatio n | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5- 53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxatio n | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | - | - ASTANACION | N.D. |
| Micro | biological Analysis | | 2003 | | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | detectable in ml sample | Absent |
| 2 | Faecal Coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | Shall not be | detectable in ml sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be | detectable in ml sample | Absent |
| Pesti | cides | 2001111 | | Gily 100 | sample | *************************************** |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p DDD | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 5 | O,p DDD | μg/L | US EPA 508-1995 | | 1 | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.04192

| TEST REPORT | | | | | | | | |
|-------------|------------------------|------|-------------------|---------------------|----------------------|--------|--|--|
| - | | | | AS PER IS | 10500:2012 | | | |
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESUL1 | | |
| 6 | Gamma-HCH (Lindane) | µg/L | US EPA 508-1995 | | 2 | N.D. | | |
| 7 | Alpha-HCH | μg/L | US EPA 508-1995 | 0. | .01 | N.D. | | |
| 8 | Beta-HCH | μg/L | US EPA 508-1995 | 0. | .04 | N.D. | | |
| 9 | Delta HCH | μg/L | US EPA 508-1995 | 0. | .04 | N.D. | | |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | 0 | .4 | N.D. | | |
| 11 | Beta-Endosulfan | μg/L | US EPA 508-1995 | 0 | .4 | N.D. | | |
| 12 | Endosulfansulphate | μg/L | US EPA 508-1995 | 0 | .4 | N.D. | | |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | | 1 | N.D. | | |
| 14 | Ethion | μg/L | US EPA 8141A-1994 | | 3 | N.D. | | |
| 15 | Chloropyrifos | μg/L | US EPA 8141A-1994 | 3 | 30 | N.D. | | |
| 16 | Phorate | μg/L | US EPA 8141A-1994 | | 2 | N.D. | | |
| 17 | Phoratesulphoxide | μg/L | US EPA 8141A-1994 | | - | N.D. | | |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | | - | N.D. | | |
| 19 | 2,4-D | μg/L | US EPA 515.1-1995 |] 3 | 30 | N.D. | | |
| 20 | Alachlor | μg/L | US EPA 508- 1995 | 2 | 20 | N.D. | | |
| 21 | Atrazine | μg/L | US EPA 532-2000 | | 2 | N.D. | | |
| 22 | Methyl parathion | μg/L | US EPA 8141A-1994 | 0 | .3 | N.D. | | |
| 23 | Methyl paraxone | μg/L | US EPA 8141A-1994 | | - | N.D. | | |
| 24 | Malathion | μg/L | US EPA 8141A-1994 | 1 | 90 | N.D. | | |
| 25 | Malaoxon | μg/L | US EPA 8141A-1994 | | - | N.D. | | |
| 26 | Aldrin | μg/L | US EPA 508- 1995 | 0. | .03 | N.D. | | |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0. | .03 | N.D. | | |

Note: mg/lit.: milligram per liter, N.D.- Not Detected.

Terms & conditions

REVIEWED BY

REMARKS: RESULTS ARE AS ABOVE

The report for publication, arbitration or as legal dispute is forbidden.
 Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
 This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

01/12/21

End of the test report-

Ground Water Level Monitoring Report in and around the Coal Mine Area (From Jan 2022 to Mar 2022)

| Sr. No. | Location | Types of Structure | | In Meters | | |
|------------|---|-----------------------|--|--|--|--|
| | | | Ground Water level (BGL) Jan 2022 | Ground Water level (BGL) Feb 2022 | Ground Water level (BGL) Mar 2022 | |
| 1 | Bankheta (Near HIL Office) | Borewell/ AWLR | 11.34 | 11.74 | 12.21 | |
| 2 | Banjikhol (Near Office) | Borewell/ AWLR | 24.48 | 24.66 | 24.85 | |
| 3 | Milupara (Near Office) | Borewell/ AWLR | 11.17 | 11.71 | 12.21 | |
| 4 | HIL Staff Quarter | Borewell/ AWLR | 6.57 | 7.04 | 7.96 | |
| 5 | Milupara Village (PHC-HIL) | Dugwell | 4.43 | 4.68 | 5.58 | |
| 6 | Sakta Village (Near Primary School) | Dugwell | 3.18 | 3.31 | 3.85 | |
| 7 | Sidarpara Village (Near Primary School) | Dugwell | 8.68 | 8.83 | 9.90 | |
| 8 | Beljor Village | Dugwell | 6.47 | 6.72 | 6.84 | |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of | The Gustomer | REPORT NO | UES/TR/21-22/05991 | | | | |
|---|--|--------------------------------|--------------------|--------------------------------------|--|--|--|
| TO, | | LAB REF NO | UES/21-22/W/0 | 10309 | | | |
| HINDALCO INDUSTR | | DATE OF SAMPLING | 24/01/2022 | 24/01/2022 | | | |
| GARE PALMA - IV/4, I VILLAGE - BANKHET | | DATE OF PECKIPT | 25/01/2022 | | | | |
| POST -MILUPARA | ~ | DATE OF REPORT | 02/02/2022 | | | | |
| DISTT RAIGARH (C. | G.) 496107. | DATE OF ANALYSIS | START: 25/01/2022 | END: 29/01/2022 | | | |
| | | SAMPLE DETAILS | | | | | |
| SAMPLE TYPE | GROUNDWATER | ORDER /REFERENCE: | N/PO/SRV/2122 | N/PO/SRV/2122/0045, DTD. 24-JULY-202 | | | |
| CUSTMER SAMPLE ID | BANKHETA MINE (PIEZOMETER) AWLR | SAMPLE CONDITION AT RECEIPT | ок | | | | |
| PACKING OF SAMPLE | 3 1 X 1 MO. PYC CAN 1 1 X 1 MO. PYC CAN 1 1 X 1 MO. GLASS SOTTLE | SAMPLE COLLECTED BY | CHRONIST | | | | |
| SAMPLING PROCEDURE | IS:3025(PART I):1987 RA 2003; APHA 22ND ED. 2012, 1060-B, 1-39 | QUANTITY RECEIVED | 5 LTR | | | | |

Report No.05991

| | | | TEST REPORT | | | |
|-----|---|--------|---|---------------------|----------------------|-----------|
| SR. | | | | AS PER IS | 10500:2012 | RESULT |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | |
| 1 | Colour | Hazen | 1S:3025:(Part-4) | 5 | 15 | <1 |
| 2 | Odour | 1.5 | 1S 3025(part-5) | Agreeable | Agreeable | Agreeable |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeable |
| 4 | pH | 100 | APHA 22 nd Ed.2012,4500-H*-B, 4-92 | 6.5-8.5 | NoRelaxatio n | 7.72 |
| 5 | Turbidity | NTU | APHA 22 rd Ed.2012,2130-B,2-13 | 1 | 5 | 1.21 |
| 6 | Electrical Conductivity | μS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 178.4 |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-CI-G, 4 - 69 | 0.2 | 1 | N.D. |
| 8 | Total Solid | mg/Lit | APHA 22 rd Ed.2012,2540- B, 2- 64 | - | | 111.4 |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 108.6 |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - | | 2.8 |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 40.0 |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 rd Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 54.0 |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca-B, 3-67 | - | - | 32.0 |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | - | • | 22.0 |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 rd Ed.2012,3500-Ca-B, 3-67 | 75 | 200 | 12.8 |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 5.34 |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 rd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 14.9 |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 rd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 11.6 |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ -B, 4-122 | 45 | NoRelaxatio n | 0.36 |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P-C, 4-153 | 8 | | N.D. |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na-B, 3-97 | 2 | | 16.4 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 rd Ed.2012,3500-K-B, 3- | - | - | 1.26 |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Repor | | |
|-------|--|--|

| | | | TEST REPORT | | | |
|-------|---|---|--|--|----------------------------|---------------|
| SR. | | | | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| | | | 87 | | | |
| 23 | Boron (as B) | mg/Lit | APHA 22 rd Ed.2012,4500-B-B, 4- 25 | 0.5 | 1,0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 rd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxatio n | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 rd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.13 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | N.D. |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.01 | NoRelaxatio n | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-NI, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 [™] Ed.2012,3111-B, 3-18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 nd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxatio n | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.001 | NoRelaxatio n | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxatio | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 rd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxatio n | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 rd Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | µg/Lit | APHA 22 rd Ed.2012,6440-6-93 | 0.0001 | NoRelaxatio n | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | 2 | - | N.D. |
| Micro | biological Analysis | | 2005 | | - | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | The social strains of the second | detectable in ml sample | Absent |
| 2 | Faecal Coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | | detectable in ml sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | | detectable in | Absent |
| Pesti | cides | - | | ###################################### | CO. E. STATE OF CO. | |
| 1 | p,p DDT | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | µg/L | US EPA 508-1995 | 3 | 1 | N.D. |
| 4 | p,p DDD | μg/L | US EPA 508-1995 | - 1 | 1 | N.D. |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | μg/L | US EPA 508-1995 | | 2 | N.D. |
| 7 | Alpha-HCH | µg/L | US EPA 508-1995 | 0. | 01 | N.D. |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | 0. | 04 | N.D. |
| | Contract and contract of the second contract | Brown Street, | The state of the s | 10.00 | | 1111111111111 |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.05991

| | | | TEST REPORT | | | | |
|-----|--|----------------|-------------------------|---------------------|----------------------|--------|--|
| SR. | THE RESERVE OF THE PARTY OF THE | | Andrew Matter and Chair | AS PER IS | AS PER IS 10500:2012 | | |
| NO. | PARAMETER | PARAMETER UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0. | 04 | N.D. | |
| 10 | Alpha-Endosulfan | µg/L | US EPA 508-1995 | 0 | .4 | N.D. | |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | 0 | .4 | N.D. | |
| 12 | Endosulfansulphate | μg/L | US EPA 508-1995 | . 0 | .4 | N.D. | |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | | 1 | N.D. | |
| 14 | Ethion | μg/L | US EPA 8141A-1994 | | 3 | N.D. | |
| 15 | Chloropyrifos | µg/L | US EPA 8141A-1994 | . 3 | 0 | N.D. | |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | | 2 | | |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | | | N.D. | |
| 18 | Phoratesulphone | µg/L | US EPA 8141A-1994 | | | N.D. | |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 3 | 0 | N.D. | |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 2 | .0 | N.D. | |
| 21 | Atrazine | µg/L | US EPA 532-2000 | | 2 | N.D. | |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0 | .3 | N.D. | |
| 23 | Methyl paraxone | µg/L | US EPA 8141A-1994 | | | N.D. | |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 19 | 90 | N.D. | |
| 25 | Malaoxon | µg/L | US EPA 8141A-1994 | | | N.D. | |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0. | 03 | N.D. | |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0. | 03 | N.D. | |

Note: mg/lit.: milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

REVIEWED BY

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

02/02

End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Co. | Mauter | REF | PORT NO | UES | UES/TR/21-22/05992 UES/21-22/W/010310 | | |
|---|--------------------------|----------------------------------|---|---------------|--|--|--|
| TO, | STRIES LIMITED. | LAN | REF NO | UES | | | |
| GARE PALMA - I | | DAT | THE OF SAMPLING | 24/ | 01/2022 | | |
| VILLAGE - BANK | | дат | E OF RECEIPT | 25/01/2022 | | | |
| POST -MILUPARA | Α, | nan | e of report | 02/ | 02/02/2022 | | |
| DISTT RAIGAR | DAT | DATE OF ANALYSIS | | T: 25/01/2022 | END: 29/01/2022 | | |
| | Vertical land of the | SAMI | LE DETAILS | | | | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: N/PO/SRV/2122/0045, 2021 | | 22/0045, DTD. 24-JULY- | | |
| CUSTMER SAMPLE ID | BANJIKHOL MINE (PIEZOMET | BANJIKHOL MINE (PIEZCHETER) ANIR | | | OK | | |
| PACKING OF SAMPLE 3 L X 1 NO. PVC CAN SEALED 1 L X 1 NO. GLASS BOTTLE | | SEALED | SAMPLE COLLECTED BY | | CHIMIST | | |
| SAMPLING PROCEDURE | QUANTITY RECEIVED | | 5 LTR | | | | |

Report No.05992

| | | | TEST REPORT | | | |
|-----|--|--------|---|---------------------|----------------------|--------------------|
| SR. | THE RESERVE OF THE PARTY OF THE | 100 | | AS PER IS | 10500:2012 | THE REAL PROPERTY. |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeabl |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeabl |
| 4 | pH | - 53 | APHA 22 nd Ed.2012,4500-H ⁺ -B, 4-92 | 6.5-8.5 | NoRelaxation | 6.84 |
| 5 | Turbidity | NTU | APHA 22 rd Ed.2012,2130-B,2-13 | 1 | 5 | 2.4 |
| 6 | Electrical Conductivity | µS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 170.2 |
| 7 | Residual Chlorine | mg/Lit | APHA 22 rd Ed.2012,4500-CI-G, 4 - 69 | 0.2 | 1 | N.D. |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | | - | 115.4 |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 112.6 |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- 66 | - 1 | | 2.8 |
| 11 | Alkalinity Total (as CaCO ₁) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 48.0 |
| 12 | Total Hardness (as CaCO ₁) | mg/Lit | APHA 22 rd Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 80.0 |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca-B, 3-67 | | - | 46.0 |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 151 | - | 34.0 |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca-B, 3-67 | 75 | 200 | 18.4 |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 ^{HE} Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 8.26 |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 nd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 14.9 |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 rd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 13.4 |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 rd Ed.2012,4500-NO ₃ - B,4-122 | 45 | NoRelaxation | 2.1 |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P-C, 4-153 | | - | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.05992

| | | | TEST REPORT | | | |
|-------|--|-------------------|---|---------------------|------------------------------|--------|
| SR. | 200 600000 | - Contract | | AS PER IS | 10500:2012 | RESULT |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na-B, 3-97 | • | - 20 | 8.4 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 rd Ed.2012,3500-K-B, 3-87 | 20 | | 0.20 |
| 23 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4-25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxation | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 st Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | N.D. |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | N.D. |
| 27 | Lead (as Pb) | mg/Lit | APHA 22nd Ed.2012,3111-B, 3-18 | 0.01 | NoRelaxation | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3-18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 rd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxation | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.001 | NoRelaxation | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxation | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxation | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 st Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | µg/Lit | APHA 22 rd Ed.2012,6440-6-93 | 0.0001 | NoRelaxation | N.D. |
| 39 | Mineral Oil | mg/Lit | 15 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003, | - | - | N.D. |
| Micro | biological Analysis | | | | | - |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | etectable in any I sample | Absent |
| 2 | Faecal Coliform | MPN/ 100mi | IS:1622:1981: RA:2019 | | etectable in any | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be d | etectable in any sample | Absent |
| estic | ides | | | 244111 | 1/2 | |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | | 1 | N.D. |
| 2 | o.p DDT | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | µg/L | US EPA 508-1995 | | 2 | N.D. |
| 7 | Alpha-HCH | µg/L | US EPA 508-1995 | 0 | 01 | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.05992

| | | | TEST REPORT | | | | |
|-----|--|----------------|-------------------|---------------------|----------------------|--------|--|
| SR. | THE RESERVE OF THE PARTY OF THE | | Market Market | AS PER IS | AS PER IS 10500:2012 | | |
| NO. | PARAMETER | PARAMETER UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | 0. | 04 | N.D. | |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0. | 04 | N.D. | |
| 10 | Alpha-Endosulfan | µg/L | US EPA 508-1995 | 0 | .4 | N.D. | |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | 0 | .4 | N.D. | |
| 12 | Endosulfansulphate | µg/L | US EPA 508-1995 | 0. | .4 | N.D. | |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | - 4 | 1 | N.D. | |
| 14 | Ethion | µg/L | US EPA 8141A-1994 | | 3 | N.D. | |
| 15 | Chloropyrifos | µg/L | US EPA 8141A-1994 | 3 | 30 | | |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | | 2 | N.D. | |
| 17 | Phoratesulphoxide | μg/L | US EPA 8141A-1994 | | | N.D. | |
| 18 | Phoratesulphone | µg/L | US EPA 8141A-1994 | | | N.D. | |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 3 | 0 | N.D. | |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 2 | 0 | N.D. | |
| 21 | Atrazine | µg/L | US EPA 532-2000 | | 2 | N.D. | |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0. | .3 | N.D. | |
| 23 | Methyl paraxone | µg/L | US EPA 8141A-1994 | | | N.D. | |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 19 | 90 | N.D. | |
| 25 | Malaoxon | µg/L | US EPA 8141A-1994 | | | N.D. | |
| 26 | Aldrin | µg/L | US EPA 508~ 1995 | 0.0 | 03 | N.D. | |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0.0 | 03 | N.D. | |

Note: mg/lit.: milligram per liter, N.D.- Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

REVIEWED BY

The report for publication, arbitration or as legal dispute is forbidden.
 Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.
 This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY -End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of the Co TO, | etamer . | 110000 | REF NO | | UES/TR/21-22/06049 UES/21-22/W/010456 | | |
|--------------------------------------|---|-----------|-------------------|-----------------|--|------------------|--|
| HINDALCO INDUSTR | | - | OF SAMPLING | 24/01/2022 | 7.07 | 0456 | |
| GARE PALMA - IV/5, | | D11071200 | OF RECEIPT | 25/01/2022 | - | | |
| U/G COAL MINE, VILL BLOCK-TAMNAR, | AGE - MILUPARA, | DATE | DATE OF REPORT | | 02/02/2022 | | |
| DISTT RAIGARH (C | .G.) 496107 | DATE | OF ANALYSIS | START: 25/01/20 | 22 | END: 29/01/2022 | |
| | | SAMPL | E DETAILS | | | | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | | M/PO/SRV/2122/0049, DTD. 24-MILY-2021 | | |
| CUSTMEN SAMPLE ID | NEAR MILUPARA MINES O PIESCMETER -AWLE | DEFICE | SAMPLE CONDI | TION AT | OR | . 24 -0001 -2021 | |
| PACKING OF SAMPLE | 3 L X I MO. PVC CAN 1 L X I MO. PVC CAN 1 L X I MO. GLASS BOTTLE | SEALED | SAMPLE COLLS | OCARD- NA | сян | мгар | |
| SAMPLING PROCEDURE | IS: 3025 (PART I): 1987 APMA 22ND ED. 2012, 1 | | QUANTITY REC | EIVED | 5 Z | ZR . | |

REPORT NO. 06049

| | | | TEST REPORT | | | |
|-----|--|---------|---|---------------------|-------------------|-----------|
| SR. | 1 | li tuis | | AS PER I | \$ 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 1 | Colour | Hazen | 15:3025:(Part-4) | 5 | 15 | <1 |
| 2 | Odour | - | 15 3025(part-5) | Agreeable | Agreeable | Agreeable |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeable |
| 4 | рН | | APHA 22 rd Ed.2012,4500-H*-B, 4-92 | 6.5-8.5 | No Relaxation | 6.53 |
| 5 | Turbidity | NTU | APHA 22 rd Ed.2012,2130-B,2-13 | 1 | 5 | 2.2 |
| 6 | Electrical Conductivity | μS/cm | 15 3025(part-14):1964, RA 2013 | - | 2 | 194.0 |
| 7 | Residual Chlorine | mg/Lit | APHA 22 rd Ed.2012,4500-Cl-G,4 - 69 | 0.2 | 1 | N.D. |
| 8 | Total Solid | mg/Lit | APHA 22 ^M Ed.2012,2540- B, 2- 64 | - | | 128.8 |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 120.4 |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 rd Ed.2012,2540- D, 2- 66 | | - | 8.4 |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 32.0 |
| 12 | Total Hardness (as CaCO ₁) | mg/Lit | APHA 22 ^M Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 68.0 |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca-8, 3-67 | - | | 38.0 |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 rd Ed.2012,3500-Mg-B, 3-84 | - | - | 30.0 |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 rd Ed.2012,3500-Ca-B, 3-67 | 75 | 200 | 15.2 . |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 [™] Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 7.2 |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 rd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 13.9 |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 nd Ed.2012,4500-SO ₄ - E,4-190 | 200 | 400 | 12.4 |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 rd Ed.2012,4500-NO ₂ -B, 4-122 | 45 | No Relaxation | 2.3 |



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| | | | TEST REPORT | | | |
|-------|---|----------------|---|--|-------------------|--------|
| SR. | | | | AS PER I | \$ 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESUL |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P-C, 4-153 | - 55 | | N.D. |
| 20 | Sodium (as Na) | mg/Lit | APHA 22ndEd.2012,3500-Na-B, 3-97 | - | - | 7.4 |
| 21 | Potassium (as K) | mg/Lit | APHA 22 rd Ed.2012,3500-K-B, 3- 87 | | - | 0.38 |
| 22 | Boron (as B) | mg/Lit | APHA 22 nd Ed.2012,4500-B-B, 4- 25 | 0.5 | 1.0 | N.D. |
| 23 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | No Relaxation | N.D. |
| 24 | Fluoride (as F) | mg/Lit | APHA 22 rd Ed.2012,4500-F-B 8D, 4-84 & 87 | 1 | 1.5 | 0.09 |
| 25 | Manganese (as Mn) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | N.D. |
| 26 | Lead (as Pb) | mg/Lit | APHA 22 rd Ed.2012,3111-8, 3-18 | 0.01 | No | West |
| 27 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- | 0.02 | Relaxation | N.D. |
| 28 | Zinc (as Zn) | mg/Lit | 108 APHA 22** Ed.2012,3111-B, 3-18 | 21.55 | Relaxation | N.D. |
| 29 | Copper (as Cu) | mg/Lit | APHA 22" Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 30 | | 7.100 | APHA 22 rd Ed.2012,3510-Cd,3- | 0.05 | 1.5 | N.D. |
| - | Cadmium (as Cd) | mg/Lit | 105 | 0.003 | Relaxation | N.D. |
| 31 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.001 | No Relaxation | N.D. |
| 32 | Arsenic (as As) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 33 | Selenium (as Se) | mg/l it | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.01 | No Relaxation | N.D. |
| 34 | Chromium (as Cr) | mg/Lit | APHA 22" Ed.2012,3500-Cr-B, 3-69 | 0.05 | No Relaxation | N.D. |
| 35 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 36 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 rd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 37 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | No Relaxation | N.D. |
| 38 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 39 | Oil & Grease | mg/Lit | 15 3025 (Part 39):1991, RA 2003 | | - Automotion | N.D. |
| licro | biological Analysis | | | | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | etectable in any | Absent |
| 2 | Faecal coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | Shall not be detectable in any | | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | 100 ml sample IS:1622:1981:RA:2019 Shall not be detectable in any | | Absent |
| estic | ides | AUGUST | | 100ml | sample | AUSGER |
| 1 | p,p DDT | µg/L | US EPA 508-1995 | | | |
| 2 | o.p DDT | µg/L | US EPA 508-1995 | | 1 | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

REPORT NO. 06049

| | | | TEST REPOR | RT TS | | |
|-----|------------------------|------|-------------------|---------------------|-------------------|--------|
| SR. | | | | AS PER I | \$ 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 3 | p,pDDE | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p _r p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | µg/L | US EPA 508-1995 | | 2 | N.D. |
| 7 | Alpha-HCH | µg/L | US EPA 508-1995 | | 0.01 | N.D. |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | | 0.04 | N.D. |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | A Company | 0.04 | N.D. |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | | 0.4 | N.D. |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | | 0.4 | |
| 12 | Endosulfansulphat e | µg/L | US EPA 508-1995 | 0,4 | | N.D. |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | 1 | | N.D. |
| 14 | Ethion | pg/L | US EPA 8141A-1994 | 3 | | N.D. |
| 15 | Chloropyrifos | μg/L | US EPA 8141A-1994 | | 30 | |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | | 2 | N.D. |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | | | N.D. |
| 18 | Phoratesulphone | µg/L | US EPA 8141A-1994 | | | N.D. |
| 19 | 2,4-D | µg/L | US EPA 515,1-1995 | | 30 | N.D. |
| 20 | Alachior | µg/L | US EPA 508- 1995 | | 20 | N.D. |
| 21 | Atrazine | µg/L | US EPA 532-2000 | | 2 | N.D. |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | | 0.3 | N.D. |
| 23 | Methyl paraxone | µg/L | US EPA 8141A-1994 | | | N.D. |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 100 | 190 | N.D. |
| 25 | Malaoxon | µg/L | US EPA 8141A-1994 | | | N.D. |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | | .03 | N.D. |
| 27 | Dieldrin | pg/L | US EPA 508-1995 | | 0.03 | N.D. |

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

REVIEWED BY

Terms & concurrons

The report for publication, erbitration or as largel dispute is forbidden.

Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only

For ULTIMATE ENVIROLYTICAL SOLUTIONS

22

AUTHORIZED SIGNATORY

-- End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Co. | stomer. | REPOR | RT NO | UES/TR/21- | UES/TR/21-22/06048 | | |
|-----------------------------------|---|----------------|---------------|------------------------|----------------------------------|----------------------------------|--|
| TO, | | LAB I | REF NO | UES/21-22/ | UES/21-22/W/010455 24/01/2022 | | |
| HINDALCO INDUSTR | IES LIMITED, | DATE | OF SAMPLING | 24/01/2022 | | | |
| GARE PALMA - IV/5, | | DATE | OF RECEIPT | 25/01/2022 | | | |
| U/G COAL MINE, VILL | AGE – MILUPARA, | DATE OF REPORT | | 02/02/2022 | | | |
| BLOCK-TAMNAR, DISTT RAIGARH (C | G) 496107 | DATE | OF ANALYSIS | ANALYSIS START: 25/01/ | | END: 29/01/2022 | |
| | | SAMP | LE DETAILS | | - 10 31 3 | | |
| SAMPLE TIPE | GROUND WATER | GROUND HATER 0 | | ONDER /REFERENCE: | | 0/SRV/2122/0049, 24-JULY-2021 | |
| CUSTMER SAMPLE ID | STAFF QUARTER-BANJIKHOL PIEZCMETER (ANLR) | | SAMPLE COMDET | TION AT RECEIPT | CIK | | |
| PACKING OF SAMPLE | 3 L X 1 NO. FVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | SEALED | SAMPLE COLLEC | THE WY | CHR | ast | |
| SAMPLING PROCEDURE | IS: 3025 (PART I): 1987 RA 20 APHA 22ND ED. 2012, 1060-8 | | QUANTITY FROM | CEVED | 5 13 | DR: | |

| | TEST REPORT | | | | | | | | | | |
|------------|---|--------|---|--------------------------|--|-----------|--|--|--|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE RESERVE TO SERVE THE | LE LIMIT FOR IR (IS 10500:2012) Permissible limit | RESULT | | | | | |
| 1 | Colour | Haren | IS:3025:(Part-4) | 5 | 15 | <1 | | | | | |
| 2 | Odour | - | IS 3025:(part-5) | Agreeable | Agreeable | Agreeable | | | | | |
| 3 | Taste | - | IS 3025:(part-8) | Agreeable | Agreeable | Agreeable | | | | | |
| 4 | pH | - | APHA 22 nd Ed.2012,4500-H*-B, 4-92 | 6.5-8.5 | No Relaxation | 6,54 | | | | | |
| 5 | Turbidity | NTU | APHA 22 ^{MEd.2012,2130-B,2-13} | 1 | 5 | 0.98 | | | | | |
| 6 | Electrical Conductivity | µS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 232.4 | | | | | |
| 7 | Residual Chlorine | mg/Lit | APHA 22 [™] Ed.2012,4500-CI-G, 4 - 69 | 0.2 | 1 | N.D. | | | | | |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | | * | 161.0 | | | | | |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 146.8 | | | | | |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 rd Ed,2012,2540- D, 2- 66 | | | 14.2 | | | | | |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | 15 3025(part-23):1986, RA 2003 | 200 | 600 | 42.0 | | | | | |
| 12 | Total Hardness (as CaCO ₁) | mg/Lit | APHA 22" Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 88.0 | | | | | |
| 13 | Calcium Hardness (as CaCO ₁) | mg/Lit | APHA 22 rd Ed.2012,3500-Ca-B, 3-67 | | - | 50.0 | | | | | |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 st Ed.2012,3500-Mg-B, 3-84 | | | 38.0 | | | | | |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca-B, 3-67 | 75 | 200 | 20.0 | | | | | |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 9.23 | | | | | |
| 17 | Chloride (as Cl) | mg/Lit | APHA 22 st Ed.2012,4500-Cl-B, 4-72 | 250 | 1000 | 30.9 | | | | | |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 ^M Ed.2012,4500-50 ₄ - E,4-190 | 200 | 400 | 21.8 | | | | | |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 st Ed.2012,4500-NO ₃ - 8,4-122 | 45 | No Relaxation | 0.54 | | | | | |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P-C, 4-153 | | | N.D. | | | | | |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| | | | TEST REPORT | | | 1 12 |
|--------|--|----------------|---|---------------------|------------------------------------|--------|
| SR. | | UNIT | METHOD OF TEST | DRINKING WATE | LE LIMIT FOR ER (IS 10500:2012) | RESULT |
| NO. | PARAMETER | UMIT | METHOD OF TEST | Acceptable Limit | Permissible limit | |
| 21 | Sodium (as Na) | mg/Lit | APHA 22ndEd.2012,3500-Na-B, 3-97 | | | 5.4 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 ^{NI} Ed.2012,3500-K-B, 3- 87 | - | | 2.1 |
| 23 | Boron (as B) | mg/Lit | APHA 22 rd Ed.2012,4500-B-B, 4- 25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 ^{nt} Ed.2012,3111-B,3-18 | 0.3 | No Relaxation | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22*9 Ed.2012,4500-F-B 8D, 4-84 & 87 | 1 | 1.5 | 0.12 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22** Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | N.D. |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.01 | No Relaxation | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 st Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3-18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3-18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 rd Ed.2012,3500-Cd, 3- 105 | 0.003 | No Relaxation | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 rd Ed.2012,3112-B, 3-23 | 0.001 | No Relaxation | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22" Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.01 | No Relaxation | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 ^{nl} Ed:2012,3500-Cr-B, 3-69 | 0.05 | No Relaxation | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 rd Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₉ OH) | mg/Lit | APHA 22 st Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | No Relaxation | N.D. |
| 39 | Mineral Oil | mg/Lit | 1S 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | * | - | N.D. |
| Microl | biological Analysis | | | | | 14 |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | detectable in ml sample | Absent |
| 2 | Faecal collform | MPN/ 100ml | IS:1622:1901; RA:2019 | | detectable in mi sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | | detectable in ml sample | Absent |
| Pestic | ides | | | | | |
| 1 | p,p DDT | µg/L | US EPA 508-1995 | 1 | 1 | N.D. |
| 2 | o.p DDT | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p 000 | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 5 | 0,p 000 | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | µg/L | US EPA 508-1995 | | 2 | N.D. |
| 7 | Alpha-HCH | µg/L | US EPA 508-1995 | 0 | .01 | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

REFORT NO. 06048

| | | | TEST REPORT | | | |
|------------|--------------------|------|-------------------|--|-----|--------|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | ACCEPTABL DRINKING WATER Acceptable Limit | | RESULT |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | 0.0 | - | N.D. |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0.0 | 04 | N.D. |
| 10 | Alpha-Endosulfan | μg/L | US EPA 508-1995 | 0. | 4 | N.D. |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | 0. | 4 | N.D. |
| 12 | Endosulfansulphate | µg/L | US EPA 508-1995 | 0. | 4 | N.D. |
| 13 | Monocrotophos | µg/L | US EPA 8141A 1994 | 1 | | N.D. |
| 14 | Ethion | µg/L | US EPA 8141A-1994 | 3 | | N.D. |
| 15 | Chloropyrifos | µg/L | US EPA 8141A-1994 | 30 | | N.D. |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | 2 | | N.D. |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | | | N.D. |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | | | N.D. |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 30 | | N.D. |
| 20 | Alachior | pg/L | US EPA 508- 1995 | 20 | | N.D. |
| 21 | Atrazine | µg/L | US EPA 532-2000 | 2 | | N.D. |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0.3 | | N.D. |
| 23 | Methyl paraxone | pg/L | US EPA 8141A-1994 | | 0.3 | |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 190 | | N.D. |
| 25 | Malaoxon | pg/L | US EPA 8141A-1994 | - | | N.D. |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0.0 | 3 | N.D. |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0.03 | | N.D. |

Note: mg/lit.: milligram per liter, N.D. - Not Detected. REMARKS: RESULTS ARE AS ABOVE

02/02

REVIEWED BY

- Terms & conditions

 The report for publication, arbitration or as legal dispute is forbidden.

 The report for publication, arbitration or as legal dispute is forbidden.

 Test sample will be retained fort's days after issue of test report unless otherwise agreed with customer.

 This is for information as the party has asked for above testics only.

 For ULTIMATE ENVIROLY

For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY

End of the test report----



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTR GARE PALMA - IV/5, U/G COAL MINE,VILL BLOCK-TAMNAR, | IES LIMITED, MILUPARA | DAT DAT | ORT MO REF MO R OF SAMPLING E OF RECEIPT E OF REPORT | UES/TR/ UES/21- 24/01/2 25/01/2 02/02/2 | | |
|--|--|------------|--|---|-------------------------|-----------------|
| DISTT RAIGARH (C | .G.) 496107 | - | E OF ANALYSIS | START: 25, | /01/2022 | END: 29/01/2022 |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | | | SRV/2122/0049, |
| CUSTMER SAMPLE ID | MILUPARA VILLAGE MEAR P. HIL(DUGWELL) | HC- | SAMPLE COMDIT | TOW AT | DTD. 24-JULY-2021 on | |
| PACKING OF SAMPLE 3 1 X 1 MO. PYC CAM S | | | SAMPLE COLLECTED BY | | сиями | or . |
| SAMPLING PROCEDURE | QUANTITY RECEIVED | | 5 LIR | | | |

REPORT NO. 06050

| TEST REPORT | | | | | | | | | | |
|-------------|--|--------|--|---------------------|----------------------|----------|--|--|--|--|
| SR. | THE RESERVE OF THE PARTY OF THE | | | AS PER IS | 10500:2012 | | | | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | | |
| 1 | Colour | Hazen | 1S:3025:(Part-4) | 5 | 15 | <1 | | | | |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeabl | | | | |
| 3 | Taste | - | 1S 3025(part-8) | Agreeable | Agreeable | Agreeabl | | | | |
| 4 | pH | - | APHA 22° Ed.2012,4500-H*-B, 4-92 | 6.5-8.5 | No Relaxation | 6.74 | | | | |
| 5 | Turbidity | NTU | APHA 22 rd Ed.2012,2130-B,2-13 | 1 | 5 | 1.26 | | | | |
| 6 | Electrical Conductivity | µ5/cm | IS 3025(part-14):1984, RA 2013 | - | | 272.4 | | | | |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-CI-G, 4 - 69 | 0.2 | 1 | N.D. | | | | |
| 8 | Total Solid | mg/Lit | APHA 22 rd Ed.2012,2540- B, 2- 64 | | | 187.0 | | | | |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 174.6 | | | | |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 rd Ed.2012,2540- D, 2- 66 | | | 12.4 | | | | |
| 11 | Alkalinity Total (as CaCO ₃) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 44.0 | | | | |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 rd Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 102.0 | | | | |
| 13 | Calcium Hardness (as CaCO3) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca- 8,3-67 | - | | 50.0 | | | | |
| 14 | Magnesium Hardness (as CaCO3) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg- B,3-84 | - | | 52.0 | | | | |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 ^{nf} Ed.2012,3500-Ca- B,3-67 | 75 | 200 | 20.0 | | | | |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 12.6 | | | | |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 nd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 23.9 | | | | |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 rd Ed.2012,4500-5O _x - E, 4-190 | 200 | 400 | 20.7 | | | | |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 rd Ed.2012,4500-NO ₃ - B,4-122 | 45 | No Relaxation | 2.6 | | | | |



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| | | | TEST REPORT | | | |
|------------|--|-------------------|---|---|---------------------------|-----------|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | AS PER IS | Permissible | RESUL |
| 20 | Phosphate (as P) | mg/Lit | APHA 22ndEd.2012,4500-P-C, 4-153 | - | | N.D. |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na- B, 3-97 | | - | 5.2 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 [™] Ed.2012,3500-K-B, 3-87 | | | 1.13 |
| 23 | Boron (as B) | mg/Lit | APHA 22 rd Ed.2012,4500-B-B, 4-25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 rd Ed.2012,3111-8,3- | 0.3 | No Relaxation | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B BD, 4-84 & 87 | 1 | 1.5 | 0.06 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3- 18 | 0.1 | 0.3 | 0.14 |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 ^M Ed.2012,3111-B, 3- 18 | 0.01 | No Relaxation | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 rd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22" Ed.2012,3111-B, 3- 18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3- 18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 rd Ed.2012,3500-Cd, 3- 105 | 0.003 | No Relexation | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 st Ed.2012,3112-B, 3- 23 | 0.001 | No Relaxation | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3- 38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3- 38 | 0.01 | No Relexation | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 rd Ed.2012,3500-Cr-B, 3-69 | 0.05 | No Relaxation | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 rd Ed.2012,5540-C, 5- 53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₆ OH) | mg/Lit | APHA 22 rd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | µg/Lit | APHA 22 rd Ed.2012,6440-6-93 | 0.0001 | No Relaxation | N.D. |
| 39 | Mineral Oil | mg/Lit | 15 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relexation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | - | - | N.D. |
| 4icro | biological Analysis | | 0.8.00 | | | 101000 |
| 1 | Total Coliforms | MPN/ 100 ML | I5:1622:1981: RA:2019 | Shall not be de 100 ml | tectable in any sample | Absent |
| 2 | Faecal coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | Shall not be detectable in any 100 ml sample | | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be detectable in any 100ml sample | | Absent |
| esti | cides | | | AUGINI : | sampie | (9)(6)(6) |
| 1 | p,p DDT | µg/L | US EPA 508-1995 | 1 | 1 | N.D. |
| 2 | o.p DDT | µg/L | US EPA 508-1995 | 1 | | N.D. |
| 3 | p,pDDE | µg/L | US EPA 508-1995 | 1 | | N.D. |
| | | | | | | |



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REPORT NO. 06050

| | | | TEST REPOR | T | | |
|------------|---------------------|------|-------------------|----------------------|---------------------------|--------|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | AS PER IS Acceptable | 10500:2012 Permissible | RESULT |
| 4 | p,p DDD | µg/L | US EPA 508-1995 | 20000 | Limit limit | |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 6 | Gamma-HCH (Lindane) | µg/L | US EPA 508-1995 | | 2 | N.D. |
| 7 | Alpha-HCH | µg/L | US EPA 508-1995 | | 01 | N.D. |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | - | 04 | N.D. |
| 9 | Delta HCH | ug/L | US EPA 508-1995 | | 04 | N.D. |
| 10 | Alpha-Endosulfan | µg/L | US EPA 508-1995 | | .4 | N.D. |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | | .4 | N.D. |
| 12 | Endosulfansulphate | µg/L | US EPA 508-1995 | 0.4 | | N.D. |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | 1 | | N.D. |
| 14 | Ethion | µg/L | US EPA 8141A-1994 | 3 | | N.D. |
| 15 | Chloropyrifos | µg/L | US EPA 8141A-1994 | - | 30 | |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | | 2 | N.D. |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | | - | N.D. |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | | | N.D. |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 3(| 0 | N.D. |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 20 | | N.D. |
| 21 | Atrazine | µg/L | US EPA 532-2000 | 2 | | |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0. | | N.D. |
| 23 | Methyl paraxone | pg/L | US EPA 8141A-1994 | 0. | | N.D. |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 19 | 0 | N.D. |
| 25 | Malaoxon | pg/L | US EPA 8141A-1994 | 19 | | N.D. |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0.0 | | N.D. |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0.0 | | N.D., |

Note: mg/lit: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

REVIEWED BY

Terms & conditions

> The report for publication, arbitration or as legal dispute is forbidden.

> Test sample will be retained for 5 days after issue of test report unless otherwise agreed with customer.

> This is for information as the party has asked for above test(s) only.

For ULTIMATE ENVIROLY.

2 huch

-End of the test report-

For ULTIMATE ENVIROLYPICAL SOLUTIONS

ADTHORIZED SIGNATORY



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| BANKHETA, POST | TRIES LIMITED, 4, COAL MINE,VILLAC -MILUPARA, |)E - | REPORT NO LAB REF NO DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT | UES/TR/21-22/0 UES/21-22/W/01 24/01/2022 25/01/2022 02/02/2022 | 0311 |
|---|--|--------|--|--|-----------------|
| DISTT RAIGARH | (C.G.) 496107. | | DATE OF ANALYSIS | START: 25/01/2022 | END: 29/01/2022 |
| | | | SAPIFIE DETAILS | | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | N/PO/SRV/2122/0045, DTD. 24-JULY-2021 | |
| CUSTMER SAMPLE ID | SAKTA VILLAGE, (DUGNE | (LL) | SAMPLE CONDITION AT RECEIPT | OK | |
| PACKING OF SAMPLE | F S X I NO. FWC CAW I S X I NO. FWC CAW I S X I NO. GLASS BOTTOM | SEAZUS | SAMPLE COLLECTED BY | CHEMIST | |
| IS:3025(PART I):1987 RA SAMPLING PROCEDURE 2003: APHA 22ND ED. 2012, 1060-B, 1-39 | | | QUANTITY RECEIVED | 5 LTR | |

Report No. 05993

| | TEST REPORT | | | | | | | | | |
|-----|---|--------|---|---------------------|----------------------|-----------|--|--|--|--|
| SR. | | 1000 | | AS PER IS | 10500:2012 | | | | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | | |
| 1 | Colour | Hazen | 15:3025:(Part-4) | 5 | 15 | 2.1 | | | | |
| 2 | Odour | 7 | IS 3025(part-5) | Agreeable | Agreeable | Agreeable | | | | |
| 3 | Taste | | IS 3025(part-8) | Agreeable | Agreeable | Agreeable | | | | |
| 4 | pH | * | APHA 22 nd Ed.2012,4500-H*-B, 4-92 | 6.5-8.5 | NoRelaxatio n | 7.53 | | | | |
| 5 | Turbidity | NTU | APHA 22 nd Ed.2012,2130-B,2-13 | 1 | 5 | 2.4 | | | | |
| 6 | Electrical Conductivity | µS/cm | IS 3025(part-14):1984, RA 2013 | = | - | 256.4 | | | | |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-CI-G, 4 - 69 | 0.2 | 1 | N.D. | | | | |
| 8 | Total Solid | mg/Lit | APHA 22 nd Ed.2012,2540- B, 2- 64 | - | • | 164.0 | | | | |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 158.8 | | | | |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 rd Ed.2012,2540- D, 2- 66 | - | 30 | 5.2 | | | | |
| 11 | Alkalinity Total (as CaCO ₁) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 86.0 | | | | |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 104.0 | | | | |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500−Ca-B, 3-67 | 2 | - | 54.0 | | | | |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | | | 50.0 | | | | |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 rd Ed.2012,3500-Ca-B, 3-67 | 75 | 200 | 21.6 | | | | |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 12.1 | | | | |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 rd Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 22.9 | | | | |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 rd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 27.6 | | | | |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ -B, 4-122 | 45 | NoRelaxatio n | 0.56 | | | | |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P- C,4-153 | 5 | - | N.D. | | | | |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na- B,3-97 | | - | 16.1 | | | | |



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| | | | TEST REPORT | | | |
|-------|--|-------------------|---|---------------------|--|--------|
| SR. | | | | AS PER IS | 10500:2012 | Thin |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 22 | Potassium (as K) | mg/Lit | APHA 22 rd Ed.2012,3500-K-B, 3-87 | 181 | | 0.38 |
| 23 | Boron (as B) | mg/Lit | APHA 22 rd Ed.2012,4500-B-B, 4-25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | NoRelaxatio n | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.12 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3- 18 | 0.1 | 0.3 | 0.09 |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.01 | NoRelaxatio n | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 ^{nt} Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 ^{nt} Ed.2012,3111-B, 3- 18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 rd Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxatio n | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 rd Ed.2012,3112-B, 3- 23 | 0.001 | NoRelaxatio n | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3- 38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 nd Ed.2012,3114-C, 3- 38 | 0.01 | NoRelaxatio n | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxatio n | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5- 53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 rd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | NoRelaxatio n | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | | - | N.D. |
| Micro | biological Analysis | | | | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | etectable in any sample | Absent |
| 2 | Faecal coliform | MPN/ 100ml | IS:1622:1981; RA:2019 | | etectable in any sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be de | Shall not be detectable in any 100ml sample | |
| Pesti | cides | Andrew State | | | | |
| 1 | p,p DDT | μg/L | US EPA 508-1995 | (2) | L | N.D. |
| 2 | o.p DDT | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 3 | p,pDDE | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 4 | p,p DDD | µg/L | US EPA 508-1995 | | 1 | N.D. |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | | | N.D. |
| 6 | Gamma-HCH (Lindane) | µg/L | US EPA 508-1995 | | 2 | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.05993

| | | | TEST REPORT | | | |
|------------|--------------------|----------------|-------------------|---------------------|----------------------|--------|
| | | | | AS PER IS | 10500:2012 | |
| SR. NO. | PARAMETER | PARAMETER UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 7 | Alpha-HCH | µg/L | US EPA 508-1995 | 0.1 | 01 | N.D. |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | 0.0 | 04 | N.D. |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0.0 | 04 | N.D. |
| 10 | Alpha-Endosulfan | µg/L | US EPA 508-1995 | 0. | 4 | N.D. |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | 0. | 4 | N.D. |
| 12 | Endosulfansulphate | µg/L | US EPA 508-1995 | 0. | 4 | N.D. |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | 1 | | N.D. |
| 14 | Ethion | µg/L | US EPA 8141A-1994 | 3 | 3 | |
| 15 | Chloropyrifos | µg/L | US EPA 8141A-1994 | 30 | | N.D. |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | 2 | 2 | |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | | | N.D. |
| 18 | Phoratesulphone | µg/L | US EPA 8141A-1994 | | | N.D. |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 3 | 0 | N.D. |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 2 | 0 | N.D. |
| 21 | Atrazine | µg/L | US EPA 532-2000 | 2 | | N.D. |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0. | 3 | N.D. |
| 23 | Methyl paraxone | µg/L | US EPA 8141A-1994 | | | N.D. |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 19 | 0 | N.D. |
| 25 | Malaoxon | µg/L | US EPA 8141A-1994 | | | N.D. |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0.0 | 03 | N.D. |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0.0 | 03 | N.D. |

Note: mg/lit.: milligram per liter, N.D.- Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

02 02 AUTHORIZED SIGNATORY

End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address OF TO, TO, HINDALCO INDUSTR GARE PALMA - IV/5, | IES LIMITED, MILUPARA | DATI | ORT NO HEF NO E OF SAMPLING E OF RECEIPT | | | |
|--|---|--------|---|------------|--|-----------------|
| U/G COAL MINE, VILL BLOCK-TAMNAR, | CONTRACTOR CONTRACTOR | - | OF REPORT | 02/02/2 | | |
| DISTT RAIGARH (C | .0.) 496107 | | E DETAILS | START: 25, | /01/2022 | END: 29/01/2022 |
| SAMPLE TYPE | GROUND WATER | | ORDER /REPERE | MCR: | NCE: M/PO/SRV/2122/004: DTD: 24-JULY-2021 | |
| CORRECT ENGLIS ID | CIDARPARA VILLAGE (DUON | (aam | SAMPLE CONDITION AT RECEIPT | | CIPE | *4-11071-5051 |
| PACKING OF SAMPLE | J L X I NO. PVC CAN I L X I NO. PVC CAN I L X I NO. GLASS BOTTLE | SEALED | SMOTE COLLEC | TED BY | сини | |
| SAMPLING PROCEDURE | IS:3025(PART I):1987 RA APMA 22ND ED. 2012,1060 | | | | 5 ACR | |

REPORT NO. 06051

| | TEST REPORT | | | | | | | | | |
|-----|---|--------|---|---------------------|----------------------|-----------|--|--|--|--|
| SR. | | | | AS PER IS | 10500:2012 | | | | | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | | | | |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 | | | | |
| 2 | Odour | - | IS 3025(part-5) | Agreeable | Agreeable | Agreeable | | | | |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeable | | | | |
| 4 | pH | | APHA 23 rd Ed.2012,4500-H*-B, 4-92 | 6.5-8.5 | MoRelexati | 7.28 | | | | |
| 5 | Turbidity | NTU | APHA 22 ^{AC} Ed.2012,2130-B,2-13 | 1 | 5 | 0.43 | | | | |
| 6 | Electrical Conductivity | µS/cm | 1S 3025(part-14):1984, RA 2013 | | - | 342.0 | | | | |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 0.2 | 1 | N.D. | | | | |
| 8 | Total Solid | mg/Lit | APHA 22 rd Ed.2012,2540- B, 2- 64 | | | 216.0 | | | | |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(pert-16):1984, RA 2006 | 500 | 2000 | 212.4 | | | | |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 nd Ed.2012,2540- D, 2- | - | - | 3.6 - | | | | |
| 11 | Alkalinity Total (as CaCO ₁) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 62.0 | | | | |
| 12 | Total Hardness (as CaCO ₃) | mg/LJt | APHA 22 rd Ed 2012,2340-C, 2- 44,45 | 200 | 600 | 98.0 | | | | |
| 13 | Calcium Hardness (as CaCO3) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca- B,3-67 | | - | 56.0 | | | | |
| 14 | Magnesium Hardness (as CaCO3) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg- B,3-84 | | * | 42.0 | | | | |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 rd Ed.2012,3500-Ca- 8,3-67 | 75 | 200 | 22.4 | | | | |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 rd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 10.2 | | | | |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 [™] Ed.2012,4500-Ci-B, 4-72 | 250 | 1000 | 21.9 | | | | |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 ^{se} Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 12.4 | | | | |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ - B,4-122 | 45 | NoRelaxati | 3.6 | | | | |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| | | | TEST REPORT | | | |
|-------|--|---|---|---------------------|----------------------|---------|
| SR. | | 1 | | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESUL |
| 20 | Phosphate (as P) | mg/Lit | APHA 22ndEd.2012,4500-P-C, 4-153 | | - | N.D. |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na-B, 3-97 | - | | 10.7 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 nd Ed.2012,3500-K-B, 3- 87 | - | - | 0.9 |
| 23 | Boron (as B) | mg/Lit | APHA 22 rd Ed.2012,4500-B-B, 4- 25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 ^M Ed.2012,3111-B,3-18 | 0.3 | NoRelaxati on | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 rd Ed.2012,4500-F-B 8D, 4-84 & 87 | 1 | 1.5 | 0.12 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | 0.3 | 0.09 |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3-18 | 0.01 | NoRelaxati on | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 rd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3-1B | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 ^M Ed.2012.3111-B. 3-18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 st Ed.2012,3500-Cd, 3- 105 | 0.003 | NoRelaxati | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.001 | NoRelaxati | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.01 | NoRelaxati | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 rd Ed.2012,3500-Cr-B, 3-69 | 0.05 | NoRelaxati | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22™ Ed.2012,5540-C, 5-53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 [™] Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 rd Ed.2012,6440-6-93 | 0.0001 | NoRelaxati | N.D. |
| 39 | Mineral Oil | mg/Lit | 1S 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | | - METHYNCTON | N.D. |
| 4icro | biological Analysis | | 2005 | | | - |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | Shall not be o | | Absent |
| 2 | Faecal coliform | MPN/ 100ml | T5:1622:1981: RA:2019 | Shall not be o | | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be d | letectable in | Absent |
| esti | cides | *************************************** | | y 200111 | - sample | 3000772 |
| 1 | p,p DDT | µg/L | US EPA 508-1995 | 1 | | N.D. |
| 2 | o.p DDT | µg/L | US EPA 508-1995 | 1 | | N.D. |
| 3 | p,pDDE | µg/L | US EPA 508-1995 | 1 | | N.D. |
| 4 | p,p DDD | µg/L | US EPA 508-1995 | 1 | | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

EXPORT NO. 06051

| | | | TEST REPORT | | | | |
|-----|---------------------|------|-------------------|---------------------|----------------------|--------|--|
| SR. | | | | AS PER IS 1 | AS PER IS 10500:2012 | | |
| NO. | PARAMETER | | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT | |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | 1 | | N.D. | |
| 6 | Gamma-HCH (Lindane) | µg/L | US EPA 508-1995 | 2 | | N.D. | |
| 7 | Alpha-HCH | µg/L | US EPA 508-1995 | 0.0 | 1 | N.D. | |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | 0.0 | 14 | N.D. | |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0.0 | 14 | N.D. | |
| 10 | Alpha-Endosulfan | µg/L | US EPA 508-1995 | 0.4 | 4 | N.D. | |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | 0.4 | 4 | N.D. | |
| 12 | Endosulfansulphate | µg/L | US EPA 508-1995 | 0.4 | 4 | N.D. | |
| 13 | Monocrotophos | µg/L | US EPA 8141A-1994 | 1 | | N.D. | |
| 14 | Ethion | µg/L | US EPA 8141A-1994 | 3 | | N.D. | |
| 15 | Chloropyrifos | µg/L | US EPA 8141A-1994 | 30 | | N.D. | |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | 2 | | N.D. | |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | - | | N.D. | |
| 18 | Phoratesulphone | µg/L | US EPA 8141A-1994 | | | N.D. | |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 30 | | N.D. | |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 20 | | N.D. | |
| 21 | Atrazine | µg/L | US EPA 532-2000 | 2 | | N.D. | |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0.3 | | N.D. | |
| 23 | Methyl paraxone | µg/L | US EPA 8141A-1994 | 100 | 10-1 | N.D. | |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 190 | | N.D. | |
| 25 | Malaoxon | µg/L | US EPA 8141A-1994 | - | | N.D. | |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0.00 | 3 | N.D. | |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0.0 | | N.D. | |

Note: mg/lit.: milligram per liter, N.D. - Not Debetsed.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report wiless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

Phude 122 For ULTIMATE ENVIROLYTICAL SQLUTIONS 02 02 22 REVIEWED BY AUTHORIZED SIGNATORY -End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUST | | | REPORT NO LAB REF NO DATE OF SAMPLING | LAB REF NO UES/21-22/W/010312 | | |
|------------------------|---|--------|---------------------------------------|--|-----------------|--|
| | 4, COAL MINE, VILLA | BE- | DATE OF RECEIPT | | | |
| BANKHETA, POST | -MILUPARA, | | DATE OF REPORT | 02/02/2022 | | |
| DISTT RAIGARH | (C.G.) 496107. | | DATE OF ANALYSIS | START: 25/01/2022 | END: 29/01/2022 | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REPERENCE: | M/90/SRV/2122/0045, DTD. 24-JULY-202 | | |
| SAMPLE TYPE | GROUND WATER | | ORDER /REFERENCE: | M/PO/SRV/2122/0045, DTD. 24-JULY-202 | | |
| CUSTMER SAMPLE ID | BELJOR VILLAGE (DUGWE | LL) | SAMPLE CONDITION AT RECEIPT | OK | | |
| | 3 L X 1 NO. PVC CAN | STATED | SAMPLE COLLECTED | CHEMIST | | |
| PACKING OF SAMPLE | 1 1 X 1 NO. PYC CAN 1 1 X 1 NO. GLASS SOTTLE | | BY | The state of the s | | |

Report No.05994

| | | | TEST REPORT | | | |
|-----|---|---------|---|---------------------|------------------|-----------|
| SR. | P. L. | 1000000 | | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | | |
| 1 | Colour | Hazen | IS:3025:(Part-4) | 5 | 15 | <1 |
| 2 | Odour | - | IS-3025(part-5) | Agreeable | Agreeable | Agreeable |
| 3 | Taste | - | IS 3025(part-8) | Agreeable | Agreeable | Agreeable |
| 4 | pH | | APHA 22** Ed.2012,4500-H*-B, 4-92 | 6.5-8.5 | No Relaxation | 7.58 |
| 5 | Turbidity | NTU | APHA 22"Ed.2012,2130-B,2-13 | 1 | 5 | 0.42 |
| 6 | Electrical Conductivity | µS/cm | IS 3025(part-14):1984, RA 2013 | - | - | 576.0 |
| 7 | Residual Chlorine | mg/Lit | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 0.2 | 1 | N.D. |
| 8 | Total Solid | mg/Lit | APHA 22 rd Ed.2012,2540- B, 2- 64 | 25 | | 353.4 |
| 9 | Total Dissolved Solids | mg/Lit | IS 3025(part-16):1984, RA 2006 | 500 | 2000 | 348.6 |
| 10 | Total Suspended Solids | mg/Lit | APHA 22 rd Ed.2012,2540- D, 2- 66 | | • | 4.8 |
| 11 | Alkalinity Total (as CaCO ₁) | mg/Lit | IS 3025(part-23):1986, RA 2003 | 200 | 600 | 166.0 |
| 12 | Total Hardness (as CaCO ₃) | mg/Lit | APHA 22 rd Ed.2012,2340-C, 2- 44,45 | 200 | 600 | 196.0 |
| 13 | Calcium Hardness (as CaCO ₃) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca-B, 3-67 | 0 | - | 106.0 |
| 14 | Magnesium Hardness (as CaCO ₃) | mg/Lit | APHA 22 rd Ed.2012,3500-Mg-B, 3-84 | | = | 90.0 |
| 15 | Calcium (as Ca) | mg/Lit | APHA 22 nd Ed.2012,3500-Ca-B, 3-67 | 75 | 200 | 42.4 |
| 16 | Magnesium (as Mg) | mg/Lit | APHA 22 nd Ed.2012,3500-Mg-B, 3-84 | 30 | 100 | 21.8 |
| 17 | Chloride (as CI) | mg/Lit | APHA 22 ^{nt} Ed.2012,4500-CI-B, 4-72 | 250 | 1000 | 46.9 |
| 18 | Sulphate (as SO ₄) | mg/Lit | APHA 22 rd Ed.2012,4500-SO ₄ -E, 4-190 | 200 | 400 | 25.2 |
| 19 | Nitrate (as NO ₃) | mg/Lit | APHA 22 nd Ed.2012,4500-NO ₃ -B, 4-122 | 45 | No Relaxation | 1.32 |
| 20 | Phosphate (as P) | mg/Lit | APHA 22nd Ed.2012,4500-P- C,4-153 | | | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| | | | TEST REPORT | | | |
|-------|--|----------------|---|---------------------|----------------------------|--------|
| SR. | E TESTER | | TO BE SHOULD BE | AS PER IS | 10500:2012 | |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 21 | Sodium (as Na) | mg/Lit | APHA 22nd Ed.2012,3500-Na- B,3-97 | - | | 6.8 |
| 22 | Potassium (as K) | mg/Lit | APHA 22 rd Ed.2012,3500-K-B, 3-87 | | - | 1.34 |
| 23 | Boron (as B) | mg/Lit | APHA 22 rd Ed.2012,4500-8-8, 4-25 | 0.5 | 1.0 | N.D. |
| 24 | Iron (as Fe) | mg/Lit | APHA 22 nd Ed.2012,3111-B,3-18 | 0.3 | No Relaxation | N.D. |
| 25 | Fluoride (as F) | mg/Lit | APHA 22 nd Ed.2012,4500-F-B &D, 4-84 & 87 | 1 | 1.5 | 0.09 |
| 26 | Manganese (as Mn) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.1 | 0.3 | 0.12 |
| 27 | Lead (as Pb) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3- 18 | 0.01 | No Relaxation | N.D. |
| 28 | Nickel (as Ni) | mg/Lit | APHA 22 nd Ed.2012,3500-Ni, 3- 108 | 0.02 | No Relaxation | N.D. |
| 29 | Zinc (as Zn) | mg/Lit | APHA 22 rd Ed.2012,3111-B, 3- 18 | 5 | 15 | N.D. |
| 30 | Copper (as Cu) | mg/Lit | APHA 22 nd Ed.2012,3111-B, 3- 18 | 0.05 | 1.5 | N.D. |
| 31 | Cadmium (as Cd) | mg/Lit | APHA 22 rd Ed.2012,3500-Cd, 3- 105 | 0.003 | No Relaxation | N.D. |
| 32 | Mercury (as Hg) | mg/Lit | APHA 22 rd Ed.2012,3112-B, 3- 23 | 0.001 | No Relaxation | N.D. |
| 33 | Arsenic (as As) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3- 38 | 0.01 | 0.05 | N.D. |
| 34 | Selenium (as Se) | mg/Lit | APHA 22 rd Ed.2012,3114-C, 3- 38 | 0.01 | No Relaxation | N.D. |
| 35 | Chromium (as Cr) | mg/Lit | APHA 22 nd Ed.2012,3500-Cr-B, 3-69 | 0.05 | No Relaxation | N.D. |
| 36 | Anionic Detergent (as MBAS) | mg/Lit | APHA 22 nd Ed.2012,5540-C, 5- 53 | 0.2 | 1.0 | N.D. |
| 37 | Phenolic Compound (as C ₆ H ₅ OH) | mg/Lit | APHA 22 nd Ed.2012,5540-B & C, 5-47 | 0.001 | 0.002 | N.D. |
| 38 | Poly-nuclear Aromatic Hydrocarbon (PAH) | μg/Lit | APHA 22 nd Ed.2012,6440-6-93 | 0.0001 | No Relaxation | N.D. |
| 39 | Mineral Oil | mg/Lit | IS 3025 (part-39) : 1991, RA 2003 | 0.5 | No Relaxation | N.D. |
| 40 | Oil & Grease | mg/Lit | IS 3025 (Part 39):1991, RA 2003 | | | N.D. |
| Micro | biological Analysis | | 1 8898 | | | |
| 1 | Total Coliforms | MPN/ 100 ML | IS:1622:1981: RA:2019 | | detectable in | Absent |
| 2 | Faecal Coliform | MPN/ 100ml | IS:1622:1981: RA:2019 | Shall not be | detectable in nl sample | Absent |
| 3 | E. Coli | MPN/ 100ml | IS:1622:1981:RA:2019 | Shall not be | detectable in | Absent |
| Pesti | cides | 2001111 | | uni 2001 | statingrie | |
| 1 | p,p DDT | µg/L | US EPA 508-1995 | 1 | | N.D. |
| 2 | o.p DDT | µg/L | US EPA 508-1995 | | | N.D. |
| 3 | p,pDDE | µg/L | US EPA 508-1995 | 1 | | N.D. |
| 4 | p,p DDD | µg/L | US EPA 508-1995 | 1 | | N.D. |
| 5 | O,p DDD | µg/L | US EPA 508-1995 | 1 | | N.D. |



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No.05994

| | | | TEST REPORT | | | |
|-----|------------------------|------|--|---------------------|----------------------|--------|
| SR. | | | deles de la constitución de la c | AS PER IS | 10500:2012 | Collis |
| NO. | PARAMETER | UNIT | METHOD OF TEST | Acceptable Limit | Permissible limit | RESULT |
| 6 | Gamma-HCH (Lindane) | μg/L | US EPA 508-1995 | | 2 | N.D. |
| 7 | Alpha-HCH | μg/L | US EPA 508-1995 | 0. | 01 | N.D. |
| 8 | Beta-HCH | µg/L | US EPA 508-1995 | 0. | 04 | N.D. |
| 9 | Delta HCH | µg/L | US EPA 508-1995 | 0. | 04 | N.D. |
| 10 | Alpha-Endosulfan | µg/L | US EPA 508-1995 | 0 | .4 | N.D. |
| 11 | Beta-Endosulfan | µg/L | US EPA 508-1995 | 0 | .4 | N.D. |
| 12 | Endosulfansulphate | µg/L | US EPA 508-1995 | 0 | .4 | N.D. |
| 13 | Monocrotophos | μg/L | US EPA 8141A-1994 | | 1 | |
| 14 | Ethion | µg/L | US EPA 8141A-1994 | | 3 | |
| 15 | Chloropyrifos | µg/L | US EPA 8141A-1994 | 3 | 30 | |
| 16 | Phorate | µg/L | US EPA 8141A-1994 | | 2 | N.D. |
| 17 | Phoratesulphoxide | µg/L | US EPA 8141A-1994 | | | N.D. |
| 18 | Phoratesulphone | μg/L | US EPA 8141A-1994 | | - | N.D. |
| 19 | 2,4-D | µg/L | US EPA 515.1-1995 | 3 | 0 | N.D. |
| 20 | Alachlor | µg/L | US EPA 508- 1995 | 2 | 0 | N.D. |
| 21 | Atrazine | µg/L | US EPA 532-2000 | | 2 | N.D. |
| 22 | Methyl parathion | µg/L | US EPA 8141A-1994 | 0 | .3 | N.D. |
| 23 | Methyl paraxone | µg/L | US EPA 8141A-1994 | | | N.D. |
| 24 | Malathion | µg/L | US EPA 8141A-1994 | 15 | 90 | N.D. |
| 25 | Malaoxon | µg/L | US EPA 8141A-1994 | | | N.D. |
| 26 | Aldrin | µg/L | US EPA 508- 1995 | 0. | 03 | N.D. |
| 27 | Dieldrin | µg/L | US EPA 508-1995 | 0. | 03 | N.D. |

Note: mg/lit.: milligram per liter, N.D.- Not Detected. REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

REVIEWED BY

End of the test report-

For ULTIMATE ENVIROLYTICAL SOLUTIONS

02 02 AUTHORIZED SIGNATORY

Annexure-3



Letter No.: HIL/EC/GP-IV/5 -Q3/2020-21/01-500

11 January, 2022

The Integrated Regional Office,
Ministry of Environment Forests & Climate Change (MoEF & CC) Aranya Bhawan,
North Block, Sector – 19, Naya Raipur,
Atal Nagar, Chhattisgarh, 492002

Sub.: Compliance of condition no. viii of Environment Clearance Letter no. – J-11015/ 8/1998-IA. II (M) Dated: - 31st August 2000 for Under Ground Mining 1.0 Million Ton/Annum Production Capacity.

Ref.: Environment Clearance Letter no. – letter no. J-11015/8/1998-IA. II (M) Dated: - 31st August 2000.

Dear Sir,

With reference to above subject, we are submitting herewith the quarterly monitoring report of Ground Water Level (from Oct. 2021 to December 2021) & GW Quality for the month of November 2021 – Post monsoon period of Gare Palma IV/5 Coal Mines, Hindalco Industries Limited, Village – Milupara, Tehsil – Tamnar, District – Raigarh, Chhattisgarh.

Thanking you,

Yours faithfully,

Govind Kumar (Mine Agent – Gare Palma Mines)

Hindalco Industries Limited

Encl: As above

CC: 1) Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas, Bhawan, Raipur, Chhattisgarh.

- 2) Regional Officer, Chhattisgarh Environment Conservation Board, TV tower Road, Raigarh (CG).
- 3) The Regional Director, Regional Directorate (Central), Bhopal Central Pollution Control Board (MoEF & CC, GOI), "Parivesh Bhawan" Paryavaran Parishar, E 5, Arera Colony, Bhopal (MP), 462016
- 4) The Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, 2nd Floor, LK Corporate and Logistic Park, Dumartarai, Raipur-492015
- 5) Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Mansingh Road, New Delhi 110011



Letter No.: HIL/EC/GP-IV/5 -Q4/2021-22/ 24/

07[™] April, 2022

The Integrated Regional Office,
Ministry of Environment Forests & Climate Change (MoEF & CC) Aranya Bhawan,
North Block, Sector – 19, Naya Raipur,
Atal Nagar, Chhattisgarh, 492002

Sub.: Compliance of condition no. viii of Environment Clearance Letter no. – J-11015/ 8/1998-IA. II (M)

Dated: - 31st August 2000 for Under Ground Mining 1.0 Million Ton/Annum Production Capacity.

Ref.: Environment Clearance Letter no. - letter no. J-11015/8/1998-IA. II (M) Dated: - 31st August 2000.

Dear Sir,

With reference to above subject, we are submitting herewith the quarterly monitoring report of Ground Water Level (from Jan. 2022 to Mar. 2022) & GW Quality for the month of January 2022 – Winter Season of Gare Palma IV/5 Coal Mines, Hindalco Industries Limited, Village – Milupara, Tehsil – Tamnar, District – Raigarh, Chhattisgarh.

Thanking you,

Yours faithfully.

Govind Kumar

(Mine Agent - Gare Palma Mines)

Hindalco Industries Limited

Encl: As above

CC: 1) Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas, Bhawan, Raipur, Chhattisgarh.

- 2) Regional Officer, Chhattisgarh Environment Conservation Board, TV tower Road, Raigarh (CG).
- 3) The Regional Director, Regional Directorate (Central), Bhopal Central Pollution Control Board (MoEF & CC, GOI), "Parivesh Bhawan" Paryavaran Parishar, E 5, Arera Colony, Bhopal (MP), 462016
- 4) The Regional Director, Central Ground Water Board, North Central Chhattisgarh Region, 2nd Floor, LK Corporate and Logistic Park, Dumartarai, Raipur-492015
- 5) Member Secretary, Central Ground Water Authority, 18/11, Jamnagar House, Mansingh Road, New Delhi 110011

Hindalco Industries Limited

Annexure-4



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, | | BEFORT NO. | | UES/TR/21-22/3510 | | | |
|---|---|---|-------|--|--------------------|---|-------------------|
| | | LAB REF NO. | | UES/21-22/AAQM/6302-6309 | | | |
| HINDALCO INDUSTRIE | | DATE OF SAN | PLING | 01/10/2021 to | 25/ | 10/2021 | |
| GARE PALMA - IV/5, MILUPARA U/G COAL MINE, VILLAGE - MILUPARA, BLOCK - TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | 02/10/2021 to 26/10/2021 01/11/2021 | | | |
| | | | | | | | START: 03/10/2021 |
| | | | | | | SAMPLE DETAI | LS |
| MONITORING FOR | AMBIENT AIR QUAL | AMBIENT AIR QUALITY MONITORING | | MER REF. NO. 4 DATE | | M/PO/SRV/2122/0049 DTD::24-JULY-2021 | |
| SAMPLING LOCATION | MAIN OFFICE AREA, | MILUPARA | | | - | | |
| DURATION OF SAMPLING | 24 HOURS | 24 HOURS SAMPLE COLLECTED BY | | | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REP | TERENCE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 NO., FILTER PAPER (PM _{2.5}): 1X1 NO. SO ₂ : 30MLXI NO. PVC BOTTLE, NO ₂ : 30MLXI NO. PVC BOTTLE RUBBER BLADER: 1X1 NO. | | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|---|--|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCB Guidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₃) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | |

| TEST REPORT | | | | | | | |
|------------------|--|--|--------------------------------------|--------------------------|--------------|-------------|--|
| Date of Sampling | PM ₁₀ μg /m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | |
| 01.10.2021 | 46 | 28 | 18 | 28 | 0.7 | N.D. | |
| 04.10.2021 | 40 | 20 | 12 | 26 | 0.5 | N.D. | |
| 08.10.2021 | 46 | 26 | 16 | 24 | 0.9 | N.D. | |
| 11.10.2021 | 38 | 22 | 10 | 22 | 0.6 | N.D. | |
| 14.10.2021 | 34 | 28 | 18 | 28 | 0.4 | N.D. | |
| 18.10.2021 | 36 | 22 | 12 | 26 | 0.8 | N.D. | |
| 22.10.2021 | 48 | 26 | 10 | 20 | 0.6 | N.D. | |
| 25.10.2021 | 36 | 20 | 16 | 28 | 0.9 | N.D. | |

Terms & conditions

- The report for auditration, arbitration or as local discours is factorists
- Yest sample will be intained for 15-days after (issue of test report unless athorwise agreed with custome

This is far minimum on the party has asked for above tests 1900LY7

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AUTHORIZED SIGNATORY

-End of the test report--



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO. | WHEN YOU WANTED | REPORT NO | UES/TR/21-22/04200 | | |
|---|--|---|--|------------------|--|
| | | LAB REF NO | UES/21-22/AAQM/07523-07530 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE, VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 02/11/2021 to 26, | /11/2021 | |
| | | DATE OF RECEIPT | 03/11/2021 to 27/11/2021 | | |
| | | DATE OF REPORT | 01/12/2021 | | |
| | | DATE OF ANALYSIS | START: 03/11/2021 | E NMD: 28/11/202 | |
| | | SAMPLE DETAILS | | 210 | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. & | M/FO/ERV/2122/0049, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | MAIN OFFICE AREA, MILUPAL | RA. | | | |
| DURATION OF SAMPLING | 24 HOURS | 24 HOURS SAMPLE COLLECTED BY LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PMIO): 1X1 SO2: 30MLX1 NO. PVC BOTTI RUBBER BLADDER: 1X1 NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|--|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | CPCBGuidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines Vol1 | 80 | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | 18 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method 10-5 | | | |

| TEST REPORT | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------|--------------|------------|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m | |
| 02.11.2021 | 48 | 30 | 20 | 26 | 0.8 | N.D. | |
| 05.11.2021 | 42 | 22 | 14 | 24 | 0.6 | N.D. | |
| 09.11.2021 | 48 | 28 | 18 | 26 | 0.8 | N.D. | |
| 12.11.2021 | 40 | 24 | 12 | 24 | 0.4 | N.D. | |
| 16.11.2021 | 36 | 30 | 20 | 26 | 0.6 | N.D. | |
| 19.11.2021 | 38 | 24 | 14 | 22 | 0.9 | N.D. | |
| 23.11.2021 | 46 | 28 | 12 | 26 | 0.7 | N.D. | |
| 26.11.2021 | 38 | 22 | 18 | 24 | 0.8 | N.D. | |

Terms & conditions

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-End of the test report.....



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO. | ······································ | REPORT NO | UES/TR/21-22/049 | 21-22/04940 | |
|--|--|--|--|-----------------|--|
| | TRIES LIMITED CARE | LAB REF NO | UES/21-22/AAQM/08789-08796 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 03/12/2021 to 28 | /12/2021 | |
| | | DATE OF RECEIPT | 04/12/2021 to 29/12/2021 01/01/2022 | | |
| | | DATE OF REPORT | | | |
| | | DATE OF ANALYSIS | START: 04/12/2021 | END: 31/12/2021 | |
| | | SAMPLE DETAILS | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. & DATE | M/FO/SRV/2122/0049, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | MAIN OFFICE AREA, MILUPAI | UA . | 0101 24 0021-2022 | | |
| DURATION OF SAMPLING | 24 HOURS SAMPLE COLLECTED BY | | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PMIO): 1X1 SO2: 30MLX1 NO. PVC BOTTI RUBBER BLADDER: 1X1 NO. | NO., FILTER PAPER (PM2 E, NO2: 30MLX1 NO. PVC | 7.5): IXI NO. BOTTLE | | |

| | AAQM Standard for Ambient Air Quality N | |
|---|--|-----------------|
| Parameter | Method Reference | NAAQM |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | Standard 100 |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* Mercury (Hg) | IS 5182 (Part 10):1999, RA 2003 EPA Method 10-5 | 4.0 |

| TEST REPORT | | | | | | | |
|--|---------------------------|--|--------------------------|--------------------------|--------------|------|--|
| Date of Sampling | РМ ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg | |
| 03.12.2021 | 50 | 32 | 22 | 28 | 0.9 | ng/m | |
| 07.12.2021 | 44 | 24 | 16 | 26 | 0.8 | N.D. | |
| 10.12.2021 | 50 | 30 | 20 | 28 | | N.D. | |
| 14.12.2021 | 42 | 26 | 14 | | 0.9 | N.D. | |
| 17.12.2021 | 38 | 32 | terioria. | 26 | 0.6 | N.D. | |
| 21.12.2021 | | | 22 | 28 | 0.8 | N.D. | |
| Charles and the Control of the Contr | 40 | 26 | 16 | 24 | 1.0 | N.D. | |
| 24.12.2021 | 48 | 30 | 14 | 28 | 0.8 | N.D. | |
| 28.12.2021 | 40 | 24 | 20 | 26 | 0.9 | N.D. | |

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| Name & Address Of The Custo TO. | WW. | REPORT NO | UES/TR/21-22/060 | /06024 | |
|---|--|--|--|-----------------|--|
| | PRIEST LIMITED CARE | LAB REF NO | UES/21-22/AAQM/0 | 10393-010400 | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE, VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 04/01/2022 to 28, | /01/2022 | |
| | | DATE OF RECEIPT | 05/01/2022 to 29/01/2022 | | |
| | | DATE OF REPORT | 02/02/2022 | | |
| | | DATE OF ANALYSIS | START: 05/01/2022 | END: 01/02/2022 | |
| | | SAMPLE DETAILS | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. & DATE | TREF. NO. 4 M/PO/SRV/2122/0049, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | MAIN OFFICE AREA, MILUPAN | RA. | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PMIO): IX1 SO2: 30MLX1 NO. PVC BOTTI RUBBER BLADDER: IX1 NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|---|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCB Guidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | | |
|---------------------|---------------------------|--|--------------------------------------|--------------------------------------|--------------|-------------|--|
| Date of Sampling | PM ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO ₂ µg/m ³ | NO ₂ μg/m ³ | CO* mg/m³ | Hg ng/m³ | |
| 04.01.2022 | 58 | 22 | 12 | 26 | 0.7 | N.D. | |
| 08.01.2022 | 60 | 28 | 18 | 22 | 0.6 | N.D. | |
| 11.01.2022 | 58 | 24 | 14 | 28 | 0.8 | N.D. | |
| 15.01.2022 | 48 | 28 | 12 | 22 | 0.4 | N.D. | |
| 18.01.2022 | 40 | 30 | 16 | 24 | 0.8 | N.D. | |
| 22.01.2022 | 46 | 28 | 10 | 20 | 1.2 | N.D. | |
| 25.01,2022 | 44 | 32 | 18 | 26 | 0.7 | N.D. | |
| 28.01.2022 | 48 | 28 | 14 | 22 | 0.5 | N.D. | |

Terms & conditions

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AUTHORIZED SIGNATORY

End of the test report.....



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | REPORT NO | UES/TR/21-22/07900 UES/21-22/AAQM/013026-013033 01/02/2022 to 25/02/2022 02/02/2022 to 26/02/2022 01/03/2022 | | | | |
|--|--|---------------------|--|-----------------|--|--|--|
| | | LAB REF NO | | | | | |
| | | DATE OF SAMPLING | | | | | |
| | | DATE OF RECEIPT | | | | | |
| | | DATE OF REPORT | | | | | |
| | | DATE OF ANALYSIS | START: 03/02/2022 | END: 01/03/2022 | | | |
| | | SAMPLE DETAILS | | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 4 | M/FO/SRV/2122/0049, DTD. 24-JULY-2021 | | | | |
| SAMPLING LOCATION | MAIN OFFICE AREA, MILUPARA | | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PMIO): 1X1 SO2: 30MLX1 NO. PVC BOTTI RUBBER BLADDER: 1X1 NO. | | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | |
|---|---|-------------------|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 4 CPCB Guidelines VolI | 80 | | | | |
| itrogen Dioxide (NO ₂) IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | | 80 | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | | |

| TEST REPORT | | | | | | | | |
|---------------------|---------------------------|--|--------------|--------------------------|--------------|------------|--|--|
| Date of Sampling | PM ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO₂ μg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m | | |
| 01.02.2022 | 60 | 26 | 10 | 22 | 0.5 | N.D. | | |
| 04.02.2022 | 64 | 22 | 14 | 26 | 0.4 | N.D. | | |
| 07.02.2022 | 52 | 28 | 10 | 22 | 0.2 | N.D. | | |
| 11.02.2022 | 44 | 20 | 18 | 28 | 0.8 | N.D. | | |
| 14.02.2022 | 48 | 24 | 12 | 20 | 0.2 | N.D. | | |
| 18.02.2022 | 42 | 26 | 16 | 21 | 0.6 | N.D. | | |
| 21.02.2022 | 48 | 30 | 10 | 22 | 0.9 | N.D. | | |
| 25.02.2022 | 44 | 22 | 16 | 28 | 0.5 | N.D. | | |

Terms & conditions

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AUTHORIZED SIGNATORY

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| Hame & Address Of the Costs | May . | REPORT NO | UES/TR/21-22/089 | /08940 | |
|--|--|-----------------------------|--|-----------------|--|
| TO, | | LAB REF NO | UES/21-22/AAQM/014643 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 02/03/2022 to 28 | /03/2022 | |
| | | DATE OF RECEIPT | 03/03/2022 to 29/03/2022 02/04/2022 | | |
| | | DATE OF REPORT | | | |
| | | DATE OF ANALYSIS | START: 04/03/2022 | END: 02/04/2022 | |
| | | SAMPLE DETAILS | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 6 DATE | M/PO/SRV/2122/0049, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | MAIN OFFICE AREA, MILUPAN | RA. | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REPERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PMIO): 1XI SO2: 30MLX1 NO. PVC BOTTI RUBBER BLADDER: 1X1 NO. | | | | |

| William Committee Committe | AAQM Standard for Ambient Air Quality Monito | | |
|--|--|-------------------|--|
| Parameter | Method Reference | NAAQM Standard | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | |
| Particulate Matter size less than 2.5 microns (PM2.s) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | |
| Mercury (Hg) | EPA Method IO-5 | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------|--|--------------------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m³ | PM _{2.5} μg/m ³ | SO ₂ µg/m ³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m³ |
| 02.03.2022 | 68 | 22 | 14 | 28 | 0.9 | N.D. |
| 07.03.2022 | 62 | 28 | 16 | 24 | 0.5 | N.D. |
| 11.03.2022 | 70 | 26 | 12 | 20 | 0.8 | N.D. |
| 14.03.2022 | 54 | 28 | 14 | 26 | 0.2 | N.D. |
| 18.03.2022 | 58 | 34 | 18 | 28 | 0.8 | N.D. |
| 21.03.2022 | 52 | 36 | 12 | 22 | 0.4 | N.D. |
| 25.03.2022 | 68 | 40 | 16 | 28 | 0.6 | N.D. |
| 28.03.2022 | 54 | 32 | 12 | 24 | 0.8 | N.D. |

Terms & conditions

* The most for explication, additions or as least discuss in forest-to-

Hert paragram will be seenbook for 15 stays after inner of seer report unless schoolselve agreed with successor.

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

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-End of the test report.....



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, MILUPARA U/G COAL MINE, VILLAGE - MILUPARA, BLOCK - TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF I | REPORT NO. LAB REF NO. DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT | | UES/TR/21-22/3511 UES/21-22/AAQM/6310-6317 01/10/2021 to 25/10/2021 02/10/2021 to 26/10/2021 01/11/2021 | | |
|---|--|----------------------|--|------------|---|--|--|
| | | DATE OF ANALYSIS STA | | START | ::03/10/2021 | END: 01/11/2021 | |
| HONITORING FOR | AMBIENT AIR QUALIT | | CUSTOMER REF | . мо. | | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | |
| SAMPLING LOCATION | STAFF QUARTAR, MAI | LUPARA | 1. | | | | |
| DURATION OF SAMPLING | 24 HOURS | DLLECTED BY LABORAT | | LABORATORY | ORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFI | CRORNICE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): IXI NO., FILTER PAPER (PM _{2.5}): IXI NO. SO ₂ : 30MLXI NO. PVC BOTTLE, NO ₂ : 30MLXI NO. PVC BOTTLE RUBBER BLADUER: IXI NO. | | | | | | |

| Parameter | Method Reference | NAAQM Standard |
|---|---|-------------------|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (PM _{2.3}) | CPCB Guidelines Vol1 | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 |
| Mercury (Hg) | EPA Method IO-5 | |

| TEST REPORT | | | | | | | |
|------------------|--|--|--------------------------|--------------------------|--------------|-------------|--|
| Date of Sampling | PM ₁₀ μg /m ³ | PM _{2.5} μg/m ³ | SO ₂ μg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | |
| 01.10.2021 | 44 | 28 | 16 | 28 | 0.6 | N.D. | |
| 04.10.2021 | 52 | 24 | 12 | 22 | 0.2 | N.D. | |
| 08.10.2021 | 48 | 26 | 14 | 28 | 0.9 | N.D. | |
| 11.10.2021 | 38 | 22 | 18 | 30 | 0.8 | N.D. | |
| 14.10.2021 | 40 | 28 | 12 | 26 | 0.5 | N.D. | |
| 18,10,2021 | 48 | 26 | 16 | 24 | 0.8 | N.D. | |
| 22.10.2021 | 46 | 24 | 10 | 18 | 0.5 | N.D. | |
| 25.10.2021 | 42 | 28 | 12 | 26 | 0.7 | N.D. | |

Terms & conditions

The report for publication, unbitration or us legal dispete is fashkalan.
Test sample will be relatived for 13 days after issue of test report union
This is far information us the party has asked for above less(s) and

For ULTIMATE ENVIROLYTICAL SOLUTIONS 01119 21 AUTHORIZED SIGNATORY REVIEWED BY -End of the test report-



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| Name & Address Of The Easter TO. | may", | REPORT NO | UES/TR/21-22/04201 UES/21-22/AAQM/07531-07538 | | |
|---|--|-----------------------------|--|--|--|
| | | LAB REF NO | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE, VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 02/11/2021 to 26 | 5/11/2021 | |
| | | DATE OF RECEIPT | 03/11/2021 to 27 | //11/2021 | |
| | | DATE OF REPORT | 01/12/2021 | | |
| | | DATE OF ANALYSIS | START: 03/11/2021 | END: 28/11/2021 | |
| | | SAMPLE DETAILS | | The state of the s | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 4 DATE | M/PO/SRV/2122/0049, DTD: 24-JULY-2021 | | |
| SAMPLING LOCATION | STAFF QUARTER, MILUPARA | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHIM | IST | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | 1.000.000000000000000000000000000000000 | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 SO ₂ : 30HLX1 NO. PVC BOTT. RUBBER BLADDER: 1X1 NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|---|---|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM _{IS}) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (PM2.3) | CPCBGuidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 &CPCBGuidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ |
| 02.11.2021 | 46 | 30 | 18 | 26 | 0.7 | N.D. |
| 05.11.2021 | 54 | 26 | 14 | 24 | 0.3 | N.D. |
| 09.11.2021 | 50 | 28 | 16 | 26 | 0.8 | N.D. |
| 12.11.2021 | 40 | 24 | 20 | 28 | 0.6 | N.D. |
| 16.11.2021 | 42 | 30 | 14 | 24 | 0.4 | N.D. |
| 19.11.2021 | 50 | 28 | 18 | 26 | 0.9 | N.D. |
| 23.11.2021 | 48 | 26 | 12 | 20 | 0.6 | N.D. |
| 26.11.2021 | 44 | 30 | 14 | 28 | 0.8 | N.D. |

Terms & conditions

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY



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| Name 2 Address Of The Event. | Magazin . | REPORT NO | UES/TR/21-22/04941 UES/21-22/AAQM/08797-08804 | | |
|--|---|--|--|--|--|
| UT 17-18-0 | TRIES LIMITED CARE | LAB REF NO | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 03/12/2021 to 28 | | |
| | | DATE OF RECEIPT | 04/12/2021 to 29 | The state of the s | |
| | | DATE OF REPORT | 01/01/2022 | | |
| | | DATE OF ANALYSIS | START: 04/12/2021 | KND: 31/12/2021 | |
| | | SAMPLE DETAILS | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 6 | M/PO/SRV/2122/0049, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | STAFF QUARTER, MILUPARA | | 7701 24 0022-20 | 62 | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEM | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | 101 | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM:s): IX1 50; 30MLXI NO. PVC BOTTI RUBBER BLADDER: IX1 NO. | NO., FILTER PAPER (PM.: E, NO: 30MLXI NO. PVC | J: IXI NO. BOTTLE | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|---|--|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | | | | |
| Particulate Matter size less than 2.5 microns (FM _{Z,b}) | CPCB Guidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 90 | | | |
| Nitrogen Dioxide (NO ₂) Carbon Monoxide (CO)* | IS 5182 (Part 6): 2006 & CPCB Guidelines Vol -T | 80 | | | |
| Mercury (Hg) | IS 5182(Part 10):1999, RA 2003 EPA Method IO-5 | 4.0 | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------|---------------|-------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | 50 ₂ μg/m ³ | NO₂ µg/m³ | CO* mg/m³ | Hg |
| 03.12.2021 | 48 | 32 | 20 | 28 | 0.8 | ng/m³ |
| 07.12.2021 | 56 | 28 | 16 | 26 | 0.4 | N.D. |
| 10.12.2021 | 52 | 30 | 20 | 28 | 200 (100 pp.) | N.D. |
| 14.12.2021 | 42 | 26 | 22 | | 0.9 | N.D. |
| 17.12.2021 | 44 | 32 | | 30 | 0.8 | N.D. |
| 21.12.2021 | | | 16 | 26 | 0.6 | N.D. |
| | 52 | 30 | 20 | 28 | 0.8 | N.D. |
| 24.12.2021 | 50 | 28 | 14 | 22 | 0.9 | N.D. |
| 20.12.2021 | 46 | 32 | 16 | 30 | 0.6 | N.D. |

Terms & conditions

The report for authiostics, arbitration or as layer dispute in horbidalon

Test semple will be retained for 15 days after rease of test report agains afterware against with customes.

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AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Home & Advisor Of the Control | war | REPORT NO | UES/TR/21-22/06025 UES/21-22/AAQM/010401-010408 | | |
|---|--|---------------------|--|-----------------|--|
| то, | | LAB REF NO | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE, VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 04/01/2022 to 28 | 3/01/2022 | |
| | | DATE OF RECEIPT | 05/01/2022 to 29 | /01/2022 | |
| | | DATE OF REPORT | 02/02/2022 | | |
| | | DATE OF ANALYSIS | START: 05/01/2022 | END: 01/02/2022 | |
| | | SAMPLE DETAILS | BBFIRE | | |
| MONIFORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 4 | M/PO/SRV/2122/0049, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | STAFF QUARTER, MILUPARA | -10 | | | |
| DURATION OF SAMPLING | 24 NOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): IXI SO ₂ : JOHLXI NO. PVC BOTT; RUBBER BLADDER: IXI NO. | | | I | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|---|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.8}) | CPCB Guidelines VolI | 60 | | |
| Sulphur Dioxide (SO2) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | ** | | |

| TEST REPORT | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------|--------------|-------------|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | 5O ₂ μg/m ³ | NO₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | |
| 04.01.2022 | 56 | 20 | 10 | 22 | 0.6 | N.D. | |
| 08.01.2022 | 62 | 26 | 12 | 24 | 0.4 | N.D. | |
| 11.01.2022 | 58 | 20 | 16 | 20 | 0.7 | N.D. | |
| 15.01.2022 | 50 | 28 | 10 | 26 | 0.8 | N.D. | |
| 10.01.2022 | 54 | 24 | 14 | 22 | 0.4 | N.D. | |
| 22.01.2022 | 68 | 26 | 12 | 24 | 0.8 | N.D. | |
| 25.01.2022 | 56 | 22 | 12 | 28 | 0.6 | N.D. | |
| 28.01.2022 | 48 | 24 | 16 | 20 | 0.7 | N.D. | |

Forms & conclitions

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Tell autists will be retained for 16 days after lesses of feet or

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY



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| Name & Address Of The Cantar | mar | REPORT NO | UES/TR/21-22/07901 UES/21-22/AAQM/013034-013035 | | |
|--|---|-----------------------------|--|-----------------|--|
| TO, | | LAB REF NO | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 01/02/2022 to 25 | /02/2022 | |
| | | DATE OF RECEIPT | 02/02/2022 to 26 | 6/02/2022 | |
| | | DATE OF REPORT | 01/03/2022 | | |
| | | DATE OF AMALYSIS | START: 03/02/2022 | END: 01/03/2022 | |
| | | SAMPLE DETAILS | Company of the | | |
| HONITORING FOR . | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 6 DATE | M/PO/SRV/2122/0049, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | STAFF QUARTER, MILUPARA | | 7. | lie- | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LECTED BY LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM:s): 1X1 SO: 30MLX1 NO. PVC BOTT: RUBBER BLADUER: 1X1 NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|--|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines Vol1 | 80 | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | 122 | | |

| TEST REPORT | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | |
| 01.02.2022 | 52 | 22 | 16 | 26 | 0.7 | N.D. | |
| 04.02.2022 | 68 | 25 | 12 | 26 | 0.5 | N.D. | |
| 07.02.2022 | 52 | 20 | 10 | 22 | 0.8 | N.D. | |
| 11.02.2022 | 46 | 24 | 18 | 28 | 0.6 | N.D. | |
| 14,02.2022 | 58 | 28 | 14 | 20 | 0.5 | N.D. | |
| 18.02.2022 | 60 | 20 | 18 | 26 | 0.9 | N.D. | |
| 21.02.2022 | 58 | 26 | 10 | 20 | 0.7 | N.D. | |
| 25.02.2022 | 62 | 28 | 16 | 18 | 0.5 | N.D. | |

Terms & conditions

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The report for publication, arbitration or as logal dispute in hubidates.

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End of the test report.....

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Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Cyston | DO. | REPORT NO | UES/TR/21-22/08941 UES/21-22/AAQM/014644 | | |
|---|---|-----------------------------|---|-----------------|--|
| то, | | LAB REF NO | | | |
| | RIES LIMITED, GARE | DATE OF SAMPLING | 02/03/2022 to 28 | 7/03/2022 | |
| PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF RECEIPT | 03/03/2022 to 29 | /03/2022 | |
| | | DATE OF REPORT | 02/04/2022 | | |
| | | DATE OF ANALYSIS | START: 04/03/2022 | END: 02/04/2022 | |
| | | SAMPLE DETAILS | THE COURT OF | Name and the | |
| HONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 4 DATE | M/PO/SRY/2122/0049, DTD: 24-JULY-2021 | | |
| SAMPLING LOCATION | STAFF QUARTER, MILUPARA | 0.0000 | | 511 | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): IXI SO ₂ : 30MLXI NO. PVC BOTT RUBBER BLADDER: IXI NO. | | | | |

| Parameter | Method Reference | NAAQM Standard | |
|---|---|-------------------|--|
| Particulate Matter size less than 10 microns (PN ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines Vol1 | 100 | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6); 2006 & CPCB Guidelines VolI | 80 | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | |
| Mercury (Hg) | EPA Method IO-5 | | |

| TEST REPORT | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} µg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | |
| 02.03.2022 | 62 | 30 | 16 | 28 | 0.8 | N.D. | |
| 07.03.2022 | 78 | 34 | 10 | 26 | 0.6 | N.D. | |
| 11.03.2022 | 62 | 28 | 12 | 25 | 0.2 | N.D. | |
| 14.03.2022 | 56 | 20 | 14 | 22 | 0.4 | N.D. | |
| 18.03.2022 | 78 | 28 | 18 | 26 | 0.8 | N.D. | |
| 21.03.2022 | . 70 | 34 | 10 | 28 | 0.2 | N.D. | |
| 25.03.2022 | .68 | 28 | 12 | 22 | 0.9 | N.D. | |
| 28.03.2022 | 72 | 38 | 18 | 20 | 0.7 | N.D. | |

Terms & conditions

The report for publication, orbitration or as legal dispute to devictions.

Test sample will be establed for 15 days after tosse of test report orders otherwise agriced with case

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AUTHORIZED SIGNATORY

02/04/22

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02/04/2



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| Name & Authors Of The Contimer | | REPORT NO. | | UES/TR/21-22/3512 | | |
|---|--------------------------------|---|--------|--------------------------|--|--|
| то, | | LAB REF NO. | | UES/21-22/AAQM/6318-6325 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, MILUPARA U/G COAL MINE, VILLAGE - MILUPARA, BLOCK - TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMP | LING | 01/10/2021 to 2 | 25/10/2021 | |
| | | DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | 02/10/2021 to 26/10/2021 | | |
| | | | | 01/11/2021 | | |
| | | | | START: 03/10/2021 | END:01/11/2021 | |
| | 1211111111111 | SAMPLE DETAIL | S | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | | CUSTOM | R REF. NO. 6 | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | |
| SAMPLING LOCATION | HIL COLONY, KONDE | T. | | | | |
| DURATION OF SAMPLING | 24 HOURS | NURS SAMPLE COLLECTED BY LABORATOS | | | CHEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REF | ERENCE | | | | |
| SAMPLE QUANTITY/PACKING | BO2: 30MLX2 NO. P | FILTER PAPER (PM;): IXI NO., FILTER PAPER (FM; x): IXI NO. SO;: 30MLX1 NO. PVC BOTTLE, NO;: 30MLX1 NO. PVC BOTTLE RUBBER BLADDER: 1X1 NO. | | | | |

| Parameter | Parameter Method Reference | | | |
|---|--|-----|--|--|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | CPCB Guidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | | | |
|---------------------|--|--|--------------------------|--------------------------|--------------|-------------|--|--|
| Date of Sampling | PM ₁₀ μg /m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | |
| 01.10.2021 | 50 | 25 | 18 | 20 | 0.9 | N.D. | | |
| 04.10.2021 | 58 | 32 | 10 | 24 | 0.6 | N.D. | | |
| 08.10.2021 | 52 | 28 | 14 | 26 | 0.2 | N.D. | | |
| 11.10.2021 | 44 | 36 | 10 | 28 | 0.8 | N.D. | | |
| 14.10.2021 | 52 | 34 | 16 | 20 | 0.9 | N.D. | | |
| 18.10.2021 | 58 | 20 | 12 | 26 | 1.0 | N.D. | | |
| 22.10.2021 | 64 | 22 | 10 | 22 | 0.8 | N.D. | | |
| 25.10.2021 | 58 | 38 | 14 | 29 | 0.5 | N.D. | | |

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- The report for publication, arbitration or as legal drupute is forbiddus.
- Test sample will be retained for 15 days after issue of test region unless etillewise agreed with customer.

+ This is for information as the party has asked for above legiful and

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AUTHORIZED SIGNATORY

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| TO. | **** | REPORT NO | UES/TR/21-22/042 | 02 |
|---|--|--|--|-----------------|
| CO TO | | LAB REF NO | UES/21-22/AAQM/07539-07546 | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, MILUPARA U/G COAL MINE, VILLAGE - MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 02/11/2021 to 26 | /11/2021 |
| | | DATE OF RECEIPT | 03/11/2021 to 27 | /11/2021 |
| | | DATE OF REPORT | 01/12/2021 | |
| | | DATE OF ANALYSIS | START: 03/11/2021 | END: 28/11/2021 |
| | | SAMPLE DETAILS | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. | M/PO/SHV/2122/0049 DTD. 24-JULY-2021 | XI |
| SAMPLING LOCATION | HIL COLONY, KONDERL | 1.5.500000 | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | 1.00 | - | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): 1XI SO;: 30MLX1 NO. PVC BOTT: RUMBER BLADDER: 1XI NO. | NO., FILTER PAPER (PM LE, NO ₂ : 30MLX1 NO. PV | M _{L.I}): 1X1 NO. PC BOTTLE | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|---|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (FM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | CPCBGuidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO ₃) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|-----|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ μg/m³ | NO ₂ μg/m³ | CO* | Hg ng/m³ |
| 02.11.2021 | 52 | 26 | 20 | 22 | 0.8 | N.D. |
| 05.11.2021 | 60 | 34 | 12 | 26 | 0.5 | N.D. |
| 09.11.2021 | 54 | 30 | 16 | 28 | 0.4 | N.D. |
| 12.11.2021 | 46 | 38 | 12 | 30 | 0.9 | N.D. |
| 16.11.2021 | 54 | 32 | 18 | 22 | 0.8 | N.D. |
| 19.11.2021 | 60 | 24 | 14 | 28 | 1.1 | N.D. |
| 23.11.2021 | 66 | 26 | 12 | 24 | 0.6 | N.D. |
| 26.11.2021 | 60 | 36 | 16 | 30 | 0.4 | N.D. |

Terms & conditions

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AUTHORIZED SIGNATORY



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| Name & Address Of The Custor | TVAIN . | REPORT NO | UES/TR/21-22/049 | 42 | |
|--|---|-----------------------------|---|-----------------|--|
| TO, | | LAB REF NO | UES/21-22/AAQM/08805-08812 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 03/12/2021 to 28/12/2021 | | |
| | | DATE OF RECEIPT | 04/12/2021 to 29 | /12/2021 | |
| | | DATE OF REPORT | 01/01/2022 | | |
| | | DATE OF ANALYSIS | START: 04/12/2021 | END: 31/12/2021 | |
| | | SAMPLE DETAILS | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 6 DATE | M/PO/SRV/2122/0049 DTD. 24-JULY-2021 | + | |
| SAMPLING LOCATION | HIL COLONY, MONDREL | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | Was recommended to the | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): IXI SO:: 3GMLX1 NO. PVC BOTT RUBBER BLADDER: IXI NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|---|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | CPCBGuidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 g CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6); 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | 50 ₂ μg/m ³ | NO ₂ μg/m ³ | CO* mg/m³ | Hg ng/m³ |
| 03.12.2021 | 54 | 28 | 22 | 24 | 0.9 | N.D. |
| 07.12.2021 | 62 | 36 | 14 | 28 | 0.6 | N.D. |
| 10.12.2021 | 56 | 32 | 18 | 30 | 0.5 | N.D. |
| 14.12.2021 | 48 | 36 | 14 | 32 | 0.8 | N.D. |
| 17.12.2021 | 56 | 34 | 20 | 24 | 0.6 | N.D. |
| 21.12.2021 | 62 | 26 | 16 | 30 | 1.0 | N.D. |
| 24,12,2021 | 68 | 28 | 14 | 26 | 0.8 | N.D. |
| 28.12.2021 | 62 | 38 | 18 | 32 | 0.6 | N.D. |

Terms & conditions

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Test rempts will be relatived by 15 days after some of test separt and no gatherine at the arm continues.

1 10

REVIEWED BY AUTHORIZE

End of the test report.....

AN ISO: 9001:2015 / ISO: 14001:2015 / ISO 45001:2018 CERTIFIED LABORATORY

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AUTHORIZED SIGNATORY

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| TO. | WW/ | REPORT NO | UES/TR/21-22/060 | 26 | |
|---|---|--|--|-----------------|--|
| | DIEC LIMITED CARE | LAB REF NO | UES/21-22/AAQM/010409-010416 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE, VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 04/01/2022 to 28/01/2022 05/01/2022 to 29/01/2022 02/02/2022 | | |
| | | DATE OF RECEIPT | | | |
| | | DATE OF REPORT | | | |
| | | DATE OF ANALYSIS | START: 05/01/2022 | END: 01/02/2022 | |
| and the Set Children | | SAMPLE DETAILS | THE RESERVE | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. | M/PO/SRV/2122/0049 DTD, 24-JULY-2021 | , | |
| SAMPLING LOCATION | HIL COLONY, KONDREL | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | 400 | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM:s): IXI SO: 30MLX1 NO. PVC BOTT: RUBBER BLADDER: IXI NO. | NO., FILTER PAPER (DR UE, NO: 30HLK1 NO. PV | G.s): 1X1 NO. VC BOTTLE | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|---|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Farticulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCB Guidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Morcury (Hg) | EPA Method IO-5 | 244 | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------|--|--------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO ₂ μg/m³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m³ |
| 04.01.2022 | 58 | 26 | 10 | 28 | 0.7 | N.D. |
| 08.01.2022 | 68 | 20 | 16 | 22 | 0.5 | N.D. |
| 11.01.2022 | 62 | 28 | 12 | 34 | 0.9 | N.D. |
| 15.01.2022 | 54 | 26 | 18 | 22 | 0.4 | N.D. |
| 18.01.2022 | 68 | 22 | 14 | 24 | 0.8 | N.D. |
| 22.01.2022 | 60 | 28 | 12 | 22 | 1.2 | N.D. |
| 25.01.2022 | 54 | 24 | 12 | 28 | 0.9 | N.D. |
| 28.01.2022 | 68 | 20 | 11 | 22 | 0.5 | N.D. |

-End of the test report.....

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| Hame & Address Of The Control | WWY . | REPORT NO | UES/TR/21-22/079 | 02 |
|--|--|--|---|-----------------|
| то, | | LAB REF NO | UES/21-22/AAQM/013036-01304 | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 01/02/2022 to 25 | /02/2022 |
| | | DATE OF RECEIPT | 02/02/2022 to 26 | /02/2022 |
| | | DATE OF REPORT | 01/03/2022 | |
| | | DATE OF ANALYSIS | START: 03/02/2022 | END: 01/03/2022 |
| | | SAMPLE DETAILS | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. | M/PO/SRV/2122/0049 DTD. 24-JULY-2021 | |
| SAMPLING LOCATION | HIL COLONY, KONDKEL | Physics Control of the Control of th | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | |
| SAMPLE QUANTITY/PACKING . | FILTER PAPER (PM ₁₀): 1X1 SO ₂ : 30MLX1 NO. PVC BOTT. RUBBER BLADDER: 1X1 NO. | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|---|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23); 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | IS 5182 (Part 24): 2019 CPCB Guidelines Vol.~I | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182 (Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | (m.m. | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ |
| 01.02.2022 | 68 | 24 | 16 | 20 | 0.9 | N.D. |
| 04.02.2022 | 62 | 28 | 10 | 28 | 0.4 | N.D. |
| 07.02.2022 | 58 | 24 | 18 | 30 | 0.6 | N.D. |
| 11.02.2022 | 56 | 22 | 14 | 28 | 0.2 | N.D. |
| 14.02.2022 | 70 | 26 | 12 | 20 | 0.8 | N.D. |
| 18.02.2022 | 62 | 22 | 18 | 22 | 0.6 | N.D. |
| 21.02.2022 | 58 | 28 | 16 | 26 | 0.2 | N.D. |
| 25.02.2022 | 50 | 18 | 12 | 24 | 0.8 | N.D. |

Terms & conditions

The report for publication, interested on or an ingel dispose of fractionies.

First sample will be reliabled for 15 days after basis of test report anteres offerigant agrees, with equation

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| Name & Address Of The Custor TO. | 00.007 | REPORT NO | UES/TR/21-22/089 | 08942 | |
|--|---|-----------------------------------|--|-----------------|--|
| | | LAB REF NO UES/21-22/AAQM/0 | | 014645 | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 02/03/2022 to 28 | /03/2022 | |
| | | DATE OF RECEIPT | 03/03/2022 to 29 | /03/2022 | |
| | | DATE OF REPORT | 02/04/2022 | | |
| | | DATE OF ANALYSIS | START: 04/03/2022 | END: 02/04/2022 | |
| | | SAMPLE DETAILS | NAME OF TAXABLE PARTY. | ALC: UNITED BY | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 6 DATE | M/PO/SRV/2122/0049, DTD, 24-JULY-2021 | | |
| SAMPLING LOCATION | HIL COLONY, KONDKEL | Various and and an artist and are | 2001 20 0000 2002 | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | - Francisco | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): 1XI SO: 30MLX1 NO. PVC BOTTI RUBBER BLADDER; 1X1 NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|--|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23); 2006 & CPCB Guidelines VolI | | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO2) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | - | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m ³ | CO* mg/m³ | Hg ng/m³ |
| 02.03.2022 | 76 | 28 | 14 | 22 | 0.9 | N.D. |
| 07.03.2022 | 68 | 26 | 18 | 26 | 0.4 | N.D. |
| 11.03.2022 | 48 | 22 | 10 | 32 | 0.8 | N.D. |
| 14.03.2022 | 58 | 28 | 12 | 28 | 0.4 | N.D. |
| 18.03.2022 | 72 | 24 | 18 | 26 | 0.6 | N.D. |
| 21.03.2022 | 68 | 26 | 16 | 20 | 0.8 | N.D. |
| 25.03.2022 | 70 | 24 | 12 | 28 | 0.5 | N.D. |
| 28.03.2022 | 68 | 26 | 14 | 20 | 0.9 | N.D. |

Terms & conditions

The report for publication, arbitration or an liquid discuss to dissipation.

Test sample will be occurred for 11 days after locus of cest report unites otherwise appeal with communities to be before one for gainst the above needle colo

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-----End of the test report.....



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| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, MILUPARA U/G COAL MINE, VILLAGE - MILUPARA, BLOCK - TAMNAR, DISTT RAIGARH (C.G.) 496107 | | REPORT NO. LAB REF NO. LATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS SAMPLE DETAILS | | UES/TR/21-22/3513 UES/21-22/AAQM/6326-6334 01/10/2021 to 25/10/2021 02/10/2021 to 26/10/2021 01/11/2021 START: 03/10/2021 END: 01/11/2 | | |
|---|--|--|---------------------|---|--------------------|--------------|
| | | | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY | MONITORING | CUSTOMER REF. | NO. S DATE | | 24-JULY-2021 |
| SAMPLING LOCATION | ETF AREA, KONDEL | | | | 11 | |
| DURATION OF SAMPLING | DURATION OF SAMPLING 24 HOURS | | SAMPLE COLLECTED BY | | LABORATORY CHEMIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFER | ENCE | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (FM ₂₀): 1X1 NO., FILTER PAPER (FM _{2.3}): 1X1 NO. SO ₂ : 30MLX1 NO. PVC BOTTLE, NO ₂ : 30MLX1 NO. PVC BOTTLE RUBBER BLADDER: 1X1 NO. | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|--|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM2.3) | CPCB Guidelines VolI | 60 | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182 (Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | | |
|---------------------|----------------------------|--|--------------------------|--------------------------------------|--------------|-------------|--|
| Date of Sampling | РМ ₁₀ µg /m³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ μg/m ³ | CO* mg/m³ | Hg ng/m³ | |
| 01.10.2021 | 54 | 28 | 12 | 26 | 0.9 | N.D. | |
| 04.10.2021 | 42 | 22 | 10 | 28 | 0.7 | N.D. | |
| 08.10.2021 | 52 | 34 | 16 | 22 | 0.6 | N.D. | |
| 11.10.2021 | 46 | 28 | 08 | 20 | 0.2 | N.D. | |
| 14,10.2021 | 50 | 32 | 12 | 28 | 0.8 | N.D. | |
| 18.10.2021 | 48 | 24 | 10 | 20 | 0.6 | N.D. | |
| 22.10,2021 | 54 | 28 | 16 | 16 | 0.9 | N.D. | |
| 25.10.2021 | 68 | 30 | 14 | 22 | 0.5 | N.D. | |

Terms & conditions

- The report for publication, arbitration or as legal dispute is forbidide

Yant sample will be retained for 15 stays after time of real control of the control with customs

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-End of the test report-----

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| Norma & Address Of The Conto | muse. | REPORT NO | UES/TR/21-22/04203 | | | |
|---|-----------------------------------|--|--|-----------------|--|--|
| TO, | | LAB REF NO | UES/21-22/AAQM/0 | 7547-07554 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE, VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 02/11/2021 to 20 | 5/11/2021 | | |
| | | DATE OF RECEIPT | 03/11/2021 to 27/11/2021 | | | |
| | | DATE OF REPORT | 01/12/2021 | | | |
| | | DATE OF ANALYSIS | START: 03/11/2021 | END: 28/11/2021 | | |
| | | SAMPLE DETAILS | | | | |
| HONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. 6 DATE | M/PO/SRV/2122/0049, DTD, 24-JULY-2021 | | | |
| SAMPLING LOCATION | ETP AREA, KONDREL | 11. | | | | |
| DURATION OF SAMPLING | 24 NOURS | SAMPLE COLLECTED BY | OLLECTED BY LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | ~ | | |
| SAMPLE QUANTITY/PACKING | | FILTER PAPER (PM;s): 1XI NO., FILTER PAPER (PM;s): 1X1 NO. SO;: 3GMLXI NO. PVC BOTTLE, NO;: 3GMLXI NO. PVC BOTTLE RUBBINS BLADGES: 1X1 NO. | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | |
|---|---|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 50 | | |
| Sulphur Dioxide (SO ₃) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6); 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO) * | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ |
| 02.11.2021 | 56 | 30 | 14 | 28 | 1.0 | N.D. |
| 05.11.2021 | 4.4 | 24 | 12 | 30 | 0.8 | N.D. |
| 09.11.2021 | 54 | 36 | 18 | 24 | 0.8 | N.D. |
| 12.11.2021 | 48 | 30 | 10 | 22 | 0.4 | N.D. |
| 16.11.2021 | 52 | 34 | 14 | 30 | 0.9 | N.D. |
| 19.11.2021 | 50 | 26 | 12 | 22 | 0.8 | N.D. |
| 23.11.2021 | 56 | 30 | 18 | 18 | 1.0 | N.D. |
| 26.11.2021 | 70 | 32 | 16 | 24 | 0.6 | N.D. |

Terms & conditions
The report for publication

The report for publication, eristiation or an regal elegate in technique.

Foot purpose with the relativest for 15 days after dates of feet report values with example leavest with a continue of the publication.

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| TO. | READ . | REPORT NO | UES/TR/21-22/04943 UES/21-22/AAQM/08813-08820 | | | |
|--|---|--|--|-----------------|--|--|
| | PIES LIMITED CARE | LAB REF NO | | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 03/12/2021 to 28 | 8/12/2021 | | |
| | | DATE OF RECEIPT | 04/12/2021 to 25 | 9/12/2021 | | |
| | | DATE OF REPORT | 01/01/2022 | | | |
| | | DATE OF ANALYSIS | START: 04/12/2021 | END: 31/12/2021 | | |
| | | SAMPLE DETAILS | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. & | M/PO/SRV/2122/0049, DTD: 24-JULY-2021 | | | |
| SAMPLING LOCATION | ETP AREA, KONDKEL | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD RESERVICE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PMLs): IXI SO: 30MLX1 NO. PVC BOTTI RUBBER BLADDER: IXI NO. | FILTER PAPER (FM:s): IXI NO., FILTER PAPER (FM:s): IXI NO. SO:: 30MLXI NO. PVC BOTTLE, NO:: 30MLXI NO. PVC BOTTLE | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|---|---|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | Standard | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCB Guidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₃) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* Mercury (Hg) | IS 5182(Part 10):1999, RA 2003 EPA Method IO-5 | 4.0 | | | |

| TEST REPORT | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------|--------------|-------------------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m ³ |
| 03.12.2021 | 58 | 32 | 16 | 30 | 1.1 | N.D. |
| 07.12.2021 | 46 | 26 | 14 | 32 | 0.9 | N.D. |
| 10.12.2021 | 56 | 38 | 20 | 26 | 0.6 | |
| 14.12.2021 | 50 | 32 | 12 | 24 | 0.0 | N.D. |
| 17.12.2021 | 54 | 36 | 16 | 32 | 0.8 | N.D. |
| 21.12.2021 | 52 | 28 | 14 | 24 | | N.D. |
| 24.12.2021 | 58 | 32 | 20 | The second second | 0.9 | N.D. |
| 28.12.2021 | 72 | | | 20 | 1.1 | N.D. |
| emarks: * Duratio | | 34 | 18 | 26 | 0.8 | N.D. |

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| Non- A. A. Coresa Of For Coates | nar - | REPORT NO | UES/TR/21-22/06027 UES/21-22/AAQM/010417-010424 | | | |
|---|--|--|--|-------------------|--|--|
| TO, | | LAB REF NO | | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE, VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | 04/01/2022 to 28/01/2022 | | | |
| | | DATE OF RECEIPT | 05/01/2022 to 29/01/2022 | | | |
| | | DATE OF REPORT | 02/02/2022 | | | |
| | | DATE OF ANALYSIS | END: 01/02/2022 | | | |
| F F F I I GARE | | SAMPLE DETAILS | | The second second | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. & | M/PO/SRV/2122/0049, DTD. 24-JULY-2021 | | | |
| SAMPLING LOCATION | ETP AREA, KONDKEL | | | | | |
| DUNATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | |
| SAMULING PROCEDURE | AS PER METHOD REPERENCE | - | | | | |
| SAMPLE CUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1XI SO ₂ : 30HLX1 NO. PVC BOTT. RUBBER BLADDER: 1XI NO. | NO., FILTER PAPER (PM. LE, NO: 30MLXI NO. PVC |): 1X1 NO. BOTTLE | | | |

| A. A. C. S. P. L. C. S. | AAQM Standard for Ambient Air Quality M | |
|---|--|-------------------|
| Parameter | Method Reference | NAAQM Standard |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulato Matter size less than 2.5 microns (PM2.s) | CPCB Guidelines VolI | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Sitrogen Diaxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* | IS 5182 (Part 10):1999, RA 2003 | 4.0 |
| Muccury (Hg) | EPA Method IO-5 | |

| TEST REPORT | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------|--------------|-------------|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | 50 ₂ μg/m ³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | |
| 04.01.2022 | 52 | 24 | 10 | 28 | 0.8 | N.D. | | |
| 02.01.2022 | 40 | 28 | 08 | 22 | 0.6 | N.D. | | |
| 11.01.2022 | 60 | 32 | 12 | 24 | 0.2 | N.D. | | |
| 15.01.2022 | 56 | 38 | 10 | 20 | 0.8 | N.D. | | |
| 18.01.2022 | 58 | 30 | 08 | 18 | 0.5 | N.D. | | |
| 22.01.2022 | 50 | 24 | .06 | 16 | 0.9 | N.D. | | |
| 25.01.2022 | 64 | 30 | 10 | 18 | 0.7 | N.D. | | |
| 28.01.2022 | 68 | 32 | 12 | 22 | 0.5 | N.D. | | |

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Trokur 02/02/2022

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| TO. | mer | REPORT NO | UES/TR/21-22/07 | TR/21-22/07903 | | |
|--|--|------------------------------------|--|---|--|--|
| | | LAB REF NO | UES/21-22/AAQM/(| 013044-013051 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING 01/02/2022 to 25/ | | /02/2022 | | |
| | | DATE OF RECEIPT | 70/ 70/ 0022 CO 20/ 02/ 2022 | | | |
| | | DATE OF REPORT | | | | |
| | | DATE OF ANALYSIS | START: 03/02/2022 END: 01/03/2 | | | |
| | | SAMPLE DETAILS | | 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. & | M/PO/SRV/2122/0049, DTD. 24-JULY-2021 | | | |
| SAMPLING LOCATION | ETP AREA, KONDKEL | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X1 SO ₂ : 30MLX1 NO. FVC BOTTI RUBBER BLADDER: 1X1 NO. | | | | | |

| Parameter | Method Reference | NAAQM Standard | |
|---|--|-------------------|--|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 . | |
| Particulate Matter size less than 2.5 microns (PM2.5) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | |
| Sulphur Dioxide (SO ₃) | r Dioxide (SO ₂) IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | |
| Mercury (Hg) | EPA Method IO-5 | 311 | |

| TEST REPORT | | | | | | | | |
|---------------------|---------------------------------------|--|--------------|--------------|--------------|-------------|--|--|
| Date of Sampling | PM ₁₀ µg/m ³ | PM _{2.5} μg/m ³ | SO₂ μg/m³ | NO₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | |
| 01.02.2022 | 58 | 22 | 16 | 24 | 0.9 | N.D. | | |
| 04.02.2022 | 48 | 26 | 08 | 28 | 0.5 | N.D. | | |
| 07.02.2022 | 70 | 36 | 18 | 22 | 0.8 | N.D. | | |
| 11.02.2022 | 64 | 30 | 08 | 26 | 0.6 | N.D. | | |
| 14.02.2022 | 52 | 32 | 12 | 12 | 0.4 | N.D. | | |
| 18.02.2022 | 68 | 28 | 08 | 18 | 0.8 | N.D. | | |
| 21.02.2022 | 60 | 38 | 16 | 20 | 0.6 | N.D. | | |
| 25.02.2022 | 72 | 42 | 10 | 28 | 0.8 | N.D. | | |

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| Name & Address Of The Castes | (op/ | REPORT NO | UES/TR/21-22/089 | 21-22/08943 | | |
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| то, | | LAB REF NO | UES/21-22/AAQM/014646 | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/5, MILUPARA U/G COAL MINE,VILLAGE – MILUPARA, BLOCK-TAMNAR, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | TE OF RECEIFT 03/03/2022 to 29/03/2022 | | | |
| | | DATE OF RECEIPT | | | | |
| | | DATE OF REPORT | | | | |
| | | DATE OF ANALYSIS | START: 04/03/2022 | END: 02/04/2022 | | |
| | | SAMPLE DETAILS | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | CUSTOMER REF. NO. & | M/PO/SRV/2122/0049, DTD. 24-JULY-2021 | | | |
| SAMPLING LOCATION | ETP AREA, KONDKEL | | Marian | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | | |
| SAMPLE QUANTITY/PACKING | | FILTER PAPER (FM ₁₀): 1X1 NO., FILTER PAPER (FM ₁₀): 1X1 NO. SO ₂ : 30MLXI NO. FVC BOTTLE, NO ₂ : 30MLXI NO. FVC BOTTLE WIRESER READDRES. 1X1 NO. | | | | |

| Parameter | Method Reference | NAAQM Standard | |
|---|---|-------------------|--|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | |
| Particulate Matter size less than 2.5 microns (PM2,s) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | |
| Sulphur Dioxide (80 ₂) | IS 5182 (Part 2): 2001, RA 2006 6 CPCB Guidelines VolI | 80 | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 60 | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | |
| Mercury (Hg) | EPA Method IO-5 | | |

| TEST REPORT | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------|--------------|------------|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} µg/m ³ | SO ₂ µg/m ³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m | | |
| 02.03.2022 | 52 | 28 | 12 | 24 | 0.6 | N.D. | | |
| 07.03.2022 | 68 | 22 | 10 | 22 | 0.9 | N.D. | | |
| 11.03.2022 | 86 | 36 | 06 | 26 | 0.5 | N.D. | | |
| 14.03.2022 | 78 | 32 | 08 | 28 | 0.8 | N.D. | | |
| 18.03.2022 | 60 | 38 | 16 | 20 | 0.6 | N.D. | | |
| 21.03.2022 | 58 | 35 | 14 | 28 | 0.7 | N.D. | | |
| 25.03.2022 | 82 | 42 | 10 | 22 | 0.5 | N.D. | | |
| 28.03.2022 | 60 | 34 | 16 | 28 | 0.4 | N.D. | | |

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| то, | | LAB REF NO. DATE OF SAMPLING | | UES/21-22/AAQM/6246-6253 | | | |
| HINDALCO INDUSTRIE | | | | 01/10/2021 to | 25/ | 10/2021 | |
| GARE PALMA - IV/4, COAL MINE, VILLAGE - BANKHETA, POST - MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DATE OF REPORT DATE OF ANALYSIS | | 02/10/2021 to 26/10/2021 01/11/2021 | | | |
| | | | | | | | START: 03/10/2021 |
| | | | | | *************************************** | SAMPLE DETAI | LS |
| MONITORING FOR | AMBIENT AIR QUAL | LITY MONITORING CUSTOMER | | REF. NO. & DATE | | PO/SRV/2122/0045, D.:24-JULY-2021 | |
| SAMPLING LOCATION | OFFICE AREA, BAN | UIKHOL | | 10 | - | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLL | LABORATORY CHEMIST | | | | |
| SAMPLING PROCEDURE | AS PER METHOD RE | AS PER METHOD REPERENCE | | | | | |
| SAMPLE QUANTITY/PACKING | SOp: 30MLXI NO. 1 | FILTER PAPER (FM ₁₀): 1X1 NO., FILTER PAPER (FM _{2.5}): 1X1 NO. SO ₂ : 30MLX1 NO. PVC BOTTLE, NO ₂ : 30MLX1 NO. PVC BOTTLE RUBBER BLADDER: 1X1 NO. | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|---|--|-----|--|--|--|
| Parameter | Parameter Method Reference | | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines Vol1 | 60 | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182 (Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-05 | 24 | | | |

| TEST REPORT | | | | | | | | |
|------------------|--|--|--------------------------|--------------------------|--------------|-------------------------|--|--|
| Date of Sampling | PM ₁₀ μg /m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m ³ | | |
| 01,10,2021 | 54 | 22 | 12 | 28 | 0.8 | N.D. | | |
| 04.10.2021 | 50 | 28 | 09 | 20 | 0.9 | N.D. | | |
| 08.10.2021 | 48 | 26 | 18 | 26 | 0.4 | N.D. | | |
| 11.10.2021 | 40 | 20 | 14 | 20 | 0.6 | N.D. | | |
| 14.10.2021 | 44 | 24 | 10 | 28 | 0.2 | N.D. | | |
| 18.10.2021 | 4.0 | 28 | 16 | 24 | 0.8 | N.D. | | |
| 22.10.2021 | 48 | 20 | 10 | 26 | 0.5 | N.D. | | |
| 25.10.2021 | 52 | 22 | 18 | 22 | 0.9 | N.D. | | |

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| Name & Address Of The Customer TO, | | REPORT | | | UES/TR/21-22/04167 | | | |
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| | | LAB REF | | | UES/21-22/AAQM/07453-07460 | | | |
| | HINDALCO INDUSTRIES LIMITED, | | SAMPLING | 01/11/2021 | to 27 | /11/2021 | | |
| GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | | | 02/11/2021 to 29/11/2021 | | | | |
| | | | | 01/12/2021 START: 02/11/2021 END: 29/11/20 | | | | |
| | | | | | | END: 29/11/2021 | | |
| | | SAMPLE I | DETAILS | | | NIE TELL | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | | CUSTOMER REF. NO. 6 DATE | | N/PO/SNV/2122/0045, DTD. 24-JULY-2021 | | | |
| SAMPLING LOCATION | OFFICE AREA, BANJING | 1OL | | | | | | |
| DURATION OF SAMPLING | 24 NOURS | SAMPLE COLLECTED BY | | LABORATORY CHIMIST | | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERE | INCE | | - | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): SO ₂ : 30MLX1 NO. PVC: RUBBER BLADDER: 1X1 | BOTTLE, NO: 3 | | | | | | |

| Parameter | Method Reference | NAAQM Standar | |
|---|--|------------------|--|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, PA 2006 & CPCB Guidelines VolI | 80 | |
| Nitrogen Dioxide (ND ₂) | IS 5182 (Part 6): 2006 a CPCB Guidelines Vol1 | 80 | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | |
| Mercury (Hg) | EPA Method IO-5 | | |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | | | |
| 01.11.2021 | 56 | 24 | 14 | 30 | 0.9 | N.D. | | | | |
| 06.11.2021 | 52 | 30 | 10 | 22 | 0.8 | N.D. | | | | |
| 08.11.2021 | 50 | 28 | 20 | 28 | 0.5 | N.D. | | | | |
| 13.11.2021 | 42 | 22 | 16 | 22 | 0.8 | N.D. | | | | |
| 15.11.2021 | 46 | 26 | 12 | 30 | 0.4 | N.D. | | | | |
| 20.11.2021 | 42 | 30 | 18 | 26 | 0.6 | N.D. | | | | |
| 22.11.2021 | 50 | 22 | 12 | 28 | 0.4 | N.D. | | | | |
| 27.11.2021 | 54 | 24 | 20 | 24 | 0.8 | N.D. | | | | |

Duration of sampling for CO - 1 Hour, N.D. - Not Detected

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| | | LAS REF | | | | | |
| | | DATE OF | SAMPLING | 04/12/2021 | to 27 | 7/12/2021 | |
| GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, | | DATE OF RECEIPT DATE OF REPORT | | 05/12/2021 to 28/12/2021 01/01/2022 | | | |
| | | | | | | | DISTT RAIGARH |
| | | SAMPLE I | ETAILS | | , III | | |
| MONITORING FOR | AMBIENT AIR QUALITY | MONITORING | CUSTOMER REF. NO. & DATE | | N/PO/SRV/2122/0045, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | OFFICE AREA, BANJIKH | OZ. | | | Date. | 24-0001-2022 | |
| DURATION OF SAMPLING | 24 MOURS | SAMPLE COLLECTED BY | | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERE | NCE | | I a second second | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM _{IA}): SO ₂ : 30MLX1 NO. PVC 1 RUBBER BLADOER: 1X1 | SOTTLE, NO: 30 | OR PAPER (PM) OMLKI NO. PVC | s): IX1 NO. BOTTLE | | | |

| Parameter | Method Reference | NAAQM Standard |
|---|--|-------------------|
| Particulate Matter size less than 10 microns (PM _{(H}) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (PM2.5) | CFCB Guidelines VolI | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* Mercury (Hg) | IS 5182(Part IO):1999, RA 2003 EPA Method IO-5 | 4.0 |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | | | |
| 04.12.2021 | 58 | 26 | 16 | 32 | 1.0 | N.D. | | | | |
| 06.12.2021 | 54 | 32 | 12 | 24 | 0.9 | N.D. | | | | |
| 11.12.2021 | 52 | 30 | 22 | 30 | 0.6 | N.D. | | | | |
| 13,12,2021 | 4.4 | 24 | 18 | 24 | 0.9 | N.D. | | | | |
| 18.12.2021 | 48 | 28 | 14 | 32 | 0.6 | N.D. | | | | |
| 20.12.2021 | 44 | 32 | 20 | 28 | 0.8 | 4904 | | | | |
| 25.12.2021 | 52 | 24 | 14 | 30 | 0.6 | N.D. | | | | |
| 27.12.2021 | 56 | 26 | 22 | 26 | 1.0 | N.D. | | | | |

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| HINDALCO INDUSTRIES LIMITED, | | LAB REF NO | | UES/21-22/AAQM/010260-010267 | | | | |
| | | DATE OF | SAMPLING | 03/01/2022 | to 28 | 1/01/2022 | | |
| GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DATE OF REPORT DATE OF ANALYSIS | | 04/01/2022 to 29/01/2022 02/02/2022 | | | | |
| | | | | | | | START: 04/01/2022 | |
| | | | | | | SAMPLE I | DETAILS | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | | CUSTOMER REF. NO. & DATE | | W/PO/SRV/2122/0045, DTD. 24-JULY-2021 | | | |
| SAMPLING LOCATION | OFFICE AREA, BANJIKE | OL | | | - | | | |
| DURATION OF SAMPLING | 24 HOURS | TRS SAMPLE COLLECT | | D BY LABORATORY CHEMIS | | 6) | | |
| SAMPLING PROCEDURE | AS PER METHOD REFEREN | NCE | | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): SO2: 30MLX1 NO. PVC N RUBBER BLANDER: 1X1 I | FILTER PAPER (PM ₁₀): 1X1 NO., FILTER PAPER (PM _{5.3}): 1X1 NO. SO ₂ : 3GMLXI NO. PVC BOTTLE, NO ₂ : 3GMLXI NO. PVC BOTTLE DIRBERS DEADLESS. XY NO. | | | | | | |

| Parameter | Method Reference | NAAQM Standard |
|---|---|-------------------|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (PM _{3.5}) | CPCBGuidelines VolI | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* | IS 5182 (Part 10):1999, RA 2003 | 4.0 |
| Mercury (Hg) | EPA Method IO-5 | 11.0 |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m³ | | | | |
| 03.01.2022 | 64 | 30 | 18 | 30 | 0.6 | N.D. | | | | |
| 07.01.2022 | 60 | 24 | 10 | 26 | 0.8 | N.D. | | | | |
| 10.01.2022 | 62 | 28 | 14 | 32 | 0.7 | N.D. | | | | |
| 14.01.2022 | 54 | 26 | 0.8 | 28 | 0.2 | N.D. | | | | |
| 17.01.2022 | 58 | 20 | 14 | 22 | 0.6 | N.D. | | | | |
| 21.01.2022 | 54 | 38 | 10 | 26 | 0.5 | N.D. | | | | |
| 24.01.2022 | 62 | 26 | 14 | 20 | 0.8 | N.D. | | | | |
| 28.01.2022 | 66 | 22 | 12 | 24 | 1.1 | N.D. | | | | |

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|--|---|---------------------|---------------------------------|----------------------|------------------------------|--|--|--|
| | | LAB REF | | | UES/21-22/AAQM/013075-013082 | | | |
| | | DATE OF | * SAMPLING | 01/02/2022 | to 25 | /02/2022 | | |
| GARE PALMA - IV/4, COAL MINE, VILLAGE - BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DATE OF | DATE OF RECEIPT | | to 26 | /02/2022 | | |
| | | DATE OF REPORT | | 01/03/2022 | | - | | |
| | | | | START: 03/02/2 | 2022 | END: 01/03/2022 | | |
| | | SAMPLE I | DETAILS | VIII - III - III | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING | | CUSTOMER REF. NO. 4 DATE | | | N/PO/SRV/2122/0045, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | OFFICE AREA, BANJIKH | or | | | | 24 0001 2021 | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | | LABORATORY CHEMIST | | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERE | NCE | | | - | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;0): SO: JOHLKI NO. PVC I RUBBER BLADDER: 1X1 | BOTTLE, NO2: 3 | ER PAPER (PM). OMLX1 NO. PVC |): 1X1 NO. BOTTLE | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | | |
|---|--|-------------------|--|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | | |
| Particulate Matter size less than 10 microns (PM:0) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | | |
| Particulate Matter size less than 2.5 microns (PM2.3) | IS 5182 (Part 24): 2019 CPCBGuidelines VolI | 60 | | | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & EPCB Guidelines VolI | 80 | | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | | | |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------|--------------|------------|--|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ μg/m ³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m | | | | |
| 01.02.2022 | 68 | 32 | 14 | 32 | 0.6 | N.D. | | | | |
| 04.02.2022 | 58 | 20 | 08 | 28 | 0.9 | N.D. | | | | |
| 07.02.2022 | 70 | 30 | 12 | 30 | 0.4 | N.D. | | | | |
| 11.02.2022 | 62 | 22 | 08 | 26 | 0.8 | N.D. | | | | |
| 14.02.2022 | 68 | 28 | 16 | 20 | 0.6 | N.D. | | | | |
| 18.02.2022 | 58 | 36 | 12 | 28 | 0.4 | N.D. | | | | |
| 21.02.2022 . | 65 | 24 | 18 | 23 | 0.9 | | | | | |
| 25.02.2022 | 62 | 28 | 14 | 28 | 1.0 | N.D. | | | | |

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AUTHORIZED SIGNATORY

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| Name & Address Of The Casjon | TO, | | NO | UES/TR/21-22/08926 | | | |
|--|--|---|---------------|--------------------------|-------|---------------------------------|--|
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT | | UES/21-22/AAQM/014619 | | | |
| | | | | 02/03/2022 | to 28 | /03/2022 | |
| | | | | 03/03/2022 to 29/03/2022 | | | |
| | | | | 02/04/2022 | | | |
| | | | | START: 04/03/2022 | | END: 02/04/2022 | |
| | | SAMPLE I | DETAILS | | 114 | | |
| MONITORING FOR | AMBIENT AIR QUALITY | AMBIENT AIR QUALITY MONITORING | | EF. NO. & DATE | | /SRV/2122/0045, 24-JULY-2021 | |
| SAMPLING LOCATION | OFFICE AREA, BANJINS | OL | ISAN LANGUAGE | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE | COLLECTED BY | LABORATORY CE | EMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERE | NCE | | | - | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): SO ₂ : 30MLX1 NO. PVC I RUBBER BLADDER: 1X1 | SOTTLE, NO.: 3 | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | | |
|---|---|-------------------|--|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | IS 5182 (Part 24): 2019, CPCB Guidelines VolI | 60 | | | | | |
| Sulphur Dioxide (SO ₂) | 18 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | | |
| Mercury (Hg) | EPA Method IO-5 | 0.0 | | | | | |

| TEST REPORT | | | | | | | | | | | |
|---------------------|---------------------------|--|--------------------------|--------------------------|--------------|-------------|--|--|--|--|--|
| Date of Sampling | PM ₁₀ µg/m³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | | | | |
| 02.03.2022 | 78 | 30 | 12 | 30 | 0.8 | N.D. | | | | | |
| 07.03.2022 | 68 | 26 | 10 | 28 | 0.6 | N.D. | | | | | |
| 11.03.2022 | 80 | 28 | 14 | 24 | 0.8 | N.D. | | | | | |
| 14.03.2022 | 72 | 30 | 0.6 | 22 | 0.5 | N.D. | | | | | |
| 18.03.2022 | 78 | 34 | 10 | 24 | 0.6 | N.D. | | | | | |
| 21.03.2022 | 68 | 32 | 08 | 28 | 0.2 | N.D. | | | | | |
| 25.03.2022 | 55 | 28 | 14 | 20 | 0.8 | N.D. | | | | | |
| 28.03.2022 | 62 | 20 | 12 | 22 | 0.5 | N.D. | | | | | |

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You report for pophlication, arbitration or as logal disprise to forbustion.

Text sample will be retained for ES object after truce of rest report unless ochonics agreed with consoner.

This is the information as the purity his asked for where insign ands.

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| Name & Address Of the Gastoner TO, | REPORT NO. UE | | UES/ | UES/TR/21-22/3495 UES/21-22/AAQM/6254-6261 | | | |
|--|--|--------------------------------|--------------|---|---------|-------|-------------------------|
| [[[[[[]]]]]] [[[]] [[]] [[]] [[] [[]] [[] [[]] [[] [[]] [[]] [[]] [[] [[]] [[] [[]] [[]] [[] [[]] [[]] [[]] [[] [[]] | LAB REF | LAB REF NO. | | | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE,VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DATE OF RECEIPT DATE OF REPORT | | 01/10/2021 to 25/10/2021 | | | |
| | | | | 02/10/2021 to 26/10/2021 | | | 21 |
| | | | | 01/11/2021 START: 03/10/2021 END: 01 | | 1.0 | |
| | | | | | | END:0 | END: 01/11/2021 |
| | SAL | APLE DETA | AILS | | | - | |
| MONITORING FOR | AMBIENT AIR QUALITY MC | NITORING | CUSTOMER REI | , NO. | & DATE | | /2122/0045 JULY-2021 |
| SAMPLING LOCATION | ETP AREA, BANJIKNOL | | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY LABORATORY | | | CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | E | | | - | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): 1X SO ₂ : 30MLX1 NO. PVC BO: RUBBER BLADDER: 1X1 NO | TTLE, NO: | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | | | |
|---|---|-------------------|--|--|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines Vol1 | 100 | | | | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.3}) | CPCBGuidelines VolI | 60 | | | | | | |
| Sulphur Dioxide (SO ₃) | IS 5182 (Part 2): 2001, RA 2006 a CPCB Guidelines VolI | 80 | | | | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | | | |
| Mercury (Hg) | EPA Method 10-05 | | | | | | | |

| TEST REPORT | | | | | | | | | |
|---------------------|--|--|--------------------------|--------------------------|--------------|-------------|--|--|--|
| Date of Sampling | PM ₁₀ μg /m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | | |
| 01.10.2021 | 48 | 22 | 08 | 26 | 0.7 | N.D. | | | |
| 04.10.2021 | 40 | 26 | 12 | 22 | 0.4 | N.D. | | | |
| 08.10.2021 | 46 | 22 | 16 | 28 | 0.8 | N.D. | | | |
| 11.10.2021 | 38 | 28 | 10 | 20 | 0.6 | N.D. | | | |
| 14.10.2021 | 36 | 20 | 08 | 26 | 0.2 | N.D. | | | |
| 18,10,2021 | 42 | 26 | 12 | 28 | 0.7 | N.D. | | | |
| 22.10.2021 | 46 | 28 | 09 | 20 | 0.6 | N.D. | | | |
| 25.10.2021 | 40 | 20 | 14 | 24 | 0.2 | N.D. | | | |

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- » The report for publication, arbitration or as legal dispute is forbidden.
- Fast sample will be retained for 15 days after result of test report unless otherwise agreed with customer.

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| TO, HINDALCO INDUST GARE PALMA – IV/ VILLAGE – BANKH POST -MILUPARA, DISTT RAIGARH | TRIES LIMITED, 4, COAL MINE, ETA, | REPORT NO LAB REF NO DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | UES/TR/21-22/04168 UES/21-22/AAQM/07461-07468 01/11/2021 to 27/11/2021 02/11/2021 to 29/11/2021 01/12/2021 START:02/11/2021 END:29/11/2021 | | | |
|--|--|--|------------------------------------|---|--------------|-----------|-------------------------------------|
| | | MPLE | DETAILS | | | | 2010 |
| HOWITORING FOR | AMBIENT AIR QUALITY MONITOR | ING | CUSTOMER REF. | NO. & DATE | | | O/SRV/2122/0045, 0. 24-JULY-2021 |
| SAMPLING LOCATION | ETF AREA, BANJIKHOL | | | | | 27.40 | 7. 24-0011-2021 |
| DURATION OF SAMPLING | 24 HOURS | SAN | PLE COLLECTED E | BY LABORATORY CHIMI | | MIST | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | - | Calle 195 | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM:e): IXI NO. SO;: 30MLX1 NO. PVC BOTTLE, RUBBER BLADDER: IX1 NO. | , FIL NO2: | TER PAPER (PM; 3 30MLRI NO. PVC |): 1. BOTT | XI NO. LE | | |

| Parameter | Method Reference | NAAQM Standard |
|---|---|-------------------|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines Vol1 | 60 |
| Sulphur Dioxide (50 ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines Vol1 | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* Mercury (Hg) | 1S 5182(Part 10):1999, RA 2003 | 4.0 |
| correspond tudy | EPA Method IO-5 | |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|--|--|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | | | |
| 01.11.2021 | 50 | 24 | 10 | 28 | 0.8 | N.D. | | | | |
| 06.11.2021 | 42 | 28 | 14 | 24 | 0.2 | N.D. | | | | |
| 08.11.2021 | 48 | 24 | 18 | 26 | 0.6 | The state of the s | | | | |
| 13.11.2021 | 40 | 30 | 12 | 22 | 0.8 | N.D. | | | | |
| 15.11.2021 | 38 | 22 | 10 | 28 | | N.D. | | | | |
| 20.11.2021 | 44 | 28 | 14 | 30 | 0.4 | N.D. | | | | |
| 22.11.2021 | 46 | 30 | 10 | | 0.6 | N.D. | | | | |
| 27.11.2021 | | | | 22 | 0.8 | N.D. | | | | |
| emarks: * Durat | 42 | 22 | 16 | 26 | 0.4 | N.D. | | | | |

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| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DAS | ###################################### | | | QM/08729-08736 o 27/12/2021 o 28/12/2021 | |
|--|--|----------------------------------|--|----------------|---|--|------------------------------------|
| | A STATE OF THE PARTY OF THE PAR | SAMPLE | DETAILS | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONIT | TORING | CUSTOMER REF. | | | | O/SRV/2122/0045, . 24-JULY-2021 |
| SAMPLING LOCATION | ETP AREA, BANJINHOL | | | | | DID | . 24-5051-2021 |
| DURATION OF SAMPLING | 24 HOURS | SAN | PLE COLLECTED E | BY LABORATORY | | с сн | MIST |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | 95 | -30000000000000000000000000000000000000 | -500 | 50055 Ft. |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM:a): 1X1 SO: 30MLX1 NO. PVC BOTTL RUBBER BLADDER: 1X1 NO. | NO., FIL E, NO ₂ : | TER PAPER (PM) . 30MLX1 NO. PVC | j: 1X BOTTI | CI NO. | | |

| Parameter | Method Reference | NAAQM Standard |
|---|---|-------------------|
| Particulate Matter size less than 10 mlcrons (FM ₁₈) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (PM2.4) | CPCB Guidelines VolI | 60 |
| Sulphur Dioxide (SO2) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 |
| Mercury (Hg) | EPA Method IO-5 | |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m³ | | | | |
| 04.12.2021 | 52 | 26 | 12 | 30 | 0.9 | N.D. | | | | |
| 06.12.2021 | 44 | 30 | 16 | 26 | 0.4 | N.D. | | | | |
| 11.12.2021 | 50 | 26 | 20 | 28 | 0.8 | N.D. | | | | |
| 13,12,2021 | 42 | 32 | 14 | 24 | 0.9 | N.D. | | | | |
| 18.12.2021 | 40 | 24 | 12 | 26 | 0.6 | | | | | |
| 20.12.2021 | 46 | 30 | 16 | 32 | 0.8 | N.D. | | | | |
| 25.12.2021 | 48 | 32 | 12 | 24 | 0.9 | N.D. | | | | |
| 27.12.2021 | 44 | 24 | 18 | 28 | 0.5 | N.D. | | | | |

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| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, | | DA: | REPORT NO LAB PREF NO DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT | | UES/TR/21-22/05972 UES/21-22/AAQM/010268-010275 03/01/2022 to 28/01/2022 04/01/2022 to 29/01/2022 02 /02/2022 | | | |
|--|--|--------------------|---|---|---|-----|----------------|--|
| DISTT RAIGARH | | | DETAILS | STAR | RT: 04/01/202 | 22 | END:01/02/2022 | |
| MONITORING FOR | AMBIENT AIR QUALITY MONT | | | NO. & DATE N/PO/SRV/2122/00 DTD. 24-JULY-202 | | | +1 | |
| SAMPLING LOCATION | ETP ARKA, BANJIKHOL | | | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED E | | SY LABORATORY CHEMIST | | ust | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₂₆); 1X1 I SO ₂ : 30MLX1 NO. PVC BOTTL RUBBER BLADDER; 1X1 NO. | | | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | | | | |
|---|---|-------------------|--|--|--|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | | | | |
| Particulate Matter size less than 10 microns (FM10) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 | | | | | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 a CPCB Guidelines VolI | BO | | | | | | | |
| Nitrogen Dioxide (NO ₃) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | | | | | |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------------------|--|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | РМ _{2.5} µg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m ³ | | | | |
| 03.01.2022 | 58 | 28 | 16 | 24 | 0.7 | N.D. | | | | |
| 07.01,2022 | 48 | 32 | 14 | 22 | 0.8 | N.D. | | | | |
| 10.01.2022 | 56 | 26 | 10 | 20 | 0.5 | N.D. | | | | |
| 14.01.2022 | 48 | 30 | 18 | 28 | 0.4 | N.D. | | | | |
| 17.01.2022 | 50 | 28 | 12 | 24 | 0.9 | N.D. | | | | |
| 21.01.2022 | -54 | 32 | 14 | 30 | 0.7 | N.D. | | | | |
| 24.01.2022 | 46 | 30 | 10 | 26 | 0.5 | N.D. | | | | |
| 28.01.2022 | 58 | 28 | 16 | 22 | 0.7 | N.D. | | | | |

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| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT NO LAB REF NO DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | UES/21-22/AAQM/013083-13090 | | | | |
|--|---|--|-----------------|--|-------------|-------|--|--|
| | | | | 1 | /02/2022 to | - | A CONTRACTOR OF THE PARTY OF TH | |
| | | | | 02/02/2022 to 26/02/2022 01/03/2022 | | | 702/2022 | |
| | | | | START: 03/02/2022 | | 22 | END: 01/03/2022 | |
| | | SAMPLE | DETAILS | | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONI | TORING CUSTOMER REF. | | | | | O/SRV/2122/0045, . 24-JULY-2021 | |
| SAMPLING LOCATION | ETP AREA, BANJIKHOL | | | | | - | | |
| DURATION OF SAMPLING | 24 HOURS | SAN | THE COLLECTED I | BY LABORATORY CHAMIST | | Deist | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM:e): 1X1 SO: 30MLX1 NO. PVC BOTT. RUBBER BLADDER: 1X1 NO. | | | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | | |
|---|---|-------------------|--|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | | | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | | | |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|----------------------------|--------------------------------------|--------------------------------------|--------------|-------------|--|--|--|--|
| Date of Sampling | PM ₁₀ µg/m ³ | РМ _{2.5} µg/m³ | 50 ₂ μg/m ³ | NO ₂ µg/m ³ | CO* mg/m³ | Hg ng/m³ | | | | |
| 01.02.2022 | 64 | 24 | 10 | 28 | 0.6 | N.D. | | | | |
| 04.02.2022 | 58 | 30 | 18 | 24 | 0.2 | N.D. | | | | |
| 07.02.2022 | 50 | 22 | 12 | 18 | 0.8 | N.D. | | | | |
| 11.02.2022 | 42 | 26 | 16 | 26 | 0.4 | N.D. | | | | |
| 14.02.2022 | 62 | 32 | 10 | 20 | 0.8 | N.D. | | | | |
| 18.02.2022 | 58 | 28 | 18 | 28 | 0.2 | N.D. | | | | |
| 21.02.2022 | 40 | 20 | 16 | 24 | 0.6 | N.D. | | | | |
| 25.02.2022 | 56 | 30 | 12 | 26 | 0.8 | N.D. | | | | |

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Test hample reli by reticined for 10 days after accur of not report action witherwise agreed with contact.

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-End of the test report-



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| TO, HINDALCO INDUST GARE PALMA – IV/4 VILLAGE – BANKHI POST -MILUPARA, DISTT RAIGARH | RIES LIMITED, I, COAL MINE, ETA, | DAT DAT | ORT NO REF NO E OF SAMPLING E OF RECEIPT E OF REPORT E OF ANALYSIS | W/00/cpm/01/01/01 | | 014620 8/03/2022 | |
|--|---|--|--|-------------------|--------|---------------------|----------------------------------|
| | 3 | AMPLE | DETAILS | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY MONIT | ORING | CUSTOMER REF. | NO. | & DATE | | O/SRV/2122/0045, 24-JULY-2021 |
| SAMPLING LOCATION | ETP AREA, BANJINHOL | | | | | 4-5-5-5 | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY LABORATORY CHEMIST | | EMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): IXI I SO: 30MLXI NO. PVC BOTTL RUBBER BLADDER: IXI NO. | | | | | | |

| Parameter | Method Reference | NAAQM Standard |
|---|--|-------------------|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (FM2.5) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & GPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* | IS 5182 (Part 10):1999, RA 2003 | 4.0 |
| Mercury (Hg) | EPA Method IO-5 | 2.0 |

| TEST REPORT | | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------------------|--|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m ³ | | | | |
| 02.03.2022 | 70 | 28 | 14 | 24 | 0.5 | N.D. | | | | |
| 07.03.2022 | 64 | 36 | 12 | 28 | 0.9 | N.D. | | | | |
| 11.03.2022 | 60 | 30 | 18 | 20 | 0.2 | N.D. | | | | |
| 14.03.2022 | 58 | 28 | 12 | 28 | 0.8 | N.D. | | | | |
| 18.03.2022 | 70 | 38 | 10 | 20 | 0.4 | N.D. | | | | |
| 21.03.2022 | 66 | 34 | 14 | 24 | 0.6 | N.D. | | | | |
| 25,03,2022 | 58 | 26 | 18 | 22 | 0.2 | N.D. | | | | |
| 28.03.2022 | 62 | 32 | 16 | 28 | 0.8 | N.D. | | | | |

Terms & conditions

- You report the publication, artistication or as tigal objects is decreated
- First sample will be retained for 15 days after tisser of test report orders otherwise agreed with consistent

This is for automorphise or the purity hav asked for above serial exig.

PEVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

---End of the test report--



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address Of The Customer | | REPORT NO. | | UES/TR/21-22/3496 | | | |
|---|---|---|-------------|--------------------------|--|--|--|
| то, | | LAB REF NO. | LAB REF NO. | | 6262-6269 | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE,VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPI | ING | 01/10/2021 to 2 | 5/10/2021 | | |
| | | DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | 02/10/2021 to 26/10/2021 | | | |
| | | | | 01/11/2021 | | | |
| | | | | START: 03/10/2021 | END: 01/11/2021 | | |
| | SZ | AMPLE DETAIL | S | free Marin III | | | |
| MONITORING FOR | AMBIENT AIR QUALITY N | MONITORING CUSTOME DATE | | R REF. NO. & | N/PO/SRV/2122/0045, DTD.:24-JULY-2021 | | |
| SAMPLING LOCATION | OFFICE AREA, BANGGET | k. | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLEC | TED BY | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFEREN | rce | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): SO ₇ : 30MLX1 NO. PVC B RUBBER BLADDER: 1X1 B | OTTLE, NO: 308 | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | | |
|---|--|-------------------|--|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | | |
| Particulate Matter size less than 2.5 microns (PM _{3.5}) | CPCBGuidelines VolI | 60 | | | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | | |
| Mercury (Hg) | EPA Method IO-05 | | | | | | |

| TEST REPORT | | | | | | | | | | |
|---------------------|--|--|--------------------------------------|--------------------------|--------------|-------------|--|--|--|--|
| Date of Sampling | PM ₁₀ μg /m ³ | PM _{2.5} μg/m ³ | SO ₂ μg/m ³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | | | |
| 01.10.2021 | 52 | 28 | 10 | 20 | 0.7 | N.D. | | | | |
| 04.10.2021 | 60 | 20 | 16 | 26 | 0.9 | N.D. | | | | |
| 08.10.2021 | 48 | 22 | 10 | 22 | 0.2 | N.D. | | | | |
| 11.10.2021 | 54 | 26 | 18 | 27 | 0.5 | N.D. | | | | |
| 14.10.2021 | 46 | 28 | 12 | 28 | 0.7 | N.D. | | | | |
| 18.10.2021 | 42 | 24 | 10 | 20 | 0.8 | N.D. | | | | |
| 22.10.2021 | 48 | 30 | 14 | 26 | 0.4 | N.D. | | | | |
| 25.10.2021 | 56 | 28 | 12 | 28 | 0.9 | N.D. | | | | |

Terms & conditions

- The report for publication, arbitration or as legal dispute is feelicides.
- Feat sample will be retained for 13 days after issue of test report uniess attacking agreed with customer.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

TO,
HINDALCO INDUSTRIES LIMITED,
GARE PALMA – IV/4, COAL MINE,
VILLAGE – BANKHETA,
POST -MILUPARA,
DISTT. - RAIGARH (C.G.) 496107

| REPORT NO | UES/TR/21-22/041 | 69 | _ |
|------------------|-------------------|-----------------|---|
| LAB REF NO | UES/21-22/AAQM/0 | 7469-07476 | |
| DATE OF SAMPLING | 01/11/2021 to 27 | /11/2021 | |
| DATE OF RECEIPT | 02/11/2021 to 29 | /11/2021 | - |
| DATE OF REPORT | 01/12/2021 | | - |
| DATE OF ANALYSIS | START: 02/11/2021 | END: 29/11/2021 | |

| | | SAMPLE I | DETAILS | | |
|----------------------------|--|----------------|-------------------------------------|----------------------|--|
| MONITORING FOR | AMBIENT AIR QUALITY | MONITORING | CUSTOMER 1 | RF. NO. & DATE | N/PO/SRV/2122/0045, DTD, 24-JULY-2021 |
| SAMPLING LOCATION | OFFICE AREA, BANKHET | N. | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE (| SAMPLE COLLECTED BY LABORATORY CHEM | | MIST |
| SAMPLING PROCEDURE | AS PER METHOD REFERE | WCE: | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): SO;: JOMLKI NO. PVC 1 RUBBER BLADDER: 1X1 | BOTTLE, NO: 30 | OR PAPER (PM; OMLXI NO. PVC |): 1X1 NO. BOTTLE | |

| Parameter | Method Reference | NAAQM | |
|---|--|-----------------|--|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | Standard 100 | |
| Particulate Matter size less than 2.5 microns (PM2.5) | CPCBGuidelines VolI | 60 | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines Vol1 | 80 | |
| Carbon Monoxide (CO)* Mercury (Hg) | IS 5182(Part 10):1999, RA 2003 EPA Method IO-5 | 4.0 | |

| TEST REPORT | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | |
| 01.11.2021 | 54 | 30 | 12 | 22 | 0.8 | N.D. | |
| 06.11.2021 | 62 | 22 | 18 | 28 | 0.6 | | |
| 08.11.2021 | 5.0 | 24 | 12 | 24 | | N.D. | |
| 13.11.2021 | 56 | 28 | 20 | | 0.4 | N.D. | |
| 15.11.2021 | 48 | | | 28 | 0.6 | N.D. | |
| 20.11.2021 | 440000 | 26 | 14 | 26 | 0.8 | N.D. | |
| | 44 | 22 | 12 | 22 | 0.6 | N.D. | |
| 22.11.2021 | 46 | 28 | 16 | 28 | 0.2 | N.D. | |
| 27.11.2021 | 58 | 30 | 14 | 26 | 0.8 | N.D. | |

Terms & conditions

The report to problements artification or on tegor (respects in transmiss)

That manages will be expansed for 15 days office sense of heat report across interport with exceptions.

2 Oulli2121 REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-End of the test report-



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| Hame & Advisor Of The Contestor | | REPORT NO | | UES/TR/21-22/04912 | | |
|--|--|---|------------------|---|-----|----------------------------------|
| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | LAB REF) | WO | UES/21-22/AAQM/08737-08744 | | |
| | | DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | 04/12/2021 to | 27/ | 12/2021 |
| | | | | 05/12/2021 to | 28/ | 12/2021 |
| | | | | 01/01/2022 START: 05/12/2021 END: 30/12/ | | |
| | | | | | | END: 30/12/2021 |
| | | SAMPLE DE | ETAILS | | | |
| HOMITORING FOR | AMBIENT AIR QUALITY | AMBIENT AIR QUALITY MONITORING CUSTOMER | | REF. NO. & DATE | | 0/SRV/2122/0045, 24-JULY-2021 |
| SAMPLING LOCATION | OFFICE AREA, BANKHET | A | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE CO | DLLECTED BY | Y LABORATORY CHEMIS | | |
| SAMPLING PROCEDURE | AS PER METHOD REFEREN | NCE | N. 2020 N 1890 N | CO. WINDS | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;a): SO:: JOMLNI NO. PVC E RUBBER BLADDER: INI | BOTTLE, NO ₂ : 30) | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | |
|---|--|-------------------|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | |
| Particulate Matter size less then 10 microns (PM ₁₈) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | |
| Particulate Matter size less than 2.5 microns (FM2.6) | CPCB Guidelines VolI | 60 | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | |

| TEST REPORT | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------------------|--------------------------|--------------|-------------|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ μg/m ³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | |
| 04.12.2021 | 56 | 32 | 14 | 24 | 0.9 | N.D. | |
| 06.12.2021 | 64 | 24 | 20 | 30 | 0.8 | N.D. | |
| 11.12.2021 | 52 | 26 | 14 | 26 | 0.6 | N.D. | |
| 13.12.2021 | 58 | 30 | 22 | 30 | 0.8 | N.D. | |
| 18.12.2021 | 50 | 28 | 16 | 28 | 0.9 | N.D. | |
| 20.12.2021 | 46 | 24 | 14 | 24 | 0.8 | N.D. | |
| 25.12.2021 | 48 | 30 | 18 | 30 | 0.4 | N.D. | |
| 27.12.2021 | 60 | 32 | 16 | 28 | 0.6 | N.D. | |

Terms & conditions

REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT N | REPORT NO LAB REF NO | | UES/TR/21-22/05973 UES/21-22/AAQM/010276-010283 | | |
|--|--|------------------------------------|-------------------------|---|--|----------------------------------|-------------------|
| | | LAB REF | | | | | |
| | | DATE OF | SAMPLING | 03/01/2022 to | 28/ | /01/2022 | |
| | | DATE OF REPORT DATE OF ANALYSIS | | 04/01/2022 to 29/01/2022 02 /02/2022 | | | |
| | | | | | | | START: 04/01/2022 |
| | | | | | | SAMPLE DI | ETAILS |
| MONITORING FOR | AMBIENT AIR QUALITY | AMBIENT AIR QUALITY MONITORING CUS | | CUSTOMER REF. NO. & DATE | | D/SRV/2122/0045, 24-JULY-2021 | |
| SAMPLING LOCATION | OFFICE AREA, BANKHET | A | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE C | OLLECTED BY | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERE | MCE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): SO2: 30MLX1 NO. PVC 1 RUBBER BLADDER: 1X1 | BOTTLE, NO: 30 | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | |
|---|--|-------------------|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | |
| Particulate Matter size less than 10 microns (PM10) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | |
| Particulate Matter size less than 2.5 microns (FM2.5) | CPCBGuidelines VolI | 60 | | | | |
| Sulphur Dioxide (80;) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | | |

| TEST REPORT | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------------------|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m ³ | | |
| 03.01.2022 | 60 | 34 | 18 | 28 | 0.5 | N.D. | | |
| 07.01.2022 | 66 | 28 | 12 | 24 | 0.7 | N.D. | | |
| 10.01.2022 | 58 | 24 | 08 | 22 | 0.9 | N.D. | | |
| 14.01.2022 | 52 | 32 | 10 | 28 | 0.5 | N.D. | | |
| 17.01.2022 | 58 | 26 | 12 | 22 | 0.7 | N.D. | | |
| 21.01.2022 | 56 | 22 | 14 | 20 | 0.8 | N.D. | | |
| 24.01.2022 | 50 | 26 | 12 | 26 | 0.6 | N.D. | | |
| 28.01.2022 | 68 | 30 | 10 | 24 | 0.8 | N.D. | | |

Terms & conditions

The report for authorison, acceleration or as regal dispose to disposed to

Test sample will be related for 15 days after stace of test report unions eitherwise agreed with customer.

REVIEWED BY 02 2022

For ULTIMATE ENVIROLYFICAL SOLUTIONS

AUTHORIZED SIGNATORY

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT NO | | UES/TR/21-22/07920 | | | |
|--|---|---------------------------------|-----------------|----------------------|---|--|--|
| | | LAB REF | LAB REF NO | | UES/21-22/AAQM/013091-013098 | | |
| | | DATE OF | SAMPLING | 01/02/2022 to | 25, | /02/2022 | |
| | | DATE OF | DATE OF RECEIPT | | 02/02/2022 to 26/02/2022 | | |
| | | DATE OF REPORT DATE OF ANALYSIS | | 01/03/2022 | | | |
| | | | | START: 03/02/2022 | | END: 01/03/202 | |
| | | SAMPLE DI | ETAILS | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY | MONITORING | CUSTOMER I | OMER REF. NO. 6 DATE | | N/PO/SRV/2122/0045, DTD. 24-JULY-2021 | |
| SAMPLING LOCATION | OFFICE AREA, BANKNET | SA: | | | , | | |
| DURATION OF SAMPLING | 24 MOURS | SAMPLE CO | DLLECTED BY | LABORATORY CHE | MIST | | |
| SAMPLING PROCEDURE | AS PER METROD REFERE | WCE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;z); SO: 30MLX1 NO. PVC 1 RUBBER BLADDER: 1X1 | BOTTLE, NO: 309 | | | | | |

| Parameter | Method Reference | NAAQM Standard | |
|---|---|-------------------|--|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | |
| Mercury (Hg) | EPA Method IO-5 | 4.0 | |

| TEST REPORT | | | | | | |
|------------------|---------------------------------------|--|--------------------------|--------------------------------------|--------------|-------------|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m ³ | CO* mg/m³ | Hg ng/m³ |
| 01.02.2022 | 68 | 38 | 10 | 26 | 0.8 | N.D. |
| 04.02.2022 | 64 | 34 | 16 | 22 | 0.6 | N.D. |
| 07.02.2022 | 56 | 30 | 10 | 24 | 0.9 | N.D. |
| 11.02.2022 | 48 | 24 | 80 | 20 | 0.7 | N.D. |
| 14.02.2022 | 68 | 30 | 06 | 18 | 0.5 | N.D. |
| 18.02.2022 | 52 | 28 | 10 | 24 | 0.8 | N.D. |
| 21.02,2022 | 60 | 28 | 14 | 22 | 0.4 | N.D. |
| 25.02.2022 | 72 | 36 | 12 | 28 | 0.9 | N.D. |

Terms & conditions

REVIEWED BY

The report for publication, arbitrarios or as input shapers to facilitation.

That sought with the relations for 18 clays after leave of test report unless of parties against with continues.

This is for information as the surry has about for about parties and the continues.

Phuetp 01103/22 For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT M | REPORT NO | | UES/TR/21-22/08928 | | |
|--|--|----------------------------------|--------------------------|---|--------------------|----------------------------------|--|
| | | LAB REF | NO. | UES/21-22/AAQM/014621 | | | |
| | | DATE OF | SAMPLING | 02/03/2022 to | 28/ | /03/2022 | |
| | | DATE OF REPORT DATE OF ANALYSIS | | 03/03/2022 to 29/03/2022 | | | |
| | | | | 02/04/2022 START: 04/03/2022 END: 02/04/20 | | | |
| | | | | | | END: 02/04/2022 | |
| TO STATE OF THE PARTY OF THE PA | | SAMPLE DE | TAILS | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY | MONITORING | CUSTOMER REF. NO. 6 DATE | | | O/SRV/2122/0045, 24-JULY-2021 | |
| SAMPLING LOCATION | OFFICE AREA, BANGGET | A | | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERE | NCE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM ₁₀): SO ₂ : 30MLX1 NO. PVC 1 RUBBER BLADGER: 1X1 | BOTTLE, NO: 300 | | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | |
|---|--|-------------------|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | |
| Particulate Matter size less than 2.5 microns (PM _{2.8}) | IS 5182 (Part 24): 2019 CPCB Guidelines VolI | 60 | | | | |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | .80 | | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | | |

| TEST REPORT | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------------------|--------------|-------------|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m ³ | CO* mg/m³ | Hg ng/m³ | | | |
| 02.03.2022 | 72 | 32 | 14 | 22 | 0.9 | N.D. | | | |
| 07.03.2022 | 70 | 38 | 12 | 26 | 0.5 | N.D. | | | |
| 11.03.2022 | 66 | 32 | 18 | 24 | 0.8 | N.D. | | | |
| 14.03.2022 | 58 | 24 | 0.6 | 28 | 0.5 | N.D. | | | |
| 18.03.2022 | 79 | 36 | 10 | 20 | 0.2 | N.D. | | | |
| 21.03.2022 | 68 | 28 | 08 | 26 | 0.6 | N.D. | | | |
| 25.03.2022 | 62 | 22 | 12 | 28 | 0.8 | N.D. | | | |
| 28.03.2022 | 80 | 38 | 10 | 22 | 0.7 | N.D. | | | |

Terms & conditions

- The report for publication, arbitrarius or or legal dispute in forbidos
- First pample will be retained for 1.5 days after issue of two report within administrative agreed with sundenue.

200 is its information as the party has asked for above leaved skip.

REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

-- End of the test report--



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Admose Of The Contamer TO, | | REPORT | MO. | UES/TR/21-22/3497 | | | |
|--|-------------------------|---|--------------------------|--|---------|--------------------------------|--------------------|
| | LAB RE | F NO. | UES/21-22/AAQM/6270-6278 | | | | |
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE,VILLAGE – BANKHETA, POST -MILUPARA. | | DATE OF SAMPLING DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | 01/10/2021 | to 25 | /10/2021 | |
| | | | | 02/10/2021 to 26/10/2021 01/11/2021 | | | |
| | | | | | | | DISTT RAIGARH (C.O |
| | SAMI | | | LE DETA | ILS | 4 | |
| MONITORING FOR | AMBIENT AIR QUALITY MON | TTORING | CUSTOMER REF. | NO. & DATE | | SRV/2122/0045, 24-JULY-2021 | |
| SAMPLING LOCATION | PIT OFFICE AREA, BANKHE | ra a | | | - | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE | COLLECTED BY | LABORATORY | CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERENCE | | | | | | |
| SAMPLE QUANTITY/PACKING | | FILTER PAPER (PM;0): 1X1 NO., FILTER PAPER (PM; 1): 1X1 NO. SO3: 30MLX1 NO. PVC BOTTLE, NO2: 30MLX1 NO. PVC BOTTLE RUBBER BLADDER: 1X1 NO. | | | | | |

| Parameter | Method Reference | NAAQM Standard |
|---|--|-------------------|
| Particulate Matter size less than 10 microns (FM _{LO}) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (PM2.5) | CPCBGuidelines VolI | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₃) | IS 5182 (Part 6): 2006 & CPCB Guidelines Vol1 | 80 |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 |
| Mercury (Hg) | EPA Method IO-05 | 122 |

| TEST REPORT | | | | | | | | | |
|---------------------|--|--|--------------------------|--------------------------|--------------|-------------------------|--|--|--|
| Date of Sampling | PM ₁₀ μg /m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m ³ | | | |
| 01.10.2021 | 60 | 28 | 14 | 28 | 0.5 | N.D. | | | |
| 04.10.2021 | 52 | 24 | 12 | 26 | 0.8 | N.D. | | | |
| 08,10,2021 | 48 | 26 | 18 | 20 | 0.6 | N.D. | | | |
| 11.10.2021 | 46 | 28 | 10 | 26 | 0.7 | N.D. | | | |
| 14.10.2021 | 42 | 22 | 16 | 22 | 0.4 | N.D. | | | |
| 18.10.2021 | 50 | 20 | 08 | 28 | 0.6 | N.D. | | | |
| 22.10.2021 | 52 | 28 | 12 | 25 | 0.5 | N.D. | | | |
| 25.10.2021 | 40 | 26 | 10 | 22 | 0.9 | N.D. | | | |

Terms & conditions

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01/11/2021

Test sample will be retained for 15 days after insur-of test report unless otherwise agreed with costs

his is for information as the party has asked for above outful

-End of the test report----

AUTHORIZED SIGNATORY

For ULTIMATE ENVIROLYTICAL SOLUTIONS



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Vame & Address Of The Contoner TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT NO | | UES/TR/21-22/04170 | | |
|---|--|---|---------------|--|------|---------------------------------|
| | | LAB RS | P NO | UES/21-22/AAQM/07477-7484 | | |
| | | DATE C | F SAMPLING | 01/11/2021 | to 2 | 7/11/2021 |
| | | DATE OF RECEIPT DATE OF REPORT DATE OF ANALYSIS | | 02/11/2021 to 29/11/2021 | | |
| | | | | 01/12/2021 START:02/11/2021 END:29/11/202 | | |
| | | | | | | EMD: 29/11/2021 |
| | | SAMPLE | DETAILS | - | | |
| MONITORING FOR | AMBIENT AIR QUALITY I | MONITORING | CUSTOMER REF. | REF. NO. & DATE | | /SRV/2122/0045, 24-JULY-2021 |
| SAMPLING LOCATION | PIT OFFICE AREA, BANK | KHETA | | | - | |
| DURATION OF SAMPLING | 24 MOURS | SAMPLE COLLECTED BY | | LABORATORY CHEMIS | | r |
| SAMPLING PROCEDURE | AS PER METHOD REFEREN | VCE | | 1 | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;o): SO:: 30MLX1 NO. PVC E RUBBER BLADDER: 1X1 I | OTTLE, NO: | | | | |

| Test Method and NAAQM Standard for Ambient Air Quality Monitoring | | | | | | | |
|---|---|-------------------|--|--|--|--|--|
| Parameter | Method Reference | NAAQM Standard | | | | | |
| Particulate Matter size less than 10 microns (PM ₁₈) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | | | | |
| Particulate Matter size less than 2.5 microns (PM2.5) | CPCBGuidelines Vol1 | 60 | | | | | |
| Sulphur Dioxide (SO ₃) | TS 5182 (Part 2): 2001, RA 2006 E CPCB Guidelines VolI | 80 | | | | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | | | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | | | | |
| Mercury (Hg) | EPA Method IO-5 | | | | | | |

| TEST REPORT | | | | | | | | | |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | | |
| 01.11.2021 | 62 | 30 | 16 | 30 | 0.6 | N.D. | | | |
| 06.11.2021 | 54 | 26 | 14 | 28 | 0.9 | N.D. | | | |
| 08.11.2021 | 50 | 28 | 16 | 22 | 0.8 | N.D. | | | |
| 13.11.2021 | 48 | 30 | 12 | 28 | 0.9 | N.D. | | | |
| 15.11.2021 | 44 | 24 | 18 | 24 | 0.6 | N.D. | | | |
| 20.11.2021 | 52 | 22 | 10 | 30 | 0.8 | N.D. | | | |
| 22.11.2021 | 54 | 26 | 14 | 26 | 0.6 | N.D. | | | |
| 27.11.2021 | 42 | 28 | 12 | 24 | 0.8 | N.D. | | | |

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-End of the test report---



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| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT | REPORT NO | | UES/TR/21-22/04913 | | |
|--|--|--------------------------------|--|--|--|--------------|-------------------|
| | | LAB RE | F NO | UES/21-22/AAQM/08745-08752 | | | |
| | | DATE C | F SAMPLING | 04/12/2021 | to 2 | 7/12/2021 | |
| | | DATE OF REPORT DATE OF REPORT | | 05/12/2021 to 28/12/2021 01/01/2022 | | | |
| | | | | | | | START: 05/12/2021 |
| | | | | | | SAMPLE | DETAILS |
| MONITORING FOR | AMBIENT AIR QUALITY) | MONITORING | CUSTOMER REF. | NO. & DATE | N/PO/SRV/2122/0045, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | PIT OFFICE AREA, BANG | CHETA | | | Dan. | 54-0071-5051 | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | | LABORATORY CHEMIST | | | |
| SAMPLING PROCEDURE | AS PER MUTHOD REFEREN | ACSE . | | Name of Street Control of Street | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;o): SO; SOMEXI NO. PVC B RUBBER BLADDER: IXI N | OTTLE, NO:: . | TER PAPER (PM _{2.8} 30MLX1 NO. PVC |): IXI NO. BOTTLE | | | |

| Parameter | Method Reference | NAAQM Standard |
|---|---|-------------------|
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (FM _{2.5}) | CPCB Guidelines VolI | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Fart 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* Mercury (Hg) | IS 5182(Part 10):1999, RA 2003 EPA Method IO-5 | 4.0 |

| TEST REPORT | | | | | | | | | |
|--|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|--|--|--|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ | | | |
| 04.12.2021 | 64 | 32 | 18 | 32 | 0.9 | N.D. | | | |
| 06.12.2021 | 56 | 28 | 16 | 30 | 0.8 | | | | |
| 11.12.2021 | 52 | 30 | 18 | 24 | 0.6 | N.D. | | | |
| 13.12.2021 | 50 | 32 | 14 | 30 | 1.000 (A.C.) | N.D. | | | |
| 18.12.2021 | 46 | 26 | 20 | | 0.8 | N.D. | | | |
| 20.12.2021 | 54 | | | 26 | 0.4 | N.D. | | | |
| THE RESERVE OF THE PARTY OF THE | | 24 | 12 | 32 | 0.9 | N.D. | | | |
| 25.12.2021 | 56 | 28 | 16 | 28 | 0.8 | N.D. | | | |
| 27.12.2021 | 44 | 30 | 14 | 26 | 0.9 | N.D. | | | |

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| Name 2 Address Of The Custon TO. | med. | REPORT NO | | UES/TR/21-22/05974 UES/21-22/AAQM/010284-010292 | | |
|--|---|---------------------------------|--|--|--|-----------------|
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | LAB RE | F NO | | | |
| | | DATE C | OF SAMPLING | 03/01/2022 | to 21 | 8/01/2022 |
| | | DATE C | OF RECEIPT | 04/01/2022 to 29/01/2022 | | |
| | | DATE OF REPORT DATE OF ANALYSIS | | 02 /02/2022 | | |
| | | | | START: 04/01/2022 END: 01/02 | | END: 01/02/2022 |
| | | SAMPLE | DETAILS | | | 520 July 199 |
| MONITORING FOR | AMBIENT AIR QUALITY | MONITORING | CUSTOMER REF. NO. & DATE | | N/PO/SRV/2122/0045, DID. 24-JULY-2021 | |
| SAMPLING LOCATION | PIT OFFICE AREA, BAN | KHETA | | | | |
| DURATION OF SAMPLING | 24 HOURS | SAMPLE COLLECTED BY | | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFEREN | NOR | | | | 1.11 |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (PM;s): SO ₂ : 30MLX1 NO. PVC E RUBBER BLADDER: 1X1 I | OTTLE, NO: | TER PAPER (PM _{2.5} 30MLX1 NO. PVC |): IXI NO. BOTTLE | | |

| Test Method and NA | AQM Standard for Ambient Air Quality M | onitoring |
|---|---|-------------------|
| Parameter | Method Reference | NAAQM Standard |
| Particulate Matter size less than 10 microns (PM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | CPCBGuidelines VolI | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* | IS 5182 (Part 10):1999, RA 2003 | 4.0 |
| Mercury (Hg) | EPA Method IO-5 | |

| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Hg ng/m³ |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|
| 03.01.2022 | 60 | 20 | 14 | 24 | 0.7 | N.D. |
| 07.01.2022 | 50 | 24 | 12 | 22 | 0.5 | N.D. |
| 10.01.2022 | 58 | 22 | 16 | 26 | 0.8 | N.D. |
| 14.01.2022 | 56 | 26 | 10 | 20 | 0.5 | N.D. |
| 17.01.2022 | 48 | 24 | 08 | 28 | 0.4 | N.D. |
| 21.01.2022 | 52 | 28 | 16 | 24 | 0.7 | N.D. |
| 24.01.2022 | 58 | 22 | 12 | 20 | 0.5 | N.D. |
| 28.01.2022 | 50 | 26 | 10 | 28 | 0.8 | N.D. |

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| Name & Address Of The Custo TO, | met. | REPOR | REPORT NO | | UES/TR/21~22/07921 | | |
|---|---|----------------|------------------|------------------------------|--------------------|-----------------|--|
| HINDALCO INDUSTRIES LIMITED, GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, | | LAB REF NO | | UES/21-22/AAQM/013099-013106 | | | |
| | | DATE (| OF SAMPLING | 01/02/2022 | | | |
| | | DATE (| F RECEIPT | 02/02/2022 to 26/02/2022 | | | |
| | | DATE OF REPORT | | 01/03/2022 | | | |
| DISTT RAIGARH | (C.G.) 496107 | DATE O | F ANALYSIS | START: 03/02 | 2/2022 | END: 01/03/2022 | |
| | | SAMPLE | DETAILS | | | | |
| MONITORING FOR | AMBIENT AIR QUALITY | MONITORING | CUSTOMER REF. | NO. 6 DATE | N/PO | /SRV/2122/0045, | |
| SAMPLING LOCATION | PIT OFFICE AREA, BAN | KHETA | | | DID. | 24-JULY-2021 | |
| DURATION OF SAMPLING | 24 HOURS | | COLLECTED BY | Z a mona mona | | | |
| SAMPLING PROCEDURE | AS PER METHOD REFERE | | TITLE BI | LABORATORY | CHEMIST | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (FM;s): SO: 30MLXI NO. PVC E RUBBER BLADDER: 1X1 I | IXI NO., FIL | TER PAPER (PM,) |): IXI NO. BOTTLE | | | |

| Parameter | Method Reference | NAAQM |
|--|--|-------------------|
| Particulate Matter size less than 10 microns (PM:0) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | Standard 100 - |
| Particulate Matter size less than 2.5 microns (PM2.5) | IS 5182 (Part 24): 2019CPCBGuidelines Vol1 | 60 |
| Sulphur Dioxide (SO ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 |
| Nitrogen Dioxide (NO2) | 15 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 |
| Carbon Monoxide (CO)* Mercury (Hg) | IS 5182(Part 10):1999, RA 2003 EPA Method IO-5 | 4.0 |
| | Total seasons and | |

| | TEST REPORT | | | | | |
|--|---------------------------------------|--|--------------------------|---|--------------|---|
| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ µg/m³ | CO* mg/m³ | Нд |
| 01.02.2022 | 68 | 22 | 14 | 28 | | ng/m |
| 04.02.2022 | 70 | 26 | 18 | 100000000000000000000000000000000000000 | 0.6 | N.D. |
| 07.02.2022 | 64 | 28 | | 20 | 0.8 | N.D. |
| 11.02.2022 | 68 | | 16 | 24 | 0.5 | N.D. |
| 14.02.2022 | 58 | 30 | 12 | 28 | 0.9 | N.D. |
| 18.02.2022 | Total Company | 28 | 08 | 22 | 0.7 | N.D. |
| Contract of the Contract of th | 56 | 24 | 14 | 28 | 0.2 | 100000000000000000000000000000000000000 |
| 21.02.2022 | 52 | 26 | 18 | 26 | | N.D. |
| 25.02.2022 | 60 | 28 | | 1000 | 0.6 | N.D. |
| emarks: * Duratio | | | 16 | 22 | 0.8 | N.D. |

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That payable left he retained by: M. Anticology.

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| Hame & Address Of The Circles | ner | REPORT NO | | UES/TR/21-22/08929 | | | |
|--|--|---------------------------------|---------------|--------------------------|--|---|--|
| TO, HINDALCO INDUSTRIES LIMITED, | | LAB REF NO | | UES/21-22/AAQM/014622 | | | |
| | | DATE O | F SAMPLING | 02/03/2022 | to 2 | 8/03/2022 | |
| GARE PALMA – IV/4, COAL MINE, VILLAGE – BANKHETA, POST -MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DATE C | F RECEIPT | 03/03/2022 to 29/03/2022 | | | |
| | | DATE OF REPORT DATE OF ANALYSIS | | 02/04/2022 | | | |
| | | | | START: 04/03/2022 1 | | END: 02/04/2022 | |
| | | SAMPLE | DETAILS | | | COLUMN TO SERVICE AND ADDRESS OF THE PERSON | |
| MONITORING FOR | AMBIENT AIR QUALITY MONITORING CUSTOMER REF | | CUSTOMER REF. | NO. & DATE | N/PO/SRV/2122/0045, DTD. 24-JULY-2021 | | |
| SAMPLING LOCATION | PIT OFFICE AREA, BAN | KHETA | | .15 | - | | |
| DURATION OF SAMPLING | 24 HOURS | 4 HOURS SAMPLE COLLECTED BY | | | LABORATORY CHEMIST | | |
| SAMPLING PROCEDURE | AS PER METHOD REFEREN | ACE | | | | | |
| SAMPLE QUANTITY/PACKING | FILTER PAPER (FM ₁₀): SO ₂ : 30mLX1 NO. PVC E RUBBER BLADDER: 1X1 | OTTLE, NO: | | | | | |

| Test Method and NA | AQM Standard for Ambient Air Quality Monito | oring | | |
|---|--|-------------------|--|--|
| Parameter | Method Reference | NAAQM Standard | | |
| Particulate Matter size less than 10 microns (FM ₁₀) | IS 5182 (Part 23): 2006 & CPCB Guidelines VolI | 100 | | |
| Particulate Matter size less than 2.5 microns (PM _{2.5}) | IS 5182 (Part 24): 2019CPCBGuidelines VolI | 60 | | |
| Sulphur Dioxide (80 ₂) | IS 5182 (Part 2): 2001, RA 2006 & CPCB Guidelines VolI | 80 | | |
| Nitrogen Dioxide (NO ₂) | IS 5182 (Part 6): 2006 & CPCB Guidelines VolI | 80 | | |
| Carbon Monoxide (CO)* | IS 5182(Part 10):1999, RA 2003 | 4.0 | | |
| Mercury (Hg) | EPA Method IO-5 | | | |

| Date of Sampling | PM ₁₀ μg/m ³ | PM _{2.5} μg/m ³ | SO ₂ µg/m³ | NO ₂ μg/m³ | CO* mg/m³ | Hg ng/m³ |
|---------------------|---------------------------------------|--|--------------------------|--------------------------|--------------|-------------|
| 02.03.2022 | 78 | 32 | 10 | 16 | 0.9 | N.D. |
| 07.03.2022 | 80 | 36 | 16 | 18 | 0.4 | N.D. |
| 11.03.2022 | 74 | 38 | 10 | 22 | 0.8 | N.D. |
| 14.03.2022 | 78 | 40 | 18 | 24 | 0.6 | N.D. |
| 18.03.2022 | 68 | 28 | 09 | 22 | 0.5 | N.D. |
| 21.03.2022 | 66 | 34 | 12 | 26 | 0.8 | N.D. |
| 25.03.2022 | 82 | 36 | 16 | 24 | 0.4 | N.D. |
| 28.03.2022 | 70 | 38 | 12 | 28 | 0.9 | N.D. |

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- * The report for publication, artification or as logal dispute is Subigino,
- Ther sample will be retained for 15 days after man-of but report unites without a agreed with manage.

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Annexure-4A

Fixed type of water sprinklers GP IV/5 coal mine









Annexure-5



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, COAL MINE, VILLAGE - BANKHETA, POST - MILUPARA, | | REPORT NO. LAB REF NO. DATE OF REPORT DATE OF SAMPLING | UES/TR/21-22/3519 UES/21-22/N/6340-6349 01/11/2021 28/10/2021 to 29/10/2021 |
|---|------------------------|---|--|
| DISTT RAIGARH | (C.G.) 496107 | SAMPLE DETAILS | 20/10/2022 20 20/20/2022 |
| MONITORING FOR | NOISE LEVEL MONITORING | | |
| CUSTOMER REF. NO. 4 | | 2 | |
| DATE | M/PO/SRV/2122/0049, D | TD.:24-JULY-2021 | |
| SAMPLING LOCATION | INSIDE COAL MINE & OUT | TSIDE COAL MINE (AS DESCRIE | BED BELOW) |
| SAMPLE COLLECTED BY | LABORATORY CHEMIST | | |
| SAMPLE QUANTITY/ PACKING | NOT APPLICABLE | | |

| | TI | EST REI | PORT | | | |
|----------------------------------|--------|---------|---------------|-------------|---------------|--|
| | 14 110 | RES | BULT | LIMIT (IND | USTRIAL ZONE) | |
| LOCATION | UNIT | DAY | NIGHT TIME | DAY TIME | NIGHT TIME | |
| OFFICE AREA, HILUPARA | dB(A) | 56 | 49 | | | |
| INCLINE AREA, MILUPARA | dB(A) | 60 | 50 | | | |
| BUNKER AREA, MILUPARA | dB(A) | 58 | 46 | | | |
| DG SET AREA, KONDKEL | dB(A) | 54 | 44 | 75 | 70 | |
| WEIGHBRIGE AREA, MILUPARA | dB(A) | 50 | 48 | 6554 | | |
| OFFICE AREA, NONDREL | dB(A) | 56 | 50 | | | |
| BUNKER AREA, KONDREL | dB(A) | 60 | 52 | | | |
| | | RES | SULT | LIMIT (RESI | DENTIAL ZONE) | |
| LOCATION | UNIT | | NIGHT TIME | | | |
| Outside Plant | | | | | | |
| SIDARPARA VILLAGE (GOVT. SCHOOL) | dB(A) | 49 | 40 | 55 | 45 | |
| HIL COLONY, MONUMEL | dB(A) | 42 | 39 | 55 | 45 | |
| HIL STAFF QUARTER, MILUPARA | d8(A) | 48 | 36 | | | |

REMARKS: RESULTS ARE AS ABOVE

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- > The report for publication, arbitration or as legal dispute is forbidden.
- > Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.

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| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, COAL MINE, VILLAGE - BANKHETA, POST - MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT NO. LAB REF NO. DATE OF REPORT DATE OF SAMPLING | REF NO. UES/21-22/N/07560-07569 OF REPORT 01/12/2021 | | | |
|---|------------------------|---|---|--|--|--|
| | | SAMPLE DETAILS | | | | |
| MONITORING FOR | NOISE LEVEL MONITORING | g . | | | | |
| CUSTOMER REF. NO. 6 DATE | M/PO/SRV/2122/0049, D | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | | | | |
| SAMPLING LOCATION | INSIDE COAL MINE & OUT | TSIDE COAL MINE (AS DESCRIE | MID BELOW) | | | |
| SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | | | |
| SAMPLE QUANTITY/ PACKING | NOT APPLICABLE | | | | | |

| | TI | EST REI | PORT | | | |
|----------------------------------|-------|-------------|---------------|-------------------------|---------------|--|
| | 13 | RES | SULT | LIMIT (INDUSTRIAL ZONE) | | |
| LOCATION | UNIT | DAY TIME | NIGHT TIME | DAY TIME | NIGHT TIME | |
| OFFICE AREA, MILUPARA | dB(A) | 54 | 48 | | | |
| INCLINE AREA, MILUPARA | dB(A) | 62 | 52 | | 70 | |
| BUNKER AREA, MILUPARA | dB(A) | 56 | 48 | | | |
| DG SET AREA, KONDKEL | dB(A) | 52 | 46 | 75 | | |
| WEIGHERIGE AREA, MILUPARA | dB(A) | 54 | 44 | | | |
| OFFICE AREA, KONDKEL | dB(A) | 58 | 52 | | | |
| BUNNER AREA, MONDREL | dB(A) | 62 | 50 | | | |
| | | RESULT | | LIMIT (RESI | DENTIAL ZONE) | |
| LOCATION | UNIT | DAY | NIGHT TIME | DAY TIME | NIGHT TIME | |
| Outside Plant | | | | | | |
| SIDARPARA VILLAGE (GOVT. SCHOOL) | dB(A) | 48 | 34 | 7727800 | | |
| HIL COLONY, MONDREL | dB(A) | 43 | 36 | 55 | 45 | |
| HIL STAFF QUARTER, MILUPARA | dB(A) | 46 | 40 | | | |

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.

Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer. This is for information as the party has asked for above test(s) only.

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

01 12 21 AUTHORIZED SIGNATORY

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, COAL MINE, VILLAGE - BANKHETA, POST - MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT NO. LAB REF NO. DATE OF REPORT | UES/TR/21-22/04949 UES/21-22/N/08826-08835 01/01/2022 | | | |
|---|------------------------|---|---|--|--|--|
| | | DATE OF SAMPLING | 23/12/2021 to 24/12/202 | | | |
| producer of the per- | T | SAMPLE DETAILS | | | | |
| MONITORING FOR | NOISE LEVEL MONITORING | 2 | | | | |
| CUSTOMER REF. NO. & DATE | M/PO/SRV/2122/0049, DI | D.:24-JULY-2021 | | | | |
| SAMPLING LOCATION | INSIDE COAL MINE & OUT | INSIDE COAL MINE & OUTSIDE COAL MINE (AS DESCRIBED BELOW) | | | | |
| SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | | | |
| SAMPLE QUANTITY/ PACKING | NOT APPLICABLE | | | | | |

| | T | EST RE | PORT | | | |
|----------------------------------|-------|--------|---------------|-------------------------|---------------|--|
| | | RE | SULT | LIMIT (IND | USTRIAL ZONE) | |
| LOCATION | UNIT | DAY | NIGHT TIME | DAY TIME | NIGHT TIME | |
| OFFICE AREA, MILUPARA | dB(A) | 56 | 50 | | | |
| INCLINE AREA, MILUPARA | dB(A) | 60 | 54 | | 70 | |
| BUNKER AREA, MILUPARA | dB(A) | 58 | 46 | | | |
| DG SET AREA, MONDREL | dB(A) | 54 | 48 | 75 | | |
| WEIGHBRIGE AREA, MILUPARA | dB(A) | 56 | 46 | 100 | | |
| OFFICE AREA, HONDREL | dB(A) | 54 | 50 | | | |
| BUNKER AREA, KONDKEL | dB(A) | 64 | 52 | | | |
| The second second | | RESULT | | LIMIT (RESIDENTIAL ZONE | | |
| LOCATION | UNIT | DAY | NIGHT TIME | DAY TIME | NIGHT TIME | |
| Outside Plant | | | | | | |
| SIDARPARA VILLAGE (GOVT. SCHOOL) | dB(A) | 46 | 36 | 55 | | |
| HIL COLONY, MONINEL | dB(A) | 42 | 38 | | 45 | |
| NIL STAFF QUARTER, MILUPARA | dB(A) | 48 | 42 | | | |

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden.
 Test sample will be retained for \$50 cm.

Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer. This is for information as the party has asked for allows test(s) only.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

01/01/2022

REVIEWED BY

-- End of the test report--



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Mame & Actives of The Gustamer TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, COAL MINE, VILLAGE - BANKHETA, POST - MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT NO. | UES/TR/21-22/06033 UES/21-22/N/010430-010439 | | |
|--|-----------------------|-----------------------------|---|--|--|
| | | DATE OF REPORT | 02/02/2022 | | |
| | | DATE OF SAMPLING | 24/01/2022 to 25/01/2022 | | |
| | | SAMPLE DETAILS | | | |
| MONITORING FOR | NOISE LEVEL MONITORIN | g | | | |
| CUSTOMER REF. NO. 6 DATE | M/PO/SRV/2122/0049, D | TD.:24-JULY-2021 | | | |
| SAMPLING LOCATION | INSIDE COAL MINE & OU | TSIDE COAL MINE (AS DESCRIE | BED BELOW) | | |
| SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | | |
| SAMPLE QUANTITY/ PACKING | NOT APPLICABLE | | | | |

| | TE | EST REF | PORT | | | |
|----------------------------------|------------|-------------|---------------|------------|------------------|--|
| | | RES | ULT | LIMIT (IND | USTRIAL ZONE) | |
| LOCATION | UNIT | DAY TIME | NIGHT TIME | DAY TIME | NIGHT TIME | |
| OFFICE AREA, MILUPARA | dB(A) | 50 | 46 | | | |
| INCLINE AREA, MILUPARA | dB(A) | 56 | 48 | | 70 | |
| BUNKER AREA, MILUPARA | dB(A) | 52 | 40 | cane: | | |
| DG SET AREA, KONDKEL | dB(A) | 64 | 44 | 75 | | |
| WEIGHBRIGE AREA, MILUPARA | dB(A) | 60 | 50 | | | |
| OFFICE AREA, KONDKEL | dB(A) | 52 | 46 | | | |
| BUNKER AREA, KONDKEL | dB(A) | 60 | 56 | | | |
| | - Annual - | RES | SULT LIMIT (R | | ESIDENTIAL ZONE) | |
| LOCATION | UNIT | DAY | NIGHT TIME | DAY TIME | NIGHT TIME | |
| Outside Plant | | | | | | |
| SIDARPARA VILLAGE (GOVT. SCHOOL) | dB(A) | 40 | 34 | 55 | 45 | |
| HIL COLONY, KONDEEL | dB(A) | 46 | 42 | 35 | 43 | |
| HIL STAFF QUARTER, MILUPARA | dB(A) | 42 | 36 | | | |

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 1 Sdays after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

End of the test report



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, COAL MINE, VILLAGE - BANKHETA, POST - MILUPARA, DISTT RAIGARH (C.G.) 496107 | | REPORT NO. LAB REF NO. DATE OF REPORT DATE OF SAMPLING | UES/TR/21-22/07909 UES/21-22/N/013057-013066 01/03/2022 25/02/2022 to 26/02/2022 | | | |
|---|---|---|---|--|--|--|
| | | SAMPLE DETAILS | | | | |
| MONITORING FOR | NOISE LEVEL MONITORING | 7 | | | | |
| CUSTOMER REF. NO. & DATE | M/PO/SNV/2122/0049, D | TD.:24-JULY-2021 | | | | |
| SAMPLING LOCATION | INSIDE COAL MINE & OUTSIDE COAL MINE (AS DESCRIBED BELOW) | | | | | |
| SAMPLE COLLECTED BY | LABORATORY CHEMIST | | | | | |
| SAMPLE GOANTITY/ PACKING | NOT APPLICABLE | | | | | |

| | T | EST RE | PORT | | | |
|----------------------------------|-------|--------|---------------|-------------------------|------------|--|
| | | RES | BULT | LIMIT (INDUSTRIAL ZONE) | | |
| LOCATION | UNIT | DAY | NIGHT TIME | DAY TIME | NIGHT TIME | |
| OFFICE AREA, MILUPARA | dB(A) | 55 | 42 | | | |
| INCLINE AREA, MILUPARA | dB(A) | 64 | 48 | | 70 | |
| BUNKER AREA, MILUPARA | dB(A) | 57 | 44 | | | |
| DG SET AREA, KONDEEL | dB(A) | 54 | 42 | 75 | | |
| WEIGHBRIGE AREA, MILUPARA | dB(A) | 59 | 52 | | | |
| OFFICE AREA, ROMDKWZ. | dB(A) | 56 | 44 | | | |
| BUMBER AREA, KONDKEL | dB(A) | 64 | 50 | | | |
| | 10.00 | RESULT | | LIMIT (RESIDENTIAL ZONE | | |
| LOCATION | UNIT | DAY | NIGHT TIME | DAY TIME | NIGHT TIME | |
| Outside Plant | | | | | | |
| SIDARPARA VILLAGE (GOVY. SCHOOL) | dB(A) | 51 | 38 | 22 | | |
| HIL COLONY, KONDREL | dB(A) | 53 | 33 | 55 | 45 | |
| HIL STAFF QUARTER, MILUPARA | dB(A) | 50 | 30 | | | |

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, urbitration or as legal dispute is forbidden.

Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer. This is for information as the party has asked for above test(s) only.

REVIEWED BY

Por ULTIMATE ENVIROLYTICAL SOLUTIONS

03 2022 AUTHORIZED SIGNATORY

End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| Name & Address of The Gustamer TO, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, COAL MINE, VILLAGE - BANKHETA, POST - MILUPARA, DISTT RAIGARH (C.G.) 496107 | | DATE OF SAMPLING | UES/TR/21-22/08949 UES/21-22/N/014652-014661 02/04/2022 28/03/2022 to 29/03/2022 | | |
|--|------------------------|----------------------------|---|--|--|
| DISTT KAIGARH | (C.G.) 496107 | SAMPLE DETAILS | 20/00/2022 60 23/03/2022 | | |
| MONITORING FOR | NOISE LEVEL MONITORING | | | | |
| CUSTOMER REF. NO. 6 DATE | M/PO/SRV/2122/0049, D1 | D.:24-JULY-2021 | | | |
| SAMPLING LOCATION | INSIDE COAL MINE & OUT | SIDE COAL MINE (AS DESCRIE | RED BELOW) | | |
| SAMPLE COLLECTED BY | LABORATORY CHEMIST | | Successful Medical | | |
| SAMPLE QUANTITY/ PACKING | NOT APPLICABLE | | | | |

| | TI | EST RE | PORT | hard I | | | |
|----------------------------------|-------|-------------|---------------|--------------------------|------------|--|--|
| LOCATION | | RE | SULT | LIMIT (INDUSTRIAL ZONE) | | | |
| | UNIT | DAY TIME | NIGHT TIME | DAY TIME | NIGHT TIME | | |
| OFFICE AREA, MILUPARA | dB(A) | 62 | 58 | | | | |
| INCLINE AREA, MILUPARA | dB(A) | 70 | 48 | | 70 . | | |
| BUNKER AREA, MILUPARA | dB(A) | 58 | 46 | | | | |
| DG SET AREA, KONDKEL | dB(A) | 60 | 50 | 75 | | | |
| WEIGHBRIGE AREA, MILUPARA | dB(A) | 64 | 58 | | | | |
| OFFICE AREA, KONDKEL | dB(A) | 66 | 52 | | | | |
| BUNKER AREA, KONDREL | dB(A) | 64 | 60 | | | | |
| | | RESULT | | RESULT LIMIT (RESIDENTIA | | | |
| LOCATION | UNIT | DAY TIME | NIGHT TIME | DAY TIME | NIGHT TIME | | |
| Outside Plant | | | | | | | |
| SIDARPARA VILLAGE (GOVT. SCHOOL) | dB(A) | 50 | 38 | | 72.00 | | |
| HIL COLONY, KONDROEL . | dB(A) | 54 | 42 | 55 | 45 | | |
| HIL STAFF QUARTER, MILUPARA | dB(A) | 52 | 40 | | | | |

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- > The report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15days after issue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above test(s) only.

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-End of the test report-

Annexure-6



HDD-272, Phase III - Near JP Chowk Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099 Ph: 0771 - 4027777 | Email: ultimatenviro@gmail.com

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| To, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, MILUPARA U/G COAL MINE, VILLAGE - MILUPARA, BLOCK-TAMNAR | | | Report No UES/TR/21-22/3520 Lab Ref No UES/21-22/W/6350 Date Of Sampling 28/10/2021 Date Of Receipt 29/10/2021 Date Of Report 01/11/2021 Date Of Analysis START: 29/10/2021 En | | | |
|--|--|-------------------|--|---------------|--|-----------------|
| DISTT RAIGARH | (C.G.) 496107 | SAMP | LE DETAILS | START: 29/ | 10/2021 | End: 01/11/2021 |
| Sample Type | | | Customer Ref. No. & Date | | M/PO/SRV/2122/0049, DTD::24-JULY-2021 | |
| Customer Sample ID | ETP INLET, KONDREL | | Sample Condition at Receipt | | Ok | |
| Packing Of Sample | J L X I SO. PVC CAN I L X I SO. PVC CAN I L X I SO. GLASS DOTTON | Sealed | Sample Collected 2 | y | Laborator | ry Chemist |
| Sampling Procedure IS:3025(PART-I):1967 RA 2003; APHA 22 th ED. 2021, 1060-B, 1-39 | | Quantity Received | | Approx. 5Ltr. | | |

| | TEST REPORT | | | | | | | |
|------------|---|-------|---|--|-----------|--|--|--|
| SR. NO. | PARAMETER | | | THE ENVIRONMENT (PROTECTION) RULES, 1988 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | |
| 1 | Colour | Hasen | APHA 22° Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | |
| 2 | Odour | - | APHA 22 nd Ed. 2012,2120-8,2-6 | Sou 6 of Annexure-I | Agreeable | | | |
| 3 | Temperature | *c | APRA 22" Ed. 2012, 2130-B, 2-13 | Shall not exceed 5°C above the receiving water temperature | 24.6 | | | |
| 4 | PR | - | APHA 22" Ed.2012,4500-H'-B,4-92 | 5.5 to 9.0 | 7.44 | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22°0 Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | |
| 6 | Total Suspended Solids | mg/L | APHA 22** Ed.2012,2540- D, 2-66 | 100 | 84.0 | | | |
| 7 | Dissolved Phosphate (as P) | ng/L | APHA 22 rd Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | |
| 8 | Fluoride (as F) | mg/L | APHA 22** Ed.2012,4500-F-BsD,4-B4 & B7 | 2.0 | 0.2 | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22** Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | | |
| 10 | Einc (as En) | mg/L | APHA 22 Ed. 2012, 3111-B. 3-18 | 5.0 | 0.11 | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | |
| 12 | Cadmium (as Cd) | ng/L | APHA 22" Ed.2012,3500-Cd. 3-105 | 2.0 | N.D. | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 rd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22" Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | |
| 16 | Total Chromium (as Cr) | mg/L | АРНА 22 ^{MS} Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/% | APNA 22 nd Ed.2012, 5520-B,5-17 | 250 | 164.0 | | | |
| 18 | Biochemical Oxygen Demand (BOD) | ng/S | IS 3025(Fart 44):1993,RA 2003 | 30 | 22.2 | | | |
| 1.9 | Oil & Grease | ng/L | IS 3025 (Part 391:1991, RA 2003 | 10.0 | N.D. | | | |
| 20 | Phenolic Compounds (as C _c H ₅ OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | |

Note: mg/lit.milligram per liter, N.D. - Not Detected.
REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, whitration or as legal dispute is feel.

Test sample will be retained for 15 days after issue of her repo

This is for information as the party has asked for above of

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FOR ULTIMATE ENVIROLYTICAL SOLUTIONS

11 21 AUTHORIZED SIGNATORY

-End of the test report--



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| to Name & Address Of The Confessor To, | | | Report No Lab Ref No | | UES/TR/21-22/04210 UES/21-22/W/07570 | | |
|---|---|---|-----------------------------|------------------------------|--|--|--|
| HINDALCO INDUST | RIES LIMITED, | A CHARLES AND A | | 24/11/20 | 21 | | |
| GARE PALMA - IV/5 | A - IV/5, | | Date Of Receipt | 25/11/20 | 21 | | |
| MILUPARA U/G CO | AL MINE, | Date Of Report | 01/12/20 | 01/12/2021 | | | |
| /ILLAGE - MILUPARA, BLOCK-TAMNAR DISTT RAIGARH (C.G.) 496107 | | | Date Of Analysis | START: 25/11/2021 End: 29/11 | | | |
| | | SAMP | LE DETAILS | | | | |
| Sample Type | HASTE HATER | | Customer Ref. No. & Date | | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | | |
| Customer Sample ID | ETP INLET, KONDREL | | Sample Condition at Receipt | | Ok . | | |
| Packing Of Sample | de 11 x 1 NO. PVC CAN le 11 x 1 NO. PVC CAN 11 x 1 NO. GLASH BOTTLE Sewled | | Sample Collected by | | Laboratory Chemist | | |
| Sampling Procedure | IS:3025(PART-I):1967 RA 2003; APRA 22 ED. 2021, 1060-B, 1-39 | | Quantity Received | | Approx. 5Ltr. | | |

| | TEST REPORT | | | | | | | | |
|------------|---|-------|---|--|-----------|--|--|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | | |
| 1 | Colour | Hazen | APHA 22 ⁵⁸ Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | | |
| 2 | Odour | - | APHA 22"Ed. 2012,2120-B,2-6 | See 6 of Anneque-1 | Agreeable | | | | |
| 3 | Temperature | 'c | дрна 22 nd Ed.2012,2130-8,2-13 | Shall not exceed 5°C shove the receiving water temperature | 24.8 | | | | |
| 4 | pit | - | APHA 22" Ed.2012,4500-H'-B,4-92 | 5.5 to 9.0 | 7.49 | | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 nd Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | | |
| 6 | Total Suspended Solids | mg/L | APHA 22 rd Ed.2012,2540- D, 2-66 | 100 | 88.0 | | | | |
| 7 | Dissolved Phosphate (as P) | ng/L | APHA 22 nd Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | | |
| 8 | Fluoride (as F) | mq/L | APHA 22" Ed. 2012, 4500-F-BaD, 4-84a87 | 2.0 | 0.3 | | | | |
| 9 | Lead (as Pb) | ng/L | APHA 22 rd Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | | | |
| 10 | Zinc (as En) | ng/L | APHA 22 rd Ed.2012,3111-B, 3-18 | 5.0 | 0.13 | | | | |
| 11 | Copper (as Cu) | ng/L | APHA 22° Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22 ^{cd} Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22" Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | |
| 14 | Arsenic (as As) | ng/L | APHA 22 ^{bl} Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | | |
| 15 | Selenium (am Se) | ng/L | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | | |
| 16 | Total Chromium (as Cr) | ng/L | APHA 22° Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | |
| 1.7 | Chemical Oxygen Demand (CCD) | ng/L | APRA 22 ⁵⁰ 8d+2012, 5520-8,5-17 | 250 | 160.0 | | | | |
| 18 | Biochemical Oxygen Demand (BCD) | ng/L | IS 3025(Part 44):1993, RA 2003 | 30 | 20.4 | | | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003 | 10.0 | N.D. | | | | |
| 20 | Phenolic Compounds (as C _s H _s OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | M.D. | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected. SULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or an inger emperor. That sample will be related for 15 steps ofter seven of that report tops This is for information as the garty has asked for above having policy.

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AUTHORIZED SIGNATORY

--End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The | Contomer | | Report No | UES/TR/2 | 1-22/0495 | 0 | |
|--|--|-------------------|--------------------|---------------|------------------------|--------------------------|--|
| To, | | | Lab Ref No | UES/21-2 | 2/W/08836 | | |
| HINDALCO INDUST | TRIES LIMITED, | | Date Of Sampling | 23/12/20 | 21 | | |
| GARE PALMA - IV/S | i, | | Date Of Receipt | 24/12/20 | 21 | | |
| MILUPARA U/G CO | AL MINE, | | Date Of Report | 01/01/20 | 1/2022 | | |
| VILLAGE - MILUPA DISTT RAIGARH | RA, BLOCK-TAMNAR (C.G.) 496107 | | Date Of Analysis | START: 24/ | 12/2021 | End: 28/12/2021 | |
| | | SAMP | LE DETAILS | | | | |
| Sample Type | WASTE WATER | | Customer Ref. No. | & Date | M/PO/SRV/ DTD.:24-2 | /2122/0049, NJLY-2021 | |
| Customer Sample ID | ETP INLET, MONDREL | | Sample Condition a | nt Receipt | ok | | |
| Packing Of Sample | 3 L X I NO. PVC CAN 1 L X I NO. PVC CAN 1 L X I NO. GLASS BOTTLE | Sealed | Sample Collected 1 | y. | Laboratoz | y Chemist | |
| Sampling Procedure 18:3025(PART-I):1987 RA 2003; APHA 22 ⁹⁰ ED. 2021, 1060-B, I-39 | | Quantity Received | | Approx. 5Ltr. | | | |

| | TEST REPORT | | | | | | | | |
|------------|---|-------|---|--|-----------|--|--|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1988 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | | |
| 1 | Colour | Basen | APHA 22 Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | | |
| 2 | Odour | + | AFHA 22"Ed. 2012,2120-B,2-6 | See 6 of Annexure-1 | Agreeable | | | | |
| 3 | Temperature | *c | APHA 22 nd Ed.2012,2130-8,2-13 | Shall not exceed 5'C above the receiving water temperature | 25.2 | | | | |
| 4 | pH | + | APHA 22" Ed.2012,4500-H"-B,4-92 | 5.5 to 9.0 | 7.51 | | | | |
| 5 | Total Residual Chlorine | ng/L | APHA 22 nd Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | | |
| 6 | Total Suspended Solids | ng/L | APHA 22 rd Ed.2012,2540- D, 2-66 | 100 | 86.0 | | | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22 rd Ed.2012,4500-P-G, 4-153 | 5.0 | N.D. | | | | |
| Ш | Fluoride (as F) | mg/L | APRA 22" Ed.2012,4500-F-B&D,4-84687 | 2.0 | 0.4 | | | | |
| 9 | Lead (as Fb) | mg/L | APHA 22 rd Ed.2012,3111-B, 3-18 | 0,1 | N.D. | | | | |
| 10 | Zinc (as Zn) | mg/L | APRA 22° Ed.2012,3111-B, 3-18 | 5.0 | 0.12 | | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 3,0 | N.D. | | | | |
| 12 | Cadmius (as Cd) | mg/L | APHA 22 Ed. 2012, 3500-Cd, 3-105 | 2.0 | N.D. | | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22° Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22" Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 st Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | | |
| 16 | Total Chromium (as Cr) | mg/1 | APMA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | AFHA 22 ^M Ed.2012, 5520-B,5-17 | 250 | 164.0 | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | ng/L | IS 3025(Part 44):1993,8A 2003 | 30 | 18,2 | | | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003 | 10.0 | N.D. | | | | |
| 20 | Phenolic Compounds (as C _c H _c OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMAINS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitrative or us larget mapuse as mostly writing the standard for 15 days after cause of test expert writing the standard for 15 days after cause of test expert writing the standard for white course course or the party bas subset for white course course or the standard for white course or the standard for white course or the standard for the standar

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

01/01/2022 AUTHORIZED SIGNATORY

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The | Caracterment | | Report No | UES/TR/2 | 1-22/0603 | 4 | |
|-----------------------------------|--|--------|--------------------|--------------------|------------------------|-------------------------|--|
| To, | | | Lab Ref No | UES/21-22/W/010440 | | | |
| HINDALCO INDUST | RIES LIMITED, | | Date Of Sampling | 24/01/20 | 022 | | |
| GARE PALMA - IV/5 | i, | | Date Of Receipt | 25/01/20 | 22 | | |
| MILUPARA U/G CO | AL MINE, | | Date Of Report | 02/02/20 | 22 | | |
| VILLAGE - MILUPA DISTT RAIGARH | RA, BLOCK-TAMNAR (C.G.) 496107 | | Date Of Analysis | START: 25/ | 01/2022 | END: 29/01/2022 | |
| | ALC: NO. OF STREET | SAMP | LE DETAILS | | | | |
| Sample Type | WASTE WATER | | Customer Ref. No. | & Date | M/PO/SRV/ DTD.:24-3 | /2122/0049, ULY-2021 | |
| Customer Sample ID | ETP INLET, KONDREL | | Sample Condition a | st Receipt | Ok- | | |
| Packing Of Sample | N L X 2 MO. PVC CAN L L X 1 MO. PVC CAN L L X 1 MO. GLASS BOTTLE | Sealed | Sample Collected 2 | ey . | Laborator | ry Chemist | |
| Sampling Procedure | IS:3025(PART-I):1987 APRA 22 ⁸⁰ ED. 2021, 10 | | Quantity Received | | Approx. 5 | iter. | |

| | TEST REPORT | | | | | | | | |
|------------|---|-------|---|--|-----------|--|--|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1988 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | | |
| 1 | Colour | Hazen | APHA 22"Ed. 2012,2120-8,2-6 | See 6 of Annexure-I | <1 | | | | |
| 2 | Odour | - | APHA 22thEd. 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable | | | | |
| 3 | Temperature | ·c | APHA 22 nd Ed.2012,2130-8,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.4 | | | | |
| 4 | pii | - | APHA 22" Ed.2012,4500-8"-B,4-92 | 5.5 to 9.0 | 7.46 | | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 nd Ed.2012,4500-C1-G, 4 - 69 | 1,0 | N.D. | | | | |
| 6 | Total Suspended Solids | ng/L | APHA 22" Ed.2012,2540- D, 2-66 | 100 | 88.0 | | | | |
| 7 | Dissolved Phosphate (as P) | ng/L | АРНА 22 ⁹⁸ Бd.2012,4500-F-C, 4-153 | 5.0 | N.D. | | | | |
| 8 | Fluoride (as F) | mg/L | APHA 22" Ed. 2012, 4500-F-B&D, 4-84&87 | 2.0 | 0.6 | | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22** Ed.2012,3111-8, 3-18 | 0.1 | N.D. | | | | |
| 10 | Zinc (as Zn) | mg/L | APHA 22 Ed. 2012, 3111-B, 3-16 | 5.0 | 0.13 | | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 Bd.2012,3114-C, 3-38 | 0.2 | N.D. | | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22° Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22°8 Ed.2012,3500-Cr-B,3-69 | 2,0 | N.D. | | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | арна 22 ⁵⁶ Bd.2012, 5520-B,5-17 | 250 | 168.0 | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 16.4 | | | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003 | 10.0 | N.D. | | | | |
| 20 | Phenolic Compounds (as C ₄ H ₅ OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

Terms & conditions

The report for publication, arbitration or an legal dispans is kerbidian. Test sample will be related for 15 days after leave of text report unless This is for information as the purty has asked for allows leading tible.

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For ULTIMATE ENVIROLYFICAL SOLUTIONS

02/02



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The C To, HINDALCO INDUST | | | Report No Lab Ref No Date Of Sampling | UES/TR/21-22/07910 UES/21-22/W/013067 24/02/2022 | | |
|--|--|----------|---|--|----------|--------------------------|
| GARE PALMA - IV/5 | | | Date Of Receipt | 25/02/20 | 22 | |
| MILUPARA U/G CO | | | Date Of Report | 01/03/20 | 22 | |
| | RA, BLOCK-TAMNAR | | Date Of Analysis | START: 25/ | 02/2022 | END: 01/03/2022 |
| DISTI KAIGAKII | (0.0.) | SAMPI | LE DETAILS | | | |
| Sample Type | MASTE WATER | | Customer Ref. No. | & Date | | /2122/0049, JULY-2021 |
| Customer Sample ID | ETP INLET, KONDKEL | | Sample Condition | at Receipt | Ole | |
| Packing Of Sample | 9 L M I NO. PVC CAM 1 L M I NO. PVC CAM 1 L M I NO. HLASS BOTTOM | Sealed | Sample Collected | by | Laborato | ry Chemist |
| Sampling Procedure | IS:3025(PART-I):1987 B APHA 22 ⁸⁵ ED. 2021, 100 | RA 2003; | Quantity Received | t | Approx. | 5Ltr. |

| | | | TEST REPORT | | ara- |
|------------|---|--------|---|--|--------------|
| SR. NO. | PARAMETER | | | THE ENVIRONMENT (PROTECTION) RULES, 1985 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT |
| - | Colour | Bazen | APHA 22 ⁵³ Ed. 2012,2120-B.2-6 | See 6 of Annexure-I | <1 |
| - | Odour | UME ON | APHA 22"Ed, 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable |
| 3 | Temperature | *c | APHA 22°0Ed.2012,2130-8,2-13 | Shall not exceed 5°C above the receiving water temperature | 24.8 |
| 4 | pH | - | APHA 22 nd Ed.2012,4500-H*-B,4-92 | 5.5 to 9.0 | 7.38 |
| 5 | Total Residual Chlorina | mg/L | арна 22 ^{м4} Ed.2012,4500-Cl-G, 4 - 69 | 1.0 | N.D. |
| 6 | Total Suspended Solids | ng/L | АРНА 22 nd %d,2012,2540- D, 2-66 | 100 | 82.0 |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22 nd Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. |
| 8 | Fluoride (as F) | mg/L | APHA 22 Ed. 2012, 4500-F-BAD, 4-84687 | 2.0 | |
| 9 | Lead (as Pb) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 0,1 | N.D. |
| 10 | Zinc (as Zn) | ng/L | APHA 22" Ed.2012,3111-B, 3-18 | 5.0 | N.D. |
| 11 | Copper (as Cu) | mg/L | APHA 22 ^{6d} Ed.2012,3111-B, 3-18 | 3.0 | N.D. |
| 12 | Cadmium (as Cd) | mg/L | APHA 22 nd Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. |
| 13 | Mercury (as Hg) | mg/L | APHA 22 rd Ed.2012,3112-B, 3-23 | 0.01 | N.D. |
| 14 | Arsenic (as As) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. |
| 15 | Selenium (as Se) | mg/L | APHA 22 ^{ME} Ed.2012,3114-C, 3-38 | 0.05 | B.D. |
| 16 | Total Chromium (as Cr) | ng/L | APHA 22" Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22 ^{tol} Ed.2012, 5520-B,5-17 | 250 | 184.0 |
| 18 | Biochemical Oxygen Demand (BOD) | ng/L | IS 3025(Part 44):1993,RA 2003 | 30 | 14.8 N.D. |
| 19 | Oil & Grease | mg/L | IS 3025 (Part 39):1991, RA 2003 | 10.0 | - |
| 20 | Phenolic Compounds (as C _c H _c OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1,0 | N.D. |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or as legal dispute is forbidden. Test papels will be retained for 15 days after lasse of feet report unit. This is for information as the party has subset for above lessing units.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

01/03/ AUTHORIZED SIGNATORY

REVIEWED BY

End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The I | Commercial | | Report No | The second secon | UES/TR/21-22/08950 | | |
|--|--|--------|---------------------------------|--|------------------------|--------------------------|--|
| To, | | | Lab Ref No | UES/21-2 | 2/W/01466 | 2 | |
| HINDALCO INDUST | | | Date Of Sampling | 28/03/20 | 22 | | |
| GARE PALMA - IV/5 | | | Date Of Receipt | 29/03/20 | 22 | | |
| MILUPARA U/G CO | AL MINE, | | Date Of Report | 02/04/20 | 22 | | |
| VILLAGE - MILUPA DISTT RAIGARH | RA, BLOCK-TAMNAR (C.G.) 496107 | | Date Of Analysis | START: 29/03/2022 END: 02/04/20 | | | |
| | | SAMP | LE DETAILS | | | Name of Street | |
| Sample Type | WASTE WATER | | Customer Ref. No. | & Date | M/PO/SRV/ DTD.:24-3 | /2122/0049, TULY-2021 | |
| Customer Sample ID | ETP INLET, KONDREL | | Sample Condition a | t Receipt | Ok | | |
| Packing Of Sample | J L X I NO. PVC CAN I L X I NO. PVC CAN I L X I NO. GLASS BOTTLE | Sealed | Sample Collected b | עי | Laborator | y Chemist | |
| Sampling Procedure IS:3025(PART-I):1987 RA 2003; APHA 22** ED. 2021, 1060-B, 1-39 | | | Quantity Received Approx. 5Ltr. | | Ltr. | | |

| | TEST REPORT | | | | | | | | |
|------------|------------------------------------|-------|---|--|-----------|--|--|--|--|
| SR. NO. | PARAMETER UNI | | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | | |
| 1 | Colour | Hazen | APHA 22**Ed. 2012,2120-B,2-6 | See 6 of Annexura-I | <1 | | | | |
| 2 | Odour | - | APHA 22°48d. 2012,2120-B,2-6 | See 6 of Annexura-I | Agreeable | | | | |
| 3 | Tomperature | ^c | APHA 22 ^M Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.6 | | | | |
| 4 | Ън | - | APHA 22 rd Ed.2012,4500-H'-B,4-92 | 5.5 to 9.0 | 7.42 | | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 rd Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | | |
| 6 | Total Suspended Solids | ng/L | APHA 22 rd Ed.2012,2540- D, 2-66 | 100 | 96.0 | | | | |
| 7 | Dissolved Phosphate (as P) | ng/L | APNA 22** Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | | |
| . 0 | Fluoride (as F) | mg/L | APHA 22" Ed.2012,4500-F-B&D,4-84&87 | 2.0 | 0.5 | | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | | | |
| 10 | Zinc (as Zn) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 5.0 | 0.18 | | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22°d Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | | |
| 12 | Cadmium (as Cd) | mq/L | APHA 22° Ed. 2012, 3500-Cd, 3-105 | 2.0 | N.D. | | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22md Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | |
| 17 | Chemical Oxygen Demand (COD) | ng/L | APHA 22 rd Ed.2012, 5520-B,5-17 | 250 | 192.0 | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 16.2 | | | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003 | 10.0 | N.D. | | | | |
| 20 | Phenolic Compounds (as Callade) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

REVIEWED BY End of the test reportAUTHORIZED SIGNATORY

For ULTIMATE ENVIROLYTICAL SOLUTIONS



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

Report No UES/TR/21-22/3521 To, Lab Ref No UES/21-22/W/6351 HINDALCO INDUSTRIES LIMITED, Date Of Sampling 28/10/2021 GARE PALMA - IV/5, Date Of Receipt 29/10/2021 MILUPARA U/G COAL MINE, Date Of Report 01/11/2021 VILLAGE - MILUPARA, BLOCK-TAMNAR Date Of Analysis START: 29/10/2021 DISTT. - RAIGARH (C.G.) 496107 End: 01/11/2021 SAMPLE DETAILS

| SR. NO. | PARAMETER | R UNIT | METHOD | OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A | |
|------------|----------------|--|--------|---------------------------|---|----|
| _ | | | TEST | REPORT | | |
| Samp. | ling Procedure | IS:3025(PART-I):198 APHA 22 ^{NO} ED. 2021, | | Quantity Received | Approx. SLtr. | |
| Pack. | ing Of Sample | J L X J MO. PVC CAN J L X J MO. PVC CAN J L X J WO. GLASS SOTTLE | Sealed | Sample Collected By | Laboratory Chemi | et |
| Cust | omer Sample ID | ETP OUTLEY, KONDKEL | | Sample Condition At Rece. | ipt Ok | |
| Samp. | Is Type | WASTE WATER | | Customer Ref. No. & Date | M/PO/SRV/2122/00 DTD.:24-JULY-202 | |

| | TEST REPORT | | | | | | | | | |
|------------|---|-------|---|--|-----------|--|--|--|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | | | |
| 2 | Odour | Hazen | APHA 22"Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | | | |
| 6 | Odour | - | APHA 22 rd Ed. 2012,2120-8,2-6 | See 6 of Annexure-I | Agreeable | | | | | |
| 3 | Temperature | 'c | APHA 22 ⁴⁴⁸ Ed.2812,2130-8;2-13 | Shall not exceed 5°C above the receiving water temperature | 24.2 | | | | | |
| 4 | PH | + | APHA 22 Ed.2012, 4500-H-B, 4-92 | 5.5 to 9.0 | 7.22 | | | | | |
| 5 | Total Residual Chlorine | mq/L | APHA 22 nd Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | | | |
| 6 | Total Suspended Solids | ng/L | APHA 22 ^{tht} Ed.2012,2540- D, 2-66 | 100 | 24.0 | | | | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHR 22 ^{md} Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | | | |
| 8 | Fluoride (as F) | mg/L | APHA 22" Ed.2012,4500-F-B&D,4-84 & 87 | 2.0 | 0.1 | | | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22" Ed.2012,3111-8, 3-18 | 0.1 | N.D. | | | | | |
| 10 | Zinc (as Zn) | ng/L | APHA 22" Ed.2012,3111-B, 3-18 | 5.0 | 0.06 | | | | | |
| 11 | Copper (as Cu) | mg/L | APRA 22 Ed. 2012, 3111-N. 3-18 | 3.0 | N.D. | | | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed.2012,3500-0d, 3-105 | 2.0 | N.D. | | | | | |
| 14 | Mercury (as Hg) | mg/L | APHA 22* Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | | |
| 15 | Arsenic (as As) Selenium (as Se) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | | | |
| 7000 | Total Chromium (as | mg/L | APHA 22 ^{HI} Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | | | |
| 16 | Cr) | ng/L | APRA 22" Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22°4 Ed.2012, 5520-B,5-17 | 250 | 64.0 | | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 46):1993,88 2003 | 30 | 6.8 | | | | | |
| 19 | Oil & Grease | mg/L | IS 3025 (Part J9):1991, RR 2003, | 10.0 | | | | | | |
| 20 | Phenolic Compounds (as C _s H ₅ OH) | ng/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | | | |

Note: mg/lit.:milligram per liter, N.D. - Not Detected.

REMARKS; RESULTS ARE AS ABOVE

Terms & conditions

Test sample will be retained for 18 days after issue of test report seems agreed with continue

This is for information as the purity has asked for stores course with O

Place P 01111/21 REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

----End of the test report---



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| to Nome & Address Of The I | and other | | Report No | UES/TR/21-22/04211 | | | |
|-----------------------------------|--|--------|--------------------|--------------------|-----------------------|-------------------------|--|
| To, | | | Lab Ref No | UES/21-2 | 2/W/07571 | | |
| HINDALCO INDUST | RIES LIMITED, | | Date Of Sampling | 24/11/20 | 21 | | |
| GARE PALMA - IV/5 | | | Date Of Receipt | 25/11/20 | 21 | | |
| MILUPARA U/G CO. | AL MINE, | | Date Of Report | 01/12/20 | 21 | | |
| VILLAGE - MILUPA DISTT RAIGARH | RA, BLOCK-TAMNAR (C.G.) 496107 | | Date Of Analysis | START: 25/ | 11/2021 | End: 29/11/2021 | |
| | | SAMP | LE DETAILS | | | | |
| Sample Type | WASTE WATER | | Customer Ref. No. | £ Date | M/PO/SRV/ DED.:24- | /2122/0049, ULY-2021 | |
| Customer Sample ID | ETP OUTLET, MONDREL | | Sample Condition A | t Receipt | Ok | | |
| Packing Of Sample | J E X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | Sealed | Sample Collected I | ly. | Laborator | ry Chemist | |
| Sampling Procedure | IS: 3025 (PART-I): 1987 B APHA 22 ED: 2021, 106 | | Quantity Received | | Approx. 5 | Ler. | |

| TEST REPORT | | | | | | | |
|-------------|------------------------------------|-------------------------------|---|--|-----------|--|--|
| SR. NO. | PARAMETER | PARAMETER UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | |
| 1. | Colour | Hazen | APHA 22 rd Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | |
| 2 | Odour | - | APHA 22 nd Ed. 2012,2120-B,2-6 | See 6 of Annesure-I | Agreeable | | |
| 3 | Temperature | *c | APHA 22 ^M Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 24.4 | | |
| 4 | pit | - | AFHA 22" Ed.2012,4500-H'-B,4-92 | 5.5 to 9.0 | 7.43 | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 rd Ed.2012,4500-Cl-G, 4 - 69 | 1.0 | N.D. | | |
| 6 | Total Suspended Solids | mg/L | APHA 22 rd Ed.2012,2540- D, 2-66 | 100 | 26.0 | | |
| 7 | Dissolved Phosphate (ss P) | mg/L | APHA 22 rd Ed.2012,4500-F-C, 4-153 | 5,0 | N.D. | | |
| 8 | Fluoride (as F) | mg/L | AFHA 22 rd Ed.2012,4500-F-B&D,4-84 & 87 | 2.0 | 0.2 | | |
| 9 | Lead (as Pb) | mg/L | APBA 22" Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | |
| 10 | Einc (as En) | Rig/L | APHA 22 ¹⁰ Ed.2012,3111-B, 3-18 | 5.0 | 0.07 | | |
| 11 | Copper (as Cu) | mg/L | APHA 22'" Ed.2012,3111-8, 3-18 | 3.0 | N.D. | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22 nd Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 rd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | |
| 14 | Arsenic (as As) | mg/L | AFHA 22 rd Ed.2012,3114-C, 3-38 | 0,2 | N.D. | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | |
| 16 | Total Chromium (as Cr) | mg/L | AFHA 22 rd Ed.2012,3590-Cr-B,3-69 | 2.0 | N.D. | | |
| 17 | Chemical Oxygen Demand (COD) | ng/L | APHA 22 nd Ed.2012, 5520-8,5-17 | 250 | 68.0 | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,FA 2003 | 30 | 7.2 | | |
| 19 | Oil & Grease | ng/L | IS 3025 (Part 39):1991, RA 2003, | 10.0 | N.D. | | |
| 20 | Phenolic Compounds (as C,H,OH) | ng/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | |

Note: mg/lit.:milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

REVIEWED BY

Terms & conditions

The report for publication, extension or an logal dispath is frethibles.

This paragle will be cutained for 15 stays after from of test report unloss of

This is the information as the party like maked for above touchs only.

-- End of the test report---

For ULTIMATE ENVIROLYTICAL SOLUTIONS

01/12/21 AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| To, HINDALCO INDUST GARE PALMA - IV/S MILUPARA U/G CO | RIES LIMITED, | | Report No Lab Ref No Date Of Sampling Date Of Receipt Date Of Report | UES/TR/21-22/04951 UES/21-22/W/08837 23/12/2021 24/12/2021 01/01/2022 START:24/12/2021 End:28/12/2021 | | |
|---|--|--------|--|---|--|--|
| VILLAGE - MILUPA DISTT RAIGARH | RA, BLOCK-TAMNAR (C.G.) 496107 | | Date Of Analysis | | | |
| | | SAMP | LE DETAILS | | | |
| Sample Type | WASTE HATER | | Customer Ref. No. & Date | | M/PO/SRV/2122/0049, DID.:24-JULY-2021 | |
| Customer Sample ID | ETF OUTLET, KONDKEL | | Sample Condition At Receipt | | Ok | |
| Packing Of Sample | J L N I NO. PVC CAN I L N I NO. PVC CAN I L N I NO. GLASS SCRIES | Sealed | f Sample Collected By | | Laboratory Chemist | |
| Sampling Procedure IS: 3025(PART-I):1987 RA 2003; APHA 22 ⁵⁰ ED. 2021, 1060-B, 1-39 | | | Quantity Received | | Approx. SLtr. | |

| TEST REPORT | | | | | | | |
|-------------|--|------------------------------|--|--|-----------|--|--|
| SR. NO. | PARAMETER | ARAMETER UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1985 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | |
| 1 | Colour | Hazen | APHA 22 ⁵⁴ Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1. | | |
| 2 | Odour | - | APHA 22 ^{nt} Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable | | |
| 3 | Temperature | 'c | APHA 22 ^{ml} Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 24.2 | | |
| 4 | pli | - | APHA 22" Ed. 2012, 4500-H'-B, 4-92 | 5.5 to 9.0 | 7.49 | | |
| 5 | Total Residual Chlorine | ng/L | APHA 22 ^{tot} Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | |
| 6 | Total Suspended Solids | ng/L | APHA 22° Ed.2012,2540- D, 2-66 | 100 | 28.0 | | |
| 7 | Dissolved Phosphate (as P) | ng/L | APHA 22 rd Ed.2012,4500-F-C, 4-153 | 5.0 | N.D. | | |
| B | Fluoride (as F) | ng/L | APHA 22 Ed. 2012, 4500-F-BaD, 4-84 & 87 | 2.0 | 0.3 | | |
| 9 | Lead (as Pb) | ng/L | APHA 22 th Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | |
| 10 | Zinc (as Zn) | mg/L | APHA 22 ^{MU} Ed.2012,3111-B, 3-18 | 5.0 | 0.08 | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | |
| 14 | Arsenic (as As) | mg/L | APHA 22° Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | |
| 15 | Selenium (as So) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22 ^{ml} Ed.2012, 5520-B,5-17 | 250 | 64.0 | | |
| 16 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 6.4 | | |
| 19 | Oil & Grease | mg/L | IS 3025(Pert 39):1991,RA 2003, | 10.0 | N.D. | | |
| 20 | Phenolic Compounds(as C ₄ H ₄ OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1,0 | N.D. | | |

Note: mg/lit.:milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The report for publication, arbitrarion or as logal impute in humbles.

 Text energie will be retained for 15 days after recent of real report agricult difference represed with this is for softenmation as the party has solved for about legit 2 page.

OTTOT REVIEWED BY For ULTIMATE ENVIROLYTICAL SQLUTIONS

AUTHORIZED SIGNATORY 01 20

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Hame & Address Of The I | Constanter Constantes | | Report No | UES/TR/2 | ES/TR/21-22/06035 | | |
|-----------------------------------|---|--------|-----------------------------|-------------------------------|--|------------|--|
| To, | | | Lab Ref No | UES/21-22/W/010441 | | | |
| HINDALCO INDUST | RIES LIMITED, | | Date Of Sampling | 24/01/20 | 22 | | |
| GARE PALMA - IV/5 | i, | | Date Of Receipt | 25/01/20 | 22 | | |
| MILUPARA U/G CO | AL MINE, | | Date Of Report | 02/02/20 | 22 | | |
| VILLAGE - MILUPA DISTT RAIGARH | RA, BLOCK-TAMNAR (C.G.) 496107 | | Date Of Analysis | START: 25/01/2022 END: 29/01, | | | |
| | | SAMP | LE DETAILS | 10-0- | | | |
| Sample Type | WASTE WATER | | Customer Ref. No. & Date | | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | | |
| Customer Sample ID | ETP CUTLET, KONDKEL | | Sample Condition At Receipt | | Ok | | |
| Packing Of Sample | F L X 1 MO. PYC CAN 1 L X 1 MO. PYC CAN 1 L X 1 MO. GLASS SOTTLE | Sealed | Sample Collected By | | Laboratos | ry Chemist | |
| Sampling Procedure | IS:3025(PART-I):1987 RA 2003; APRA 22 ²⁰ ED. 2021, 1060-B, 1-39 | | Quantity Received | | Approx. 5Ltr. | | |

| | TEST REPORT | | | | | | | |
|------------|------------------------------------|-------|---|--|-----------|--|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1986 (SCHEDULE-VI) PART-A INLAND SURFACE WATER | RESULT | | | |
| 1 | Colour | Hazen | APHA 22"Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | |
| 2 | Odour | * | APHA 22°5Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable | | | |
| 3 | Temperature | *c | APHA 22**Ed.2012,2130-8,2-13 | Shall not exceed 5°C above the receiving water temperature | 24.8 | | | |
| 4 | pR | 100 | APHA 22* Ed.2012,4500-H'-B,4-92 | 5.5 to 9.0 | 7.56 | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 ⁶⁸ Bd.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | |
| 6 | Total Suspended Solids | ng/L | APHA 22 ^{s8} Ed.2012,2540- D, 2-66 | 100 | 26.0 | | | |
| 7 | Dissolved Phosphate (as P) | ng/L | APHA 22** Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | |
| 8 | Fluoride (as F) | mg/L | APHA 22 ⁶⁸ Ed.2012,4500-F-B&D,4-84 & 87 | 2.0 | 0.4 | | | |
| 9. | Load (as Pb) | mg/L | APHA 22 rd Ed.2012,3111-B, 3-10 | 0.1 | N.D. | | | |
| 10 | Einc (as En) | mg/L | APHA 22 ^{ml} Ed.2012,3111-B, 3-18 | 5.0 | 0.09 | | | |
| 11 | Copper (as Cu) | ing/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | |
| 13 | Mercury (as Hg) | mg/L | АРИА 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | |
| 14 | Arsenic (as As) | mg/% | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 th Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | |
| 16 | Total Chromium (as Cr) | mg/1 | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22 nd Ed.2012, 5520-B,5-17 | 250 | 68.0 | | | |
| 18 | Biochemical Oxygen Demand (BCO) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 6.2 | | | |
| 19 | 011 & Grease | mg/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | | |
| 20 | Phenolic Compounds (as C,H,OH) | mg/S | IS 3025(Part 43):1992,PA 2003 | 1.0 | N.D. | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE Terms & conditions

62/62

REVIEWED BY

The report for publication, arbitration or an legal dispute in forbidden.

Tost aample will be retained for 15 days other leave of lest report unbide of

This is for information on the party has autod for above trestal only.

AUTHORIZED SIGNATORY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| To Name & Address Of The C | Cuntamer | | Report No UES/TR/21-22/07911 Lab Ref No UES/21-22/W/013068 | | | |
|--|--|--------|--|------------|--|-----------------|
| HINDALCO INDUST | RIES LIMITED. | | Date Of Sampling | | | |
| GARE PALMA - IV/5 | | | Date Of Receipt | 25/02/20 | 22 | |
| MILUPARA U/G CO. | | | Date Of Report 01/03/2022 | | 22 | |
| | RA, BLOCK-TAMNAR | | Date Of Analysis | START: 25/ | 02/2022 | END: 01/03/2022 |
| | | SAMP | LE DETAILS | | | 4 |
| Sample Type | HASTE WATER | | Customer Ref. No. & Date | | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | |
| Customer Sample ID | ETP OUTLET, KONDKEL | | Sample Condition At Receipt | | Ók | |
| The state of the s | 3 L X 1 NO. PVC CAN 1 L X I NO. PVC CAN | Sealed | Sample Collected | Ру | Laboratory Chemist | |
| Packing Of Sample | I L X I WO. GLASS BOTTLE | | | | | |

| TEST REPORT | | | | | | | |
|---------------|------------------------------------|-------------------------------|--|--|-----------|--|--|
| SR. PARAMETER | | PARAMETER UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | |
| 1 | Colour | Hazen | APHA 22"ded. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | |
| 2 | Odour | - | AFHA 2200Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable | | |
| 3 | Temperature | *c | арна 22 ^м вd.2012,2130-8,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.2 | | |
| 4 | pit | - | APHA 22" Bd. 2012, 4500-H'-B, 4-92 | 5.5 to 9.0 | 7.62 | | |
| 5 | Total Residual Chlorine | ng/L | APHA 22° Ed. 2012, 4500-C1-G, 4 - 69 | 1.0 | N.D. | | |
| 6 | Total Suspended Solids | mg/L | APHA 22 ^{eq} Ed.2012,2540- D, 2-66 | 100 | 22.0 | | |
| 7 | Dissolved Phosphate | mg/L | APHA 22 ^{NI} Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | |
| 8 | Fluoride (as F) | mg/L | APHA 22 rd Ed.2012,4500-F-B6D,4-84 & 87 | 2.0 | 0.3 | | |
| g. | Lead (as Pb) | mq/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | |
| 10 | Zino (as Zn) | ng/L | APHA 22° Ed.2012,3111-B, 3-18 | 5.0 | 0.08 | | |
| 11 | Copper (as Cu) | ng/L | APHA 22" Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | |
| 12 | Cadmium (as Cd) | ng/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | |
| 13 | Mercury (as Hg) | mg/L | APRA 22" Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | |
| 14 | Arsenic (as As) | ng/L | APRA 22 ^{ed} Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 th Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | |
| 16 | Total Chronium (as Cr) | mg/L | APHA 22 nd Ed.2012,3500-Cr-B,3~69 | 2.0 | N.D. | | |
| 17 | Chemical Oxygen Demand (CCD) | mg/L | APHA 22 nd Ed.2012, 5520-B,5-17 | 250 | 54.0 | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 8.4 | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | |
| 20 | Phenolic Compounds (as C.H.OH) | ng/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

Terms & conditions

01/03/

REMARKS: RESULTS ARE AS ABOVE

The report for authoration, whiteallon or as legal dispute in forbible

Test sample will be retained for 15 days ofter issue of test report unless otherwise agreed with contorner

This is for information as the party has asked for shove tearly chief.

REVIEWED BY End of the test report-

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

Formet No.: UES/FORM/09



HDD-272, Phase III - Near JP Chowk Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099 Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The : | Eve Dianer | | Report No | and the second s | ES/TR/21-22/08951 | | |
|-----------------------------------|---|--------|-----------------------------|--|--|-----------|--|
| | 2010-212-000028 | | Lab Ref No | UES/21-2 | 2/W/01466 | 3 | |
| HINDALCO INDUST | rries Limited, | | Date Of Sampling | 28/03/20 | 22 | 9111 | |
| GARE PALMA - IV/5 | i, | | Date Of Receipt | 29/03/20 | 22 | | |
| MILUPARA U/G CO | AL MINE, | | Date Of Report | 02/04/20 | 02/04/2022 | | |
| VILLAGE - MILUPA DISTT RAIGARH | RA, BLOCK-TAMNAR (C.G.) 496107 | | Date Of Analysis | START: 29/03/2022 END: 02/0 | | | |
| 73.5 | | SAMP | LE DETAILS | | | | |
| Sample Type | WASTE WATER | | Customer Ref. No. & Date | | M/PO/SRV/2122/0049, DID.:24-JULY-2021 | | |
| Customer Sample ID | ETP OUTLET, KONDKEL | | Sample Condition At Receipt | | Ok | | |
| Packing Of Sample | J L X I NO. PVC CAN I L X I NO. PVC CAN I L X I NO. GLASS BOTTLE | Sealed | Sample Collected E | By Laboratory Chemist | | y Chemist | |
| Sampling Procedure | IS:3025(PART-I):1987 RA 2003; APHA 22 ⁵⁰ ED. 2021, 1060-B, 1-39 | | Quantity Received | | Approx. 5Ltr. | | |

| TEST REPORT | | | | | | | |
|-------------|---|---------------------|---|--|-----------|--|--|
| SR. NO. | PARAMETER | UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1988 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | |
| 1 | Colour | Hazen | APHA 22°Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | |
| 2 | Odour | - | APHA 22 ⁵⁶ Ed. 2012,2120-8,2-6 | See 6 of Annexure-1 | Agreeable | | |
| 3 | Temperature | 'c | APRA 22"Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.6 | | |
| 4 | pH | ~ | APHA 22 nd Ed.2012,4500-H°-B,4-92 | 5.5 to 9.0 | 7.24 | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 nd Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | |
| 6 | Total Suspended Solids | mg/L | APHA 22 ^{tst} Ed.2012,2540- D, 2-66 | 100 | 18.0 | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22 nd Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | |
| 8 | Fluoride (as F) | mg/L | APHA 22 ^{se} Ed.2012,4500-F-84D,4-84 & 87 | 2.0 | 0.2 | | |
| 9 | Lead (as Pb) | mg/L | APRA 22" Ed.2012,3111-B, 3-18 | 0,1 | N.D. | | |
| 10 | Einc (as En) | ng/L | APHA 22** Ed.2012,3111-B, 3-18 | 5.0 | 0.12 | | |
| 11 | Copper (as Cu) | ng/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | |
| 12 | Cadmium (as Cd) | mg/L | AFHA 22" Ed. 2012, 3500-Cd, 3-105 | 2.0 | N.D. | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22" Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | |
| 16 | Total Chronium (as Cr) | mg/L | APHA 22° Ed.2012,3500-Cr-8,3-69 | 2.0 | N.D. | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22** Ed.2012, 5520-8,5-17 | 250 | 64.0 | | |
| 16 | Biochemical Oxygen Demand (BOD) | ng/L | IS 3025(Part 44):1993,RA 2003 | 30 | 9.6 | | |
| 19 | Oil & Grease | ng/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | |
| 20 | Phenolic Compounds (as C ₆ H ₅ OH) | mg/L | IS 3025(Part 43):1992,8A 2003 | 1.0 | N.D. | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

02/04/2

- > The report for problection, whiteston or as legal dispute is furbidden.
- First number will be retained for 15 days after tissue of test report unless otherwise agreed with customer.

This is for information as the party has asked for above seeigs) only.

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

Annexure-6A

Photographs of Treatment facilities





SETTLING POND NO - 5



Effluent Treatment Plant - Kondkel - 200 Cum /Hrs X 2



Water Treatment Plant (WTP) – Kondkel – 5 X 5 Cum / Hrs



Reverse Osmosis Plant (RO Plant) - Kondkel 2 x 2 Cum/Hrs

Annexure – 6A



Reverse Osmosis Plant (RO Plant) – Milupara – 5 Cum / Hrs



Iron Removal Plant (IRP Plant) – Milupara – 5 Cum / Hrs



Annexure-6AA



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Nemo & Address Of The Customer | |
|-----------------------------------|-------|
| To, | |
| HINDALCO INDUSTRIES LIMITE | D, |
| GARE PALMA - IV/5, | |
| MILUPARA U/G COAL MINE, | |
| VILLAGE - MILUPARA, BLOCK-T | AMNAR |
| DISTT RAIGARH (C.G.) 496107 | 7 |

| Report No | UES/TR/21-22/3522 | | | |
|------------------|-------------------|-----------------|--|--|
| Lab Ref No | UES/21-22/W/6352 | | | |
| Date Of Sampling | 28/10/2021 | | | |
| Date Of Receipt | 29/10/2021 | | | |
| Date Of Report | 01/11/2021 | | | |
| Date Of Analysis | START: 29/10/2021 | End: 01/11/2021 | | |

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

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| SAMPLE DETAILS | | | | | | | | | |
|--------------------|--|--------|-----------------------------|--|--|--|--|--|--|
| Sample Type | WASTE WATER | | Customer Ref. No. 6 Date | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | | | | | |
| Customer Sample ID | STP INLET, PORTACABIN | | Sample Condition At Receipt | ok | | | | | |
| Packing Of Sample | 3 L X I WO. PVC CAN I L X I WO. PVC CAN I L X I WO. GLASS ROTTLE | Sealed | Sample Collected By | Laboratory Chemist | | | | | |
| Sampling Procedure | IS:3025(PART-I):1987 RA APHA 22 ⁸⁰ ED. 2021, 1060 | | Quantity Received | Approx. 5Ltr. | | | | | |

| TEST REPORT | | | | | | | |
|-------------|------------------------------------|---------------------|--|--|-----------|--|--|
| SR. NO. | PARAMETER | UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | |
| 1 | Colour | Hazen | APHA 22" Ed. 2012,2120-8,2-6 | See 6 of Annexure-I | <1 | | |
| 2 | Odour | - | APHA 22 nd Ed. 2012,2120-8,2-6 | See 6 of Annexyre-I | Agreeable | | |
| 3 | Temperature | te: | APHA 22 rd Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 26.4 | | |
| 4 | pli | - | APHA 22" Ed.2012,4500-H'-H,4-92 | 5.5 to 9.0 | 7.40 | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22** Ed.2012,4500-Cl-G, 4 - 69 | 1.0 | N.D. | | |
| 6 | Total Suspended Solids | mg/L | APHR 22** Ed.2012,2540- D, 2-66 | 100 | 26.0 | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22** Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | |
| 8. | Fluoride (as F) | mg/L | APHA 22ml Ed.2012,4500-F-B&D,4-84 & 87 | 2.0 | 0.2 | | |
| 9 | Lead (as Pb) | mg/L | APHA 22 rd Ed.2012,3111-8, 3-18 | 0.1 | N.D. | | |
| 10 | Zinc (as Zn) | ng/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 5.0 | 0.16 | | |
| 11 | Copper (as Cu) | mg/L | APHA 22" Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed. 2012, 3500-Cd, 3-105 | 2.0 | N.D. | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 ^{NT} Ed. 2012, 3112-B, 3-23 | 0.01 | N.D. | | |
| 1.4 | Arsenic (as As) | mg/L | APHA 22 th Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | |
| 15 | Selenium (as Se) | mg/L | APHA 22" Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | |
| 1,6 | Total Chromium (as Cr) | mg/L | APHA 22 ^{ed} Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22 nd Ed.2012, 5520-B,5-17 | 250 | 174.0 | | |
| 18 | Biochemical Oxygen Demand (BOD) | ng/L | IS 3025(Part 44):1993,RA 2003 | 30 | 26.2 | | |
| 19 | Oil & Grease | mg/L | IS 3025 (Part 39):1991, BA 2003, | 10.0 | N.D. | | |
| 20 | Phenolic Compounds (as CoHsON) | ng/L | IS 3025(Part 43):1992,8A 2003 | 1.0 | N.D. | | |

Note: mg/lit.:milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

REVIEWED BY

Terms & conditions

The report for publication, arbitration or as legal dispute in fundada

Test nample will be intained for 18 skys after verse of test report the Vitin in for intermation as the party has asked for above topped the second

--End of the test report----



HDD-272, Phase III - Near JP Chowk Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099 Ph: 0771 - 4027777 I Email: ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| To, HINDALCO INDU | STRIES LIMITED, | | Report No Lab Ref No Date Of Sampling | UES/TR/21-22/04212 UES/21-22/W/07572 24/11/2021 25/11/2021 01/12/2021 START:25/11/2021 End:29/11/202 | | |
|--|--|-----------------------------|---|---|--------------------|--|
| GARE PALMA - IV | | | Date Of Receipt | | | |
| MILUPARA U/G C | TOTAL WINDOWS | | Date Of Report | | | |
| DISTT RAIGAR | ARA, BLOCK-TAMNAR H (C.G.) 496107 | - | Date Of Analysis | | | |
| | | SAMP | LE DETAILS | | | |
| Sample Type | WASTE WATER | Customer Ref. No. & Date | | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | | |
| Customer Sample ID | STP INLEY, PORTACABIN | Sample Condition At Receipt | | Ok: | | |
| Packing Of Sample | F L X 1 MG. PVC CAN I L X 1 MG. PVC CAN I L X 1 MG. GLASS SOTTLE | Sealed | Sample Collected 1 | 9y | Laboratory Chemist | |
| Sampling Procedure IS:3025(PART-I):1987 RA 2003; APHA 22 th ED. 2021, 1060-B, 1-39 | | | Quantity Received | | Approx. 5Ltr. | |

| TEST REPORT | | | | | | | |
|-------------|------------------------------------|-------|---|--|----------|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1988 (ECHEOULE-VI) PART-A INLAND SURFACE WATER | RESULT | | |
| 1 | Colour | Hazen | APHA 22°Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1. | | |
| 2 | Odour | - | APHA 22 Ed. 2012,2120-B,2-6 | See 6 of Annexure-3 | Agreeabl | | |
| 3 | Temperature | *c | арна 22 ^м вd.2012,2130-в,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.6 | | |
| 4 | pii | - | APHA 22" Ed.2012,4500-H*-B,4-92 | 5.5 to 9.0 | 7.47 | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 nd Ed.2012,4500-C1-G, 4 - 69 | 1.0 | W.D. | | |
| 6 | Total Suspended Solids | mg/L | AFHA 22 nd Ed.2012,2540- D, 2-66 | 100 | 28.0 | | |
| 7 | Dissolved Phosphate (as F) | mg/L | APNA 22 rd Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | |
| 8 | Fluoride (se F) | mg/L | APHA 22 nd Ed.2012,4500-F-B&D,4-84 & 87 | 2.0 | 0.5 | | |
| 9 | Lead (as Pb) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | |
| 10 | Zinc (as En) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 5.0 | 0.17 | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 st Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | |
| 12 | Cadmium (as Cd) | mg/L | AFHA 22" Ed. 2012, 3500-Cd, 3-105 | 2.0 | N.D. | | |
| 13 | Mercury (as Hg) | mg/L | APNA 22" Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | |
| 15 | Selenium (as Se) | mg/L | APHA 22° Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | АРНА 22 nd Ed.2012, 5520-B,5-17 | 250 | 172.0 | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 24.1 | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | |
| 20 | Phenolic Compounds (as C.H.OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The import for publication, artification or an logal dispute is hobbidden.

Final asympto will be estained for 15 days after locus of test report unless differences segred with at

This is for information as the party has suited for above tostics only.

01 12 21 AUTHORIZED SIGNATORY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

REVIEWED BY

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The C To, | | | Report No Lab Ref No | UES/TR/21-22/04952 UES/21-22/W/08838 | | | |
|--|--|-----------------------------|-------------------------|--|--------------------|--|--|
| | STRIES LIMITED, | | Date Of Sampling | 23/12/2021 24/12/2021 | | | |
| GARE PALMA - IV | | | Date Of Receipt | | | | |
| MILUPARA U/G C | | | Date Of Report | 01/01/2022 START: 24/12/2021 End: 28/ | | | |
| DISTT RAIGAR | ARA, BLOCK-TAMNAF H (C.G.) 496107 | • | Date Of Analysis | | | End: 28/12/2021 | |
| | | SAMP | LE DETAILS | | | | |
| Sample Type | naple Type WASTW WATER | | | Customer Ref. No. & Date | | M/PO/SRV/2122/0049, DTD::24-JULY-2021 | |
| Customer Sample ID | STP INLET, PORTACABIN | Sample Condition At Receipt | | Ok | | | |
| Packing Of Sample | 5 5 M 1 MO. PPC CAS 1 L M 1 MO. PPC CAS 1 L M 1 MO. GLASS BOTTLE | Sealed | Sample Collected By | | Laboratory Chemist | | |
| Sampling Procedure IS:3025(PART-I):1987 RA 2003; APHA 22 th ED. 2021, 1060-B, 1-39 | | | Quantity Received | | Approx. SLtr. | | |

| TEST REPORT | | | | | | | |
|-------------|------------------------------------|---------------------|---|--|-----------|--|--|
| SR. NO. | PARAMETER | UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1886 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | |
| 1 | Colour | Bazen | APHA 22"Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | |
| 2 | Odour | - | AFHA 22 rd Ed. 2012,2128-8,2-6 | See 6 of Annexure-I | Agreeable | | |
| 3 | Temperature | °c | APHA 22 rd Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.1 | | |
| 4 | pli | - | APHA 22" Ed.2012,4500-H'-B,4-92 | 5.5 to 9.0 | 7.49 | | |
| 5: | Total Residual Chlorine | mg/L | APHA 22 ^{nf} Ed.2012,4500-C1-G, 4 - 69 | 1,0 | N.D. | | |
| 6 | Total Suspended Solids | ng/L | APHA 22 rd Ed.2012,2540- b, 2-66 | 100 | 34.0 | | |
| 7 | Dissolved Phosphate (as P) | ng/L | APHA 22 th Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | |
| B | Fluoride (as F) | ng/L | APHA 22 nd Ed.2012,4500-F-BaD,4-84 a | 2.0 | 0.3 | | |
| 9 | Lead (as Pb) | ng/L | APRA 22" Ed. 2012, 3111-B, 3-18 | 0.1 | N.D. | | |
| 10 | Zinc (as Zn) | mg/L | APRA 22" Ed.2012,3111-B, 3-18 | 5.0 | 0.10 | | |
| 11 | Copper (as Cu) | mg/L | APHA 22° Ed. 2012, 3111-B, 3-18 | 3.0 | N.D. | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 6d.2012,3112-B, 3-23 | 0.01 | N.D. | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 st Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | |
| 15 | Selenium (as Se) | mg/L | APHA 22" Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | |
| 16 | Total Chronium (as Cr) | ng/L | APHA 22 st Ed.2012,3500-Ct-B,3-69 | 2.0 | N.D. | | |
| 17 | Chemical Oxygen Demand (COD) | ng/L | APHA 22 nd Ed.2012, 5520-B,5-17 | 250 | 172.0 | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1983,RA 2003 | 30 | 19.8 | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | |
| 20 | Phenolic Compounds (as C.H.OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

REVIEWED BY

Terms & conditions

The report for poblication, advisation or as layer dispute is to lear sample will be relatived for 15 theys ofter latine of last rep This is for inflammation as the party has awind for above isself.

-End of the test report--

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The C | | | Report No UES/TR/21-22/06036 Lab Ref No UES/21-22/W/010442 | | | St. |
|--|--|----------------|---|------------------------------|------------------------|-------------------------|
| | STRIES LIMITED, | | Date Of Sampling | 7 24/01/2022 25/01/2022 | | |
| GARE PALMA - IV | 1.00 m | | Date Of Receipt | | | |
| MILUPARA U/G C | | Date Of Report | 02/02/2022 | | | |
| VILLAGE -MILUPARA, BLOCK-TAMNAR DISTT RAIGARH (C.G.) 496107 | | | Date Of Analysis | START: 25/01/2022 END: 29/0: | | |
| | | SAMP | LE DETAILS | | | Service Control |
| Sample Type | WASTE WATER | | Customer Ref. No. | 6 Date | M/PO/SRV/ DTD.:24-3 | /2122/0049, ULY-2021 |
| Customer Sample ID | STP INLET, PORTACABIN | | Sample Condition | At Receipt | Ok | |
| Packing Of Sample | 3 L X 1 NO. PVC CAN 1 L X 1 NO. PVC CAN 1 L X 1 NO. GLASS BOTTLE | Sealed | Sample Collected | Ву | Laboratoz | y Chemist |
| Sampling Procedure | IS:3025(PART-I):1987 RA APRA 22 ED. 2021, 106 | | Quantity Received | | Approx. 5 | Ltr. |

| | TEST REPORT | | | | | | | | | |
|---------------|---|-------|---|--|----------|--|--|--|--|--|
| SR. PARAMETER | | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1888 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | | | |
| 1 | Colour | Hazen | APHA 22 nd Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | | | |
| 2 | Odour | - | APHA 22"dEd. 2012,2120-B,2-6 | See 6 of Annexure-1 | Agreeabl | | | | | |
| 3 | Temperature | °c | арна 22 ^{мв} ed.2012,2130-В,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.3 | | | | | |
| 4 | pH | - | APHA 22 Ed. 2012, 4500-H - B, 4-92 | 5.5 to 9.0 | 7.43 | | | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 ^{ml} Ed.2012,4500-Cl-G, 4 - 69 | 1.0 | N.D. | | | | | |
| 6 | Total Suspended Solids | mg/L | APHA 22** Ed.2012,2540- D, 2-66 | 100 | 38.0 | | | | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22 nd Ed.2012,4500-F-C, 4-153 | 5.0 | N.D. | | | | | |
| 8 | Fluoride (as F) | ng/L | APHA 22 nd Ed.2012,4500-F-BaD,4-84 & 87 | 2.0 | 0.4 | | | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22" Ed. 2012, 3111-8, 3-18 | 0,1 | N.D. | | | | | |
| 10 | Zinc (as Zn) | mg/L | APRA 22 dd Ed.2012,3111-B, 3-18 | 5.0 | 0.12 | | | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 ^{hf} Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22 ^{MI} Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 ^{hd} Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | | | |
| 16 | Total Chronium (as Cr) | mg/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22 nd Ed.2012, 5520-B,5-17 | 250 | 176.0 | | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 18.4 | | | | | |
| 19 | Cil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | | | | |
| 20 | Phenolic Compounds (as C ₄ H ₆ OH) | mg/L | 18 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, arbitration or an legal dispute is forbidden

Test sample will be retained for 15 days after issue of test report unless difference agreed with customs.

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End of the test report-

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| To, HINDALCO INDU | STRIES LIMITED, | | Report No Lab Ref No Date Of Sampling | | 1-22/0791 2/W/01306 | | |
|--|--|--------|---|------------|------------------------|-------------------------|--|
| GARE PALMA - IN | //5, | | Date Of Receipt | | 5/02/2022 | | |
| MILUPARA U/G C | | | Date Of Report | | | | |
| VILLAGE -MILUPARA, BLOCK-TAMNAR DISTT RAIGARH (C.G.) 496107 | | | Date Of Analysis | START: 25/ | 02/2022 | END: 01/03/2022 | |
| | | SAMP | LE DETAILS | | | | |
| Sample Type | HASTE WATER | | Customer Ref. No. | £ Date | M/PO/SRV/ DTD.:24-3 | /2122/0049, ULY-2021 | |
| Customer Sample ID | STP INLET, PORTACABIN | | Sample Condition | At Receipt | Ok | | |
| Packing Of Sample | J L X I NO. PWC CAN I L X I NO. PWC CAN I L X I NO. GLASS SOTTLE | Sealed | Sample Collected I | Эу | Laborator | y Chemist . | |
| Sampling Procedure | IS:3025(PART-I):1987 R APHA 22 ED. 2021, 106 | | Quantity Received | | Approx. 5 | Ltr. | |

| | TEST REPORT | | | | | | | | | |
|---------------|---|-------|---|--|-----------|--|--|--|--|--|
| SR. PARAMETER | | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1886 [SCHEOULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | | | |
| 1 | Colour | Hazen | APHA 22 nd Ed. 2012,2120-8,2-6 | See 6 of Annexure-I | <1 | | | | | |
| 2 | Odour | - | APHA 22 nd Ed. 2012,2120-B,2-6 | See 6 of Annexure-1 | Agreeable | | | | | |
| 3 | Temperature | °c | APHA 22"ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.5 | | | | | |
| 4 | pil | - | APHA 22" Ed. 2012, 4500-H'-B, 4-92 | 5.5 to 9.0 | 7.28 | | | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 nd Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | | | |
| 6 | Total Suspended Solids | mg/L | APHA 22 nd Ed.2012,2540- D, 2-66 | 100 | 32.0 | | | | | |
| 7 | Dissolved Phosphate | mg/% | APHA 22 nd Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | | | |
| θ | Fluoride (as F) | mg/L | APHA 22 ^{ME} Ed.2012,4500-F-B6D,4-84 s | 2,0 | 0.2 | | | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22 ^{MF} Ed. 2012, 3111-B, 3-18 | 0.1 | N.D. | | | | | |
| 10 | Zinc (as En) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 5.0 | 0.22 | | | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22" Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 ^{NI} Ed.,2012,3114-C, 3-38 | 0.05 | N.D. | | | | | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22" Ed.2012, 5520-B,5-17 | 250 | 148.0 | | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 22,4 | | | | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003, | 10,0 | N.D. | | | | | |
| 20 | Phenolic Compounds (as C _c H _c OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

Terms & conditions

01/03/2

REVIEWED BY

REMARKS: RESULTS ARE AS ABOVE

The report for publication, unbitration or an input dispute in facilities.

Test campile will be relatived for 15 days after traver of test request upless titles.

This is for information up the purity has asked for above lending stupp (CLT).

AUTHORIZED SIGNATORY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

-End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| | GARE PALMA - IV MILUPARA U/G C | STRIES LIMITED, 1/5, OAL MINE, ARA, BLOCK-TAMNA | R | Report No Lab Ref No Date Of Sampling Date Of Receipt Date Of Report | Lab Ref No UES/21-22/W/014664 Date Of Sampling 28/03/2022 Date Of Receipt 29/03/2022 | | |
|---|-----------------------------------|--|-----------------------|--|--|-----------|-----------|
| | Sample Type | MASTE WATER | | Customer Ref. No. | & Date | | |
| Sample Type MASTE WATER Customer Ref. No. 6 Date M/PO/SRV/2122/0049, DID.:24-JULY-2021 | Customer Sample ID | STP INLET, PORTACABIN Sample Con | STP INLET, PORTACABIN | | At Receipt | Ok | |
| CUSCODEL NO. 6 Date DID.:24-JULY-2021 | Packing Of Sample | 3 L X I NO. PVC CAR I L X I NO. PVC CAR I L X I NO. GLASS BOTTLE | Sealed | Sample Collected 1 | Ву | Laborator | y Chemist |
| Customer Sample ID SIP INLET, PORTACABIN Sample Condition At Receipt Ok Packing Of Sample 11.8.1 NO. PVC CAN Sealed Sample Collected By Laboratory Chemist | Sampling Procedure | IS:3025(PART-I):1987 R APHA 22 ED. 2021, 106 | | Quantity Received | | Approx. 5 | Ltr. |

| | TEST REPORT | | | | | | | | | |
|------------|---|-------|--|--|-----------|--|--|--|--|--|
| SR. NO. | DADAMETED IBUT METUOD OF THE | | THE ENVIRONMENT (PROTECTION) RULES, 1986 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | RESULT | | | | | | |
| 1 | Colour | Hazen | APHA 22 nd Ed. 2012,2120-8,2-6 | See 6 of Annexure-I | <1 | | | | | |
| 2 | Odour | - | APHA 22 nd Ed. 2012,2120-B,2-6 | See 6 of Annexura-I | Agreeable | | | | | |
| 3 | Temperature | tic | APHA 22 ^{ml} Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.0 | | | | | |
| 4 | pH | - | APHA 22" Ed. 2012, 4500-H'-B, 4-92 | 5.5 to 9.0 | 7.42 | | | | | |
| 5 | Total Residual Chlorine | ng/L | APRA 22 ^{m8} Ed.2012,4500-C1-G, d - 69 | 1.0 | N.D. | | | | | |
| 6 | Total Suspended Solids | ng/L | APHA 22 nd Ed.2012,2540- D, 2-66 | 100 | 46.0 | | | | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22** Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | | | |
| 8 | Fluorida (as F) | mg/L | APHA 22 ^{Md} Ed.2012,4500-F-B6D,4-84 6 87 | 2.0 | 0.6 | | | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | | | | |
| 10 | Zinc (as Zn) | mg/L | APHA 22" Ed.2012,3111-B, 3-18 | 5.0 | 0.42 | | | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-19 | 3.0 | N.D. | | | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2,0 | N.D. | | | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 ^{HI} Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | | | |
| 15 | Selenium (as Se) | mg/L | APRA 22" Ed.2012,3114-C, 3-38 | 0,05 | N.D. | | | | | |
| 16 | Total Chromium (as Cr) | ng/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | | |
| 17 | Chemical Oxygen Demand (COD) | ng/L | APHA 22 st Ed.2012, 5520-B,5-17 | 250 | 156.0 | | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 24.0 | | | | | |
| 19. | Oil & Grease | mg/I | IS 3025(Part 39):1993,RA 2003, | 10,0 | N.D. | | | | | |
| 20 | Phenolic Compounds (as C ₄ H ₅ OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The report for publication, arbitration or as legal dispute is firstidais.
- Test sample will be retained for 15 days after inour of test report unless otherwise agreed with continue

This is for information as the party has asked for above testist only.

REVIEWED BY

02/00/21

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

AN ISO: 9001:2015 / ISO: 14001:2015 / ISO 45001:2018 CERTIFIED LABORATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

To, HINDALCO INDUSTRIES LIMITED, GARE PALMA - IV/5, MILUPARA U/G COAL MINE, VILLAGE - MILUPARA, BLOCK-TAMNAR DISTT. - RAIGARH (C.G.) 496107

| Report Wo | UES/TR/21-22/3523 | | | | |
|------------------|-----------------------------------|--|--|--|--|
| Lab Ref No | UES/21-22/W/6353 | | | | |
| Date Of Sampling | 28/10/2021 | | | | |
| Date Of Receipt | 29/10/2021 | | | | |
| Date Of Report | 01/11/2021 | | | | |
| Date Of Analysis | START: 29/10/2021 End: 01/11/2021 | | | | |

| | 1 1 1 1 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 2 | SAMP | LE DETAILS | | |
|--------------------|--|--------|-----------------------------|----------------------------|---|
| Sample Type | HASTE WATER | | Customer Ref. No. & Date | M/PO/SRV/21 DID.:24-JUL | 100 TE 10 C C C C C C C C C C C C C C C C C C |
| Customer Sample ID | STP OUTLET, PORTA CABIN | | Sample Condition At Receipt | 0k | |
| Packing Of Sample | J L X I WG. PVC CAN I L X I WG. PVC CAN I L X I WG. GLAGG DOTTLE | Sealed | Sample Collected By | Laboratory | Chemist |
| Sampling Procedure | IS:3025(PART-I):1987 RA APHA 22 ^{NO} ED. 2021, 1060 | | Quantity Received | Approx. 5Lt | F. |

| | TEST REPORT | | | | | | | | | | |
|------------|---|-------|---|--|---------------------|--|--|--|--|--|--|
| SR, NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) BULES, 1988 (SCHEBULE-VI) PART-A INLAND SURFACE WATER | SUMP WATER PIT-D | | | | | | |
| 1 | Colour | Hazen | AFHA 22°dEd. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | | | | |
| 2 | Odour | - | APHA 22 rd Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable | | | | | | |
| 3 | Temperature | 'c | APHA 22 ^{MEd.} 2012,2130-B,2-13 | Shall not exceed 5'C above the receiving water temperature | 24.2 | | | | | | |
| 4 | pH | - | APHA 22** Ed.2012,4500-H'-B,4-92 | 5.5 to 9.0 | 7.26 | | | | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 ^{mt} Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | | | | |
| 6 | Total Suspended Solids | ng/L | APHA 22 ^{Mt} Ed.2012,2540- D, 2-66 | 100 | 22.0 | | | | | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22 ^{ME} Ed.2012,4500-P°C, 4-153 | 5.0 | N.D. | | | | | | |
| 8 | Fluoride (as F) | mg/L | APRA 22" Ed.2012,4500-F-B&D,4-84 & | 2.0 | 0.1 | | | | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22° Ed. 2012, 3111-B, 3-18 | 0.1 | N.D. | | | | | | |
| 10 | Zinc (as En) | mg/L | APHA 22 ^M Ed.2012,3111-B, 3-18 | 5.0 | 0.06 | | | | | | |
| 11 | Copper (as Cu) | mg/1 | AFHA 22 rd Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | | | | |
| 12 | Cadmium (ss Cd) | mg/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | | | | |
| 13 | Mercury (as Hg) | ng/L | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | | | |
| 14 | Arsenic (as As) | ng/L | APHA 22" Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22" Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | | | | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22 ^{ed} R8.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | | | |
| 17 | Chemical Oxygen Demand (CCD) | mg/L | АРНА 22 nd Ed.2012, 5520-B,5-17 | 250 | 48.0 | | | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 8.6 | | | | | | |
| 19 | Oil & Grease | ng/L | 15 3025(Part 39):1991,PA 2003, | 10.0 | M.D. | | | | | | |
| 20 | Phenolic Compounds (as C _s H ₂ OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1,0 | N.D. | | | | | | |

Note: mg/lit.:milligram per liter, N.D. - Not Detected. REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

The report for publication, whan

Peut sample will be retained for 15 days after some of test is

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For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

--End of the test report-----

AN ISO: 9001:2015 / ISO: 14001:2015 / ISO 45001:2018 CERTIFIED LABORATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| In Name & Address Of The I | TO COMPLET | | Report No | UES/TR/2 | UES/TR/21-22/04213 | | |
|---|--|--------|---------------------------------|------------------------------|--|------------------------|--|
| To, HINDALCO INDUST | DIES LIMITED | | Lab Ref No | UES/21-22/W/07573 | | | |
| GARE PALMA - IV/5 | | | Date Of Sampling | 24/11/20 | 24/11/2021 25/11/2021 01/12/2021 | | |
| MILUPARA U/G CO | ALL THE STATE OF T | | Date Of Receipt | 25/11/20 | | | |
| VILLAGE - MILUPA | RA, BLOCK-TAMNAR | | Date Of Report | 01/12/20 | | | |
| DISTT RAIGARH | (C.G.) 496107 | | Date Of Analysis | START: 25/11/2021 End: 29/11 | | | |
| | | SAMP | LE DETAILS | | ALI DE | | |
| Sample Type | HASTE HATER | | Customer Ref. No. | . & Date | M/PO/SRV/ DTD.:24-J | 2122/0049, ULY-2021 | |
| Customer Sample ID | STP OUTLEY, PORTA CABIN | | Sample Condition | At Receipt | t Ok Laboratory Chemist | | |
| Packing Of Sample | S & M I MO. FVC CAM I & M I MO. FVC CAM I & M I MO. GLASS SOFFIE | Sealed | Sample Collected | By | | | |
| Sampling Procedure 18:3025 (PART-I):1987 RA 2003; APHA 22 ⁸⁰ ED. 2021, 1060-B, 1-39 | | | Quantity Received Approx. 5Ltr. | | | Ltr. | |

| | TEST REPORT | | | | | | | | | |
|------------|---|-------|--|--|-----------|---|---------------------|--|--|--|
| SR. NO. | PARAMETER | | | UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1986 (SCHEDULE-VI) PART-A INLAND SURFACE WATER | SUMP WATER PIT-D | | | |
| A | Colour | Hazen | APHA 22"Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | | | |
| 2 | Odour | - | APHA 22"Ed. 2012,2120-B,2-6 | See 6 of Anneaury-1 | Agreeable | | | | | |
| 3 | Temperature | °c. | APHA 22 nd 8d.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.2 | | | | | |
| 4 | pH | - | APHA 22" Ed.2012,4500-H"-B,4-92 | 5.5 to 9.0 | 7.31 | | | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22° Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | | | |
| 6 | Total Suspended Solids | mg/L | APHA 22 nd Ed.2012,2540- D, 2-66 | 100 | 20.0 | | | | | |
| 7 | Dissolved Phosphate (as F) | mg/L | APHA 22** Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | | | |
| В | Fluoride (as F) | mg/L | AFHA 22** Ed.2012,4500-F-B&D,4-84 & 87 | 2.0 | 0.2 | | | | | |
| 9 | Lead (as Pb) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 0,1 | N.D. | | | | | |
| 10 | Einc (as En) | mg/L | APHA 22 Ed.2012,3111-B, 3-18 | 5.0 | 0.09 | | | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 ⁸⁸ Ed.2012,3111-B, 3-16 | 3.0 | N.D. | | | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22° Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22" Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 ⁵⁴ Ed.2012,3114-C, 3-36 | 0.2 | N.D. | | | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | | | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22 nd Ed.2012, 5520-8,5-17 | 250 | 44.0 | | | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 6.2 | | | | | |
| 19 | Oil & Grease | mg/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | | | | |
| 20 | Phenolic Compounds (as C ₆ H ₂ OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

Terms & conditions

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REMARKS: RESULTS ARE AS ABOVE

The report for publication, arbitration or an ingul dispets in for Fast sample will be related for 15 days after brain of test report This is for information as the party has eaked for above testing

-End of the test report-

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

01/12/21



HDD-272, Phase III - Near JP Chowk Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099 Ph: 0771 - 4027777 I Email: ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| 24 Name & Address Of the | Condomer | | Report No | UES/TR/2 | 21-22/04953 | | |
|---|--|--------|---------------------------------|------------------------------|------------------------|------------------------|--|
| To, | CO INDUSTRIES LIMITED, | | Lab Ref No | UES/21-2 | UES/21-22/W/08839 | | |
| GARE PALMA - IV/S | CONTROL CONTROL ENGINEER | | Date Of Sampling | 23/12/2021 | | | |
| MILUPARA U/G CO | | | Date Of Receipt | 24/12/20 | 24/12/2021 | | |
| VILLAGE - MILUPA | RA, BLOCK-TAMNAR | | Date Of Report | 01/01/20 | 22 | | |
| DISTT RAIGARH (C.G.) 496107 | | | Date Of Analysis | START: 24/12/2021 End: 28/12 | | | |
| | The sale of the sale | SAMP | LE DETAILS | | | MICHIGAN CO. | |
| Sample Type | MASTE WATER | | Customer Ref. No. | € Date | M/PO/SRV/ DTD::24-J | 2122/0049, ULY-2021 | |
| Customer Sample ID | STP OUTLET, PORTA CABIN | f | Sample Condition | At Receipt | Ok | | |
| Packing Of Sample | JIXINO, PVC CAN IIXINO, PVC CAN IIXINO, GLASS BOTTLE | Sealed | Sample Collected | Ву - | Laboratory Chemist | | |
| Sampling Procedure 18:3025 (PART-I):1987 RA 2003; APHA 22 ⁹⁰ ED. 2021, 1060-B, 1-39 | | | Quantity Received Approx. 5Ltr. | | Ltr. | | |

| TEST REPORT | | | | | | | |
|-------------|---|-------|--|--|------------|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1988 [SCHEDULE-VI] PART-A INLAND SURFACE WATER | SUMP WATER | | |
| 1 | Colour | Hazen | APHA 22 nd Ed. 2012,2120-B,2-6 | See 6 of Annexure-1 | <1 | | |
| 2 | Odour | - | APHA 22"Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable | | |
| 3 | Temperature | 10 | APHA 22 ^{ml} Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.5 | | |
| 4 | pH | - | APHA 22" Ed.2012,4500-H-B,4-92 | 5.5 to 9.0 | 7.71 | | |
| 5 | Total Residual Chlorine | mq/L | APHA 22 nd 86.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | |
| 6 | Total Suspended Solids | mg/L | APHA 22° Ed.2012,2540- D, 2-66 | 100 | 24.0 | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APHA 22 nd Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | |
| 8 | Fluoride (as F) | mg/L | APHA 22 ⁴⁸ Ed.2012,4500-F-B&D,4-84 & 87 | 2.0 | 0.3 | | |
| 9 | Lead (as Pb) | mg/L | APHA 22 ^M Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | |
| 10 | Zinc (as Zn) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 5.0 | 0.10 | | |
| 11 | Copper (as Cu) | mg/L | APHA 22" Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | |
| 1.2 | Cadmium (as Cd) | mg/L | APHA 22 nd Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | |
| 1.4 | Arsenio (as As) | mg/L | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | |
| 15 | Selenium (as Se) | mg/L | APHA 22" Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | |
| 16 | Total Chromium (as Cr) | ng/L | APHA 22 rd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | |
| 17 | Chemical Oxygen Demand (CCD) | ng/L | APHA 22" Ed.2012, 5520-B,5-17 | 250 | 48.0 | | |
| 18 | Biochemical Oxygen Demand (BOD) | ng/L | IS 3025(Part 44):1993,RA 2003 | 30 | 5.8 | | |
| 19 | Oil & Grease | ng/L | IS 3025 (Part 39):1991, RA 2003, | 10.0 | N.D. | | |
| 20 | Phenolic Compounds (as C ₄ H ₃ OH) | ng/L | 18 3025(Part 43):1992,8A 2003 | 1.0 | N.D. | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE Terms & conditions

01/01

REVIEWED BY

The report for swilliarism, arbitration or as logal dispute is forbidition.

That dample will be estained for 45 days after issue of instruction of the entire in agreed with cush. This is for information as the purity has asked for allow leaght parts.

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

01/01/202

End of the test report-



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| to Name & Address Of The I | Contemar | | Report No | ab Ref No UES/21-22/W/010443 Nate Of Sampling 24/01/2022 | | | |
|--------------------------------------|--|-------------------|----------------------|---|--|----|--|
| HINDALCO INDUST | | | non-interest (Vennes | | | | |
| GARE PALMA - IV/S MILUPARA U/G CO | | | Date Of Receipt | | | | |
| | RA, BLOCK-TAMNAR | | Date Of Report | 02/02/20 | 2/02/2022 | | |
| DISTT RAIGARH | (C.G.) 496107 | | Date Of Analysis | START: 25/01/2022 END: 29/01/2 | | | |
| | The state of the s | SAMP | LE DETAILS | | | | |
| Sample Type | sple Type WASTE WATER | | | & Date | M/PO/SRV/2122/0049, DTD.:24-JULY-2021 | | |
| Customer Sample ID | STP OUTLET, PORTA CABIN | e: | | | Ok | Ok | |
| Packing Of Sample | 3 L X 2 MO. PVC CAW 1 L X 1 MO. PVC CAW 1 L X 1 MO. GLASS SOTTLE | Sealed | | | Laboratory Chemist | | |
| Sampling Procedure | IS:3025(PART-I):1987 RA APMA 22 ED. 2021, 106 | Quantity Received | Approx. 5Ltr. | | Ltr. | | |

| | TEST REPORT | | | | | | | |
|------------|------------------------------------|---------------------|---|--|---------------------|--|--|--|
| SR. NO. | PARAMETER | UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) RULES, 1986 (SCHEDULE-VI) PART-A INLAND SURFACE WATER | SUMP WATER PIT-D | | | |
| -1 | Colour | Hagen | APHA 22 MEd. 2012,2120-B,2-6 | See 6 of Annexure-I | <1 | | | |
| 2 | Odour | 200 | AFHA 22"Ed. 2012,2120-8,2-6 | See 6 of Annexure-1 | Agreeable | | | |
| 3 | Temperature | °c | APHA 22 rd Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.6 | | | |
| 4 | pH | - | APHA 22" Ed.2012,4500-H"-B,4-92 | 5.5 to 9.0 | 7.64 | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 nd Ed.2012,4500-Cl-G, 4 - 69 | 1.0 | N.D. | | | |
| 6 | Total Suspended Solids | mg/L | APHA 22" Ed.2012,2540- D, 2~66 | 100 | 28.0 | | | |
| 7 | Dissolved Phosphate (as P) | mg/L | АРНА 22 ^{мд} Ed.2012,4500-P-C, 4-153 | 5.0 | M.D. | | | |
| | Fluoride (as F) | ng/l | APHA 22 rd Ed.2012,4500-F-B6D,4-84 6 87 | 2.0 | 0.2 | | | |
| 9 | Lead (as Pb) | mq/L | APHA 22 rd Ed. 2012, 3111-B, 3-18 | 0.1 | N.D. | | | |
| 10 | Einc (as En) | mg/L | APHA 22 nd Ed.2012,3111-B, 3-18 | 5.0 | 0,12 | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 rd Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22" Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | |
| 13 | Mercury (as Hg) | mg/L | APHA 22 rd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | |
| 14 | Arsenic (as As) | ng/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | |
| 15 | Selenium (as Se) | ng/L | APHA 22" Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | |
| 16 | Total Chromium (as Cr) | ng/L | APHA 22" Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | |
| 17 | Chemical Oxygen Demand (COD) | ng/L | APHA 22° Ed.2012, 5520-B,5-17 | 250 | 52.0 | | | |
| 18 | Biochemical Oxygen Demand (BOD) | ng/L | IS 3025(Part 44):1993,RA 2003 | 30 | 4,2 | | | |
| 19 | Oil & Grease | ng/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | | |
| 20 | Phenolic Compounds (as C.H.OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1.0 | N.D. | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

Phuot

REVIEWED BY

- The report for profileation, withfrution or an input dispute in furthelsen. That sample will be retained for 15 days after is one of test report influe-thin in for information as the party has solved for above (setts) only.

-End of the test report-

For ULTIMATE ENVIROLYTICAL SOLUTIONS

02 AUTHORIZED SIGNATORY



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| To, | Customer | | Report No | 777777777777 | | | |
|--|--|-------------------------|------------------------------------|---|--------------------|------|--|
| HINDALCO INDUST | TRIES LIMITED. | ES LIMITED. Lab Ref No. | | | UES/21-22/W/013070 | | |
| GARE PALMA - IV | | | Date Of Easpling | 24/02/2022 | | | |
| MILUPARA U/G CO | Section and the section of the secti | | Date Of Receipt 25/02/2022 | | | | |
| VILLAGE - MILUPA | RA, BLOCK-TAMNAR | | Date Of Report | 01/03/20 | 01/03/2022 | | |
| DISTT RAIGARH | (C.G.) 496107 | | Date Of Analysis | START: 25/02/2022 END: 01/03/ | | | |
| | | SAMP | LE DETAILS | | | | |
| Sample Type | WASTE MATER | | Customer Ref. No. | 6 Date M/PO/SRV/2122/0049, DTD,:24-JULY-2021 | | | |
| Customer Sample ID | STP OUTLET, PORTA CABIN | ř. | Sample Condition At Receipt | | Ok: | | |
| Packing Of Sample | S D X I NO. PYC CAN I L X I NO. PYC CAN I L X I NO. GLASS SCTTLE | Sealed | Sample Collected By Laboratory Chi | | y Chemist | | |
| Sampling Procedure IS:3025(PART-I):1967 RA 2003; APMA 22 th ED. 2021, 1060-B, 1-39 | | | Quantity Received | Approx. 5Ltr. | | Ltr. | |

| | TEST REPORT | | | | | | | |
|------------|---|-------------------------------|---|--|------------|--|--|--|
| SR. NO. | PARAMETER | PARAMETER UNIT METHOD OF TEST | | THE ENVIRONMENT (PROTECTION) HULES, 1988 (SCHEDULE-VI) PART-A INLAND SURFACE WATER | SUMP WATER | | | |
| 1 | Colour | Hazen | APRA 22**Ed. 2012,2120-B,2-6 | See 6 of Annexure-1 | <1 | | | |
| 2 | Odour | - | APHA 22 Ed. 2012,2120-B,2-6 | See 6 of Annexure-I | Agreeable | | | |
| 3 | Temperature | °c | APHA 22°Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.6 | | | |
| 4. | pH | - | APHA 22" Ed. 2012, 4500-H'-B, 4-92 | 5.5 to 9.0 | 7.22 | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 ^{mf} Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | |
| 6 | Total Suspended Solids | mg/L | APHA 22 nd Ed.2012,2540- D, 2-66 | 100 | 26.0 | | | |
| 7 | Dissolved Phosphate (as P) | mg/1, | APHA 22" Ed.2012,4500-P-C, 4-153 | 5.0 | N.D. | | | |
| В | Fluoride (as F) | ng/L | APHA 22" Ed. 2012, 4500-F-BaD, 4-84 & | 2.0 | 0.1 | | | |
| 9 | Lead (as Pb) | ng/L | APRA 22** Ed.2012,3111-B, 3-18 | 0.1 | N.D. | | | |
| 10 | Zinc (as Zn) | ng/L | APHA 22 Ed. 2012, 3111-B, 3-18 | 5.0 | 0.08 | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22" Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | |
| 12 | Cadmium (as Cd) | mq/L | APHA 22 nd Ed.2012,3500-Cd, 3-105 | 2.0 | N.D. | | | |
| 1.3 | Mercury (as Hg) | mg/L | APHA 22 nd Ed.2012,3112-B, 3-23 | 0.01 | N.D. | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 rd Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | |
| 16 | Total Chromium (as Cr) | mg/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | N.D. | | | |
| 17 | Chemical Oxygen Demand (COD) | mg/L | APHA 22 nd Ed.2012, 5520-B,5-17 | 250 | 44.0 | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993, RA 2003 | 30 | 8.0 | | | |
| 19 | Oil & Grease | ng/L | IS 3025(Part 39):1991,RA 2003, | 10.0 | N.D. | | | |
| 20 | Phenolic Compounds (as C ₆ H ₂ OH) | ng/L | IS 3025 (Part 43):1992, RA 2003 | 1.0 | N.D. | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected.

REMARKS: RESULTS ARE AS ABOVE Terms & conditions

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REVIEWED BY

The report the publication, arbitration or as regal dispirts is frubidisin.

That sample will be retained for 15 days after issue of test import unless of

This is for information as the party has acked for above testing effect to

-End of the test report-

AUTHORIZED SIGNATORY

For ULTIMATE ENVIROLYTICAL SOLUTIONS



Recognized by Ministry of Environment Forest and Climate Change under EP act 1986

| To. | Customer | | Report No UES/TR/21-22/08953 | | | 3 | |
|--|---|--------|--|--|--|------|--|
| HINDALCO INDUST | TRIES LIMITED. | | Lab Ref No | UBS/21-22/W/014665 Pling 28/03/2022 | | | |
| GARE PALMA - IV/S | | | Date Of Sampling | | | | |
| MILUPARA U/G CO | March Control of the | | Date Of Receipt 29/03/2022 | | | | |
| VILLAGE - MILUPA | RA, BLOCK-TAMNAR | | Date Of Report 02/04/2022 | | 22 | | |
| DISTT RAIGARH | (C.G.) 496107 | | Date Of Analysis | START: 29/ | START: 29/03/2022 END: 02/04/ | | |
| | | SAMP | LE DETAILS | | | | |
| Sample Type | HASTE WATER | | Customer Ref. No. & Date Sample Condition At Receipt Sample Collected By | | M/PO/SRV/2122/0049, DID.:24-JULY-2021 Ok Laboratory Chemist | | |
| Customer Sample ID | STP OUTLET, PORTA CABIN | 1 | | | | | |
| Packing Of Sample | 3 1 X 1 NO. FYC CAN 1 1 X 1 NO. FYC CAN 1 1 X 1 NO. GLASS BOTTLE | Sealed | | | | | |
| Sampling Procedure IS:3025(PART-I):1987 NA 2003; APHA 22 ED. 2021, 1060-B, 1-39 | | | Quantity Received | Approx. 5Ltr. | | Ltr. | |

| | TEST REPORT | | | | | | | |
|------------|---|-------|---|--|------------|--|--|--|
| SR. NO. | PARAMETER | UNIT | METHOD OF TEST | THE ENVIRONMENT (PROTECTION) RULES, 1986 (SCHEDULE-VI) PART-A INLAND SURFACE WATER | SUMP WATER | | | |
| 1 | Colour | Hazen | APHA 22 6d, 2012,2120-8,2-6 | See 6 of Annexura-I | <1 | | | |
| 2 | Odour | - | APHA 22 st Ed. 2012,2120-B,2-6 | See 0 of Annapare-I | Agreeable | | | |
| 3 | Temperature | 10 | APHA 22 rd Ed.2012,2130-B,2-13 | Shall not exceed 5°C above the receiving water temperature | 25.8 | | | |
| 4 | pH | - | APHA 22" Ed. 2012, 4500-H-1, 4-92 | 5.5 to 9.0 | 7.44 | | | |
| 5 | Total Residual Chlorine | mg/L | APHA 22 ^{ed} Ed.2012,4500-C1-G, 4 - 69 | 1.0 | N.D. | | | |
| 6 | Total Suspended Solids | mg/L | APHA 22° Ed.2012,2540- D, 2-66 | 1.00 | 28.0 | | | |
| 7 | Dissolved Phosphate (as P) | mg/L | APRA 22"d Ed.2812,4500-P-C, 4-153 | 5.0 | N.D. | | | |
| 8 | Fluoride (as F) | ng/L | APHA 22 rd Ed,2012,4500-F-B4D,4-84 4 | 2.0 | 0.2 | | | |
| 9 | Lead (as Pb) | BG/L | APHA 22** Bd.2012,3111-B, 3-18 | 0.1 | N.D. | | | |
| 10. | Zinc (as Zn) | mg/L | APHA 22** Ed.2012,3311-8, 3-18 | 5.0 | 0.11 | | | |
| 11 | Copper (as Cu) | mg/L | APHA 22 ⁶⁴ Ed.2012,3111-B, 3-18 | 3.0 | N.D. | | | |
| 12 | Cadmium (as Cd) | mg/L | APHA 22 nd Ed.2012,3500-Cd, 3-105 | 2,0 | N.D. | | | |
| 13 | Mercury (ss Hg) | mg/L | APHA 22" Ed.2012,3112-8, 3-23 | 0.01 | N.D. | | | |
| 14 | Arsenic (as As) | mg/L | APHA 22 nd Ed.2012,3114-C, 3-38 | 0.2 | N.D. | | | |
| 15 | Selenium (as Se) | mg/L | APHA 22 ^{cd} Ed.2012,3114-C, 3-38 | 0.05 | N.D. | | | |
| 16 | Total Chromium (as Cr) | ng/L | APHA 22 nd Ed.2012,3500-Cr-B,3-69 | 2.0 | M.D. | | | |
| 17 | Chemical Oxygen Demand (COD) | ng/L | APHA 22 ³⁸ Ed.2012, 5520-B,5-17 | 250 | 56.0 | | | |
| 18 | Biochemical Oxygen Demand (BOD) | mg/L | IS 3025(Part 44):1993,RA 2003 | 30 | 9.4 | | | |
| 19 | Oil & Grease | mg/L | IS 3025 (Pert 39):1991,RA 2003, | 10.0 | N.D. | | | |
| 20 | Phenolic Compounds (as C ₄ H ₂ OH) | mg/L | IS 3025(Part 43):1992,RA 2003 | 1,0 | N.D. | | | |

Note: mg/lit.: milligram per liter, N.D. - Not Detected. REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15 days after from of test report unless atherwise agreed with custo

This is far information as the party has asked for ab-

02/04/22 REVIEWED BY

For ULTIMATE ENVIROLYTICAL SOLUTIONS

AUTHORIZED SIGNATORY

AN ISO : 9001:2015 / ISO: 1400 1:2015 / ISO 45001 2018 CERTIFIED LABORATORY

Annexure – 6AAA

Sewage Treatment Plant



Annexure - 7



छत्तीसगढ़ पर्यावरण संरक्षण मंडल

पर्यावास भवन, नार्थ ब्लॉक, सेक्टर—19 नवा रायपुर अटल नगर, रायपुर (छ.ग.) 492002 ई-मेल- hocecb@gmail.com

क्रमांक **९९**९% मुख्या. / वैज्ञा. / छ.ग.प.सं.मं. / २०२१ विवा रायपुर अटल नगर, दिनांक 17/8 / २०२१ प्रति,

श्री अनुराग श्रीवास्तव,

पार्टनर.

मेसर्स अल्टीमेट इन्वायरोलाइटिकल सॉल्यूशन्स, 272–एच.डी.डी. फेस–3, कबीर नगर, रिंग रोड नं. 2, जिला–रायपुर (छ.ग.)

विषय:- प्रदेश में संचालित निजी प्रयोगशाला को छत्तीसगढ़ पर्यावरण संरक्षण मंडल द्वारा प्रदत्त मान्यता के संबंध में।

संदर्भ :-

1. आपका आवेदन कमांक UES/2021-22/0042, दिनांक 31 / 07 / 2021.

2. मंडल मुख्यालय का पत्र कमांक 5357, दिनांक 24/09/2019.

3. भारत शासन, पर्यावरण, वन एवं जलवायु परिवर्तन मंत्रालय का पत्र क्रमांक F No. Q-15018/07/2017-CPW, दिनांक 21/02/2020.

---:00:----

कृपया उपरोक्त विषयांतर्गत संदर्भित पत्रों का अवलोकन करें। लेख है कि मंडल मुख्यालय द्वारा पत्र कमांक 5357 दिनांक 24/09/2019 के माध्यम से आपके निजी प्रयोगशाला को जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 की धारा 17 (2) एवं वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 की धारा 17 (2) के अंतर्गत मान्यता प्रदान की गई थी, जिसकी वैधता दिनांक 31/07/2021 तक थी। संदर्भ—3 पर उल्लेखित पत्र के अनुक्रम में छत्तीसगढ़ पर्यावरण संरक्षण मंडल द्वारा जल (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1974 की धारा 17 (2) एवं वायु (प्रदूषण निवारण तथा नियंत्रण) अधिनियम, 1981 की धारा 17 (2) के अंतर्गत् प्रदत्त मान्यता की वैधता दिनांक 25/06/2022 तक बढ़ाई जाती है। कृपया आपकी प्रयोगशाला में प्रचालकों की अद्यतन विश्लेषण दर सूची से मंडल को अवगत कराते हुए इस पत्र की पावती भेजे।

Micad Office C.G. Environment Conservation Board Penyawas Bhawan, North Block, Sec-19 Atal Nagar, Distt-Raiour (C.G.) 492002

सदस्य सचिव

्राप्ट पर्यावरण संरक्षण मंडल, नवा रायपुर अटल नगर, जिला–रायपुर (छ.ग)

पृ.क्रमांक प्रतिलिपिः— /मुख्या./वैज्ञा./छ.ग.प.सं.मं./2021 नवा रायपुर अटल नगर, दिनांक / /2021 क्षेत्रीय अधिकारी, क्षेत्रीय कार्यालय, छत्तीसगढ़ पर्यावरण संरक्षण मंडल, रायपुर / भिलाई—दुर्ग / बिलासपुर / कोरबा / रायगढ़ / अंबिकापुर / जगदलपुर की ओर सूचनार्थ एवं आवश्यक कार्यवाही हेतु प्रेषित।

सदस्य सचिव

छत्तीसगढ़ पर्यावरण संरक्षण मंडल, नवा रायपुर अटल नगर, जिला–रायपुर (छ.ग)

F. No. Q-15018/07/2017-CPW Government of India Ministry of Environment, Forest and Climate Change (CP Division)

Agni-233, Indira Paryavaran Bhavan, Jor Bagh Road, New Delhi – 110 003. Dated, the 21st February, 2020

To

M/s Ultimate Envirolytical Solution HDD 272, Phase-3 Near J.P Chawk Kabir Nagar, Ring Road-2 Raipur-492099, Chhattisgarh

Subject: -Recognition of M/s Ultimate Envirolytical Solutions, HDD 272, Phase-3, Near J.P Chawk Kabir Nagar, Ring Road-2, Raipur 492099, Chhattisgarh as Environmental Laboratory under the Environment (Protection) Act. 1986.

Sir,

I am directed to refer to your application dated:01.09.2017 for recognition of your laboratory under Environment (Protection) Act, 1986. Based on the recommendations of the Expert Committee for Recognition of Environmental Laboratories in its 61st meeting held on 03.12.2019 and your acceptance of the revised terms and conditions at Annexure-III & IV of the Guidelines for recognition of Environmental Laboratories, this Ministry approves of recognition of M/s Ultimate Envirolytical Solutions, HDD 272, Phase-3, Near J.P Chawk Kabir Nagar, Ring Road-2, Raipur 492099, Chhattisgarh, as shall be notified in the Gazette of India. Considering the current validity of mandatory accreditations/certifications of the laboratory, this shall be valid up to 25.06.2022.

- 2. As sought in your aforementioned application M/s Ultimate Envirolytical Solutions, Chhattisgarh may undertake the following tests:
- (i) Physical Tests: Conductivity, Colour, pH, Fixed & volatile solids, Total solids, Total dissolved solids, Total suspended solids, Turbidity, Temperature, Velocity & discharge measurement of industrial effluent stream, Salinity, Settleable solids and Sludge volume index (SVI).
- (ii) Inorganic (General & Non-metallic): Acidity, Alkalinity, Ammonical nitrogen, Chloride, Chlorine residual, Dissolved oxygen, Fluoride, Total hardness, Total kjehldal nitrogen (TKN), Nitrite nitrogen, Nitrate nitrogen, Phosphate, Sulphate, Chlorine demand, Iodine and Silica.
- (iii) Inorganic (Trace metals): Boron, Cadmium, Calcium, Chromium Total, Chromium Hexavalent, Copper, Iron, Lead, Magnesium, Mercury, Nickel, Potassium, Sodium, Sodium absorption ratio, Zinc, Arsenic, Barium, Manganese and Tin.
- (iv) Organics (General) and Trace Organics: Bio-chemical oxygen demand (BOD), Chemical oxygen demand (COD), Oil & grease, Phenol, Pesticide ((Organo-chlorine, Organo nitrogen-phosphorous), Poly-chlorinated biphenyl (PCB's) each, Polynuclear aromatic hydrocarbon (PAH) each and Organic Carbon (in Solid).
- (v) Microbiological Tests: Total Coliform, Faecal Coliform, Faecal streptococci, E. coli, Total Plate count.
- (vi) Toxicological Tests: Bioassay method for evaluation of toxicity using fish, Bio-accumulation, bio magnification and bio-transformation studies.
- (vii) Biological Tests: Macrophytic identification, Planktonic identification count and Chlorophyll.
- (viii) Hazardous Waste: Corrosivity, Ignibility (Flash Point) and Measurement of heavy metals/pesticides in the waste /leachate.
- (ix) Soil/ Sludge/ Sediment and Solid Waste: Boron, Cation Exchange Capacity (CEC), Electrical Conductivity, Nitrogen available, Organic carbon/ matter (chemical method), pH, Phosphorous (available), Phosphate (ortho), Phosphate (total), Potassium, SAR in soil extract, Sodium, Soil moisture, TKN, Calorific value, Bicarbonate, Calcium, Calcium carbonate, Chloride, Bicarbonate, Calcium, Calcium carbonate, Chloride, Heavy metal, Magnesium, Nitrate, Potash (available), Sulphate and water holding capacity.

- (x) Ambient Air/ Fugitive Emissions: Nitrogen dioxide (NO₂), Sulphur dioxide (SO₂), Total Suspended particulate matter, Respirable suspended particulate matter (PM₁₀), Ammonia, Chlorine, Fluoride, Lead.
- (xi) Stack Gases/ Source Emission: Particulate matter, Sulphur dioxide, Velocity & flow, Carbon dioxide, Carbon monoxide, Temperature, Oxygen, Oxides of nitrogen, Acid mist, Ammonia, Fluoride (Particulate), Fluoride(Gaseous) and Hydro-chloric acid.
- (xii) Noise Level: Noise level measurement (20 to 140 dba), Ambient Noise & Source-specific Noise.
- (xiii) Meteorological: Ambient temperature, Wind direction, Wind speed, Relative Humidity and Rainfall.
- 3. Further, the following analysts have been approved for recognition as Government Analysts.
 - (i) Mr. Anurag K. Shrivastava
 - (ii) Mr. Little Kumar Prajapati
 - (iii) Mr. Pramod Kumar Choubey
- 4. The laboratory shall compulsorily participate in the Analytical Quality Control (AQC) exercise conducted by the Central Pollution Control Board (CPCB) at least once a year to ascertain the capability of the laboratory and analyses carried out and shall submit quarterly progress reports to this Ministry.
- 5. Periodic surveillance of the recognized environmental laboratory will be undertaken by this Ministry/CPCB to assess its proper functioning, systematic operation and reliability of data generated at the laboratory.
- 6. It is also mandatory for the laboratory to have requisite accreditations of the NABL/ ISO 9001 and OHSAS and its renewal as per accreditation rules. This recognition is subject to such accreditations and renewal, as applicable. The laboratory may approach this Ministry for further extension of validity of recognition after renewal of the mandatory accreditations/ certification concerned. Such application for extension of validity may be submitted to this Ministry in due advance, preferably before 6 months.
- 7. The laboratory should compulsorily follow the accepted Terms & Conditions. In case of serious non-compliance of any of the Terms and Conditions, the laboratory may be black-listed for a minimum period of two years and civil/criminal proceedings, as applicable, may be initiated for performing functions on behalf of the Government in an unauthorized manner.

Yours faithfully,

(Dr. Susan George K.)

Scientist 'D' Tel. No. 011-24695327 Email: susan.george@nic.in

Copy to:

- Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, New Delhi - 110032.
- Member Secretary, Chhattisgarh Environment Conservation Board, Paryavas Bhawan, North Block, Sector-19, Atal Nagar, Dist-Raipur, Chattisgarh.
- Additional Principal Chief Conservator of Forests (C), Ministry of Environment, Forest and Climate Change, Regional Office (WCZ), Ground Floor, East Wing, New Secretariat Building, Civil Lines, Nagpur-440001.
- 4. Director, IT Division, MoEF&CC, New Delhi-110003: for uploading on MoEF&CC website





National Accreditation Board for Testing and Calibration Laboratories

CERTIFICATE OF ACCREDITATION

ULTIMATE ENVIROLYTICAL SOLUTIONS

has been assessed and accredited in accordance with the standard

ISO/IEC 17025:2017

"General Requirements for the Competence of Testing & Calibration Laboratories"

for its facilities at

HDD 272, PHASE-III, KABIR NAGAR, RAIPUR, CHHATTISGARH, INDIA

in the field of

TESTING

Certificate Number:

TC-6065

Issue Date:

27/10/2021

Valid Until:

26/10/2023

This certificate remains valid for the Scope of Accreditation as specified in the annexure subject to continued satisfactory compliance to the above standard & the relevant requirements of NABL.

(To see the scope of accreditation of this laboratory, you may also visit NABL website www.nabl-india.org)

Name of Legal Identity: ULTIMATE ENVIROLYTICAL SOLUTIONS

Signed for and on behalf of NABL



N. Venkateswaran Chief Executive Officer

Annexure - 8

Environmental Expenditure Details for FY 2021-22 (October 2021 to March 2022)

M/s Hindalco Industries Limited, Gare Palma Mines IV/5

| Particulars | Amount (Lakh) |
|------------------------------------|---------------|
| Water Quality Management | 118.72 |
| Air Quality Management | 6.26 |
| Plantation, Green Belt Development | 0.25 |
| Others | 3.56 |
| Total | 128.79 |