



Ref: APL/Mahan/EMD/EC/MoEFCC/245/11/23  
Date- 27.11.2023

To,  
**Additional Principal Chief Conservator of Forest (APCCF)**  
**Ministry of Environment, Forest and Climate Change**  
Regional Office, Western Region  
Kendriya Paryavaran Bhavan,  
Link Road No- 3, E-5, Ravi Shankar Nagar  
Bhopal - 462 016 (M.P)

**Sub: Six Monthly Compliance Status of Environment Clearances for Mahan Thermal Power Plant at Village Bandhaura, District Singrauli, Madhya Pradesh.**

**Ref:** Environmental clearance letter no. **J-13011/56/2006-IA.II (T)** Dated- 20.04.2007 & Its subsequent amendment vide letter dated 10.02.2009, 23.08.2013 and 08.04.2016.

Dear Sir,

With reference to above subject, please find enclosed herewith Six-Monthly Environment Clearances (EC) compliance status report along with Environmental monitoring reports as Ambient Air Quality, Water Quality, Noise level & Soil quality, CAAQM data, Met. data, Greenbelt development, Fly ash & CSR Report etc. for the period of **April'2023 to September'2023** in soft (e-mail).

This is for your kind information & record please.

Thanking You,  
Yours faithfully,  
for **Mahan Energen Ltd.**

**(Santosh Kumar Singh)**  
**Authorized Signatory**

**Encl:** as above

**cc:**

Member Secretary  
**Central Pollution Control Board**  
Parivesh Bhavan, East Arjun Nagar  
Kendriya Paryavaran Bhawan  
New Delhi- 110 032.

Member Secretary,  
**Madhya Pradesh Pollution Control Board**  
Paryavaran Parisar, E-5, Arera Colony,  
Bhopal, MP

The Regional Officer  
**Madhya Pradesh Pollution Control Board**  
Bhakuar, Navgarh, Singrauli, MP-486887

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(Formerly Essar Power MP Ltd)  
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# **SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENTAL CLEARANCE (EC)**

**For**

**1200 (2x600) MW Thermal Power Plant**

**At**

**Village Bandhaura, Tehsil Mada,  
District Singrauli, Madhya Pradesh**

**Submitted to:**

**Integrated Regional Office, Bhopal  
Ministry of Environment & Forest & Climate Change  
Central Pollution Control Board, New Delhi &  
Madhya Pradesh Pollution Control Board, Bhopal**



***Submitted By:***

**Environment Management Department  
Mahan Energen Limited**

**Bandhaura Village, Mada Tehsil, Singrauli  
District, Madhya Pradesh-486 886**

**Period: April'2023 to September'2023**

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## **Mahan Energen Limited**

### **Introduction:**

Mahan Energen Limited is operating 2x600 MW Coal based Thermal Power Plant situated at Villages Bandhaura, Khairahi, Karsualal and Nagwa in Singrauli District of Madhya Pradesh.

The Environmental Clearance for the project with capacity 4x500 MW was accorded on 20.04.2007 and the same was amended for change in capacity & unit size (3x600 MW) on 10.02.2009. Further, an amendment to the EC for change in source of Coal from domestic to import and road transportation of coal for period of exceeding three years was accorded on 23.08.2013. An amendment in EC on 08.04.2016.

**Adani Power Limited** has implemented the Approved Resolution Plan and acquired 100% of paid-up share capital and management control of EPMPPL on **16.03.2022**. "**Mahan Energen Limited**" is wholly owned subsidiary of Adani Power Limited and incorporated under Companies (Incorporation) Rules, 2014 date 25.03.2022.

Environment Clearance is transferred from Essar Power (MP) Limited to **Mahan Energen Limited vide F. No. J-13011/56/2006-IA-II(T) dated; 15<sup>th</sup> September' 2022**

MoEFCC, New Delhi has amended in the Environmental Clearance (EC) in **CONDITION NO. (xxxii) vide F. No. J-13011/56/2006-IA-II(T) dated; 16th July' 2023**.

Further, Environmental Clearance has been granted by MoEFCC, New Delhi for **Expansion** of Bandhaura Thermal Power Plant by **2x800 MW vide F. No. J-13011/56/2006-IA.II (T), EC Identification No. EC23A004MP195224 on dated: 27th July'2023** under the provision of EIA Notification dated 14th September'2006 and amendments.

**Consent to Establish (CTE)** also granted for expansion of TPP from Madhya Pradesh Pollution Control Board (MPPCB) vide Consent No. 58920 dated: 27.09.2023.



## Mahan Energen Limited

### COMPLIANCE STATUS ON ENVIRONMENTAL CLEARANCE 1200 (2×600) MW Coal Based Thermal Power Plant

Vide letter No. J-13011/56/2006-IA.II (T) dated 20.04.2007 and its subsequent amendment dated 10.02.2009; 23.08.2013, 08.04.2016, and EC transferred from Essar Power to Mahan Energen Ltd. on 15.09.2022, Amendment in EC dated 16.07.2023.

A	Specific Condition	Status
(i)	The total land requirement shall not exceed 700 ha for all activities/ facilities of the power project put together.	Complied. All project activities/Facilities of the Power Project have been developed within 700 ha only.
(ii)	Forestry clearance for diversion of 70 ha forest land involved in the project shall be obtained before starting construction on the forest land.	Compiled The forest area is optimised to 34.98 ha now. Stage-1 FC has been obtained from MoEFCC vide letter no.6-MPC 043/2008-BHO/822 dated. 02.04.2009 and final diversion of land does not proceed. <b>No construction activities have been taken place in the forest land.</b>
(iii)	R&R in sufficient detail shall be finalized before award of the project and a copy of the detailed R&R shall be submitted to MoEF within three months of the issue of this letter or before the award of the project whichever is earlier.	Complied As previous, R&R Benefits are being provided as per Madhya Pradesh R&R policy 2002 and in line with agreement executed on 18.10.2008 between Collector, Singrauli and EPMPL. Copy of the agreement with MP Govt. has been forwarded to MoEFCC vide our letter no. EPMPL/ MoEFCC/ 07.07.2010. Adani Power Limited has implemented the Approved Resolution Plan and acquired 100% of paid-up share capital and management control of EPMPL on 16.03.2022. "Mahan Energen Limited" is wholly owned subsidiary of Adani Power Limited
(iv)	The PAFs/ PAPs losing their homesteads, or a major portion of the land shall not be ousted from the land till they are settled at the alternate sites.	Complied R&R implementation as per the agreement dated; 05.09.2007 has been done. All payments as per the demand received from the state government & local administration have been made, plots allotted to all the homesteads. Supporting documents already submitted with EC compliance report.
(v)	Ash and sulphur content in the coal to be used in the project shall not exceed 35% and 0.5% respectively.	Complied. Ash and Sulphur content in the coal is being maintained below 35% & 0.5% respectively. MEL Power Plant is based on Pit head TPP and all parameters are being achieved as per notification.

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(vi)	Two bi-flue stacks of 275m height each shall be provided with continuous online monitoring equipment. Exit velocity of at least 25m/sec shall be maintained	Complied One bi-flue stack of 275 M height has been installed. Also, CEMS (Continuous emission monitoring system) has been provided for both units. Exit velocity is maintained > 25m/s. Stack emission monitoring Report is enclosed as <b>Annexure-I</b> .
(vii)	High efficiency electrostatic precipitators (ESPs) with efficiency not less than 99.9% shall be installed to ensure that particulate emission does not exceed 100 mg/Nm <sup>3</sup> .	Complied ESP (9 Fields) with efficiency of 99.9% installed in both the units to meet permissible norm for particulate emissions less than 50 mg/Nm <sup>3</sup> . Stack Emission Monitoring Report has been provided as <b>Annexure – I</b> .
(viii)	Space provision shall be made for Flue Gas De-sulphurisation (FGD) unit, if required at a later stage.	Complied Space for FGD has been provided in the adjacent to chimney. As per MoEFCC Notification dated 5 <sup>th</sup> Sep 2022, Mahan TPP is falling under Category "C" Non- retiring TPPs and the timelines for compliance of SO <sub>2</sub> emission is up to December'2026.
(ix)	Low NOx burners shall be provided.	Complied Low NOx burners have already been provided in each boiler.
(x)	Adequate dust extraction system such as bag filters and water spray system in dusty areas such as coal and ash handling areas, transfer areas and other vulnerable areas shall be provided.	Complied Dust extraction systems over fly ash silo, coal bunkers and conveyor junction points have been installed. Dry fog diffusion systems have already been provided in coal crusher house and conveyor transfer points. Water sprinkling system & Mobile Fog Cannon has been provided in coal yard area.
(xi)	Fly ash shall be collected in dry form and ash generated shall be used in a phased manner as per provisions of the notification on Fly Ash Utilization issued by the Ministry in September, 1999 and its amendments. By the end of 9th year full fly ash utilization should be ensured. Unutilized ash shall be disposed of in the ash pond in the form of High Concentration Slurry.	Complied. MoUs / Agreements have been signed with Cement Industries as M/s Prism Johnson Limited Cement and M/s Birla Corporation India Limited (BCIL) to lift the fly ash generated from the power plant. We have also signed a MOU with "Ashtech (India) Private Ltd." for lifting the Ash being generated from the Power Plant. Only unutilized Ash is being sent to Ash dyke / pond. Ash generation and utilization report is enclosed as <b>Annexure- IV</b> .
(xii)	Ash pond shall be lined with HDPE geo-synthetic membrane to avoid leaching. Adequate safety	Complied HDPE lining has been provided in the ash pond. The ash pond operates with HCSD system.

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	measures shall be implanted to protect the ash pond bund from getting breached.	Adequate safety measures such as proper bund slope, toe drain around the dyke, etc., have been taken to protect the bund.
(xiii)	A conservation plan for Schedule-1 animals reported in the study area of the project shall be prepared in consultation with an expert organization like Wildlife Institute of India at Dehradun and duly approved by State Wildlife Department of Madhya Pradesh. A copy of the same shall be submitted to the ministry and Regional Office at Bhopal within six months of the date of issue of this letter. The plan so prepared shall be implemented effectively. Necessary allocation of funds for the same shall be made and will be included as project cost.	Complied Ecological Assessment and Flora & Fauna Wildlife Conservation & Management Plan has been prepared by M/s. Good Earth Enviro Care in Association with Department of Environment Management, Indian Institute of Social Welfare & Business Management, Kolkata and report is submitted to PCCF – WL, Bhopal vide <b>letter no APL/MEL/Env/ PCCF/ 407/23 dated; 03.04.2023.</b> The plan will be implemented with due approval of CWLW. Acknowledged copy submitted in previous compliance.
(xiv)	Rain water harvesting shall be practiced. A detailed scheme for rain water harvesting to recharge the ground water aquifer shall be prepared in consultation with Central Ground Water Authority/ State Ground Water Board and a copy of the same shall be submitted within 3 months to the Ministry.	Complied Rainwater Harvesting study carried out & report is submitted to Regional Director, Central Ground Water Board, Bhopal & Member Secretary, Central Ground Water Authority, New Delhi. <b>vide letter no. APL/MEL/ENV/ CGWA/404/23 dated; 03.04.2023.</b> Rainwater harvesting within the plant premises has been constructed/ implemented to harvest the rainwater. Acknowledged copy submitted in previous compliance. Pond deepening work are being carried out in Five-Six ponds in villages falling under the area. More than 400 farmers availed benefits from pond deepening for irrigation in their agricultural land.
(xv)	The treated effluents conforming to the prescribed standards only shall be discharged in the Bhalea nallah.	Complied. Effluent is being treated suitably and analysis results are well within the stipulated MPPCB/CPCB standard by the process of neutralizing and treated water being used for gardening. We are maintaining zero discharge of treated effluent. Effluent analysis results are provided <b>as Annexure-I.</b>
(xvi)	Regular monitoring of ground water in and around the ash pond area shall be carried out, records maintained, and periodic reports shall be furnished to the Regional Office of the Ministry.	Complied Regular monitoring of ground water is being carried out in and around the ash pond area. Record is maintained and enclosed as <b>Annexure – I.</b>
(xvii)	A 100 m wide green belt shall be developed all around the plant area and 20 m wide green belt	Complied

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	shall be developed all around the ash pond and township covering a total area of 100 ha.	Greenbelt is already developed over an area of 121.21 ha. However, some casualties were noted by the IRO and all casualty replacement is already been done. Greenbelt report is enclosed as <b>Annexure- II</b> .
(xviii)	First aid and sanitation arrangements shall be made for the drivers and other contract workers during construction phase.	Complied
(xix)	Leq of Noise Level should be limited to 75 dBA and regular maintenance of equipment to be undertaken. For people working in high noise areas, personal protection devices should be provided.	Complied Leq of noise level at project boundary is being monitored and observed less than 75 dB(A). People working in high noise area are provided with PPEs like ear- muff and ear plug. Monitoring report is enclosed as <b>Annexure-I</b> .
(xx)	Regular monitoring of the ambient air quality shall be carried out in and around the power plant and records maintained. The location of the monitoring stations and frequency of monitoring shall be decided in consultation with SPCB. Periodic reports shall be submitted to the Regional Office of this Ministry.	Complied. Online CAAQ monitoring system for Ambient air quality is already established. Ambient Air Quality Monitoring is also being carried out by third party consultant. Monitoring reports is enclosed as <b>Annexure-I</b> . Records of the same are being maintained and report is being sent to the Regional Office of the MoEFCC, CPCB & MPPCB. Online ambient air quality system also connected with MPPCB & CPCB portal.
(xxi)	The project proponent shall advertise in at least two local newspapers widely circulated in the region around the project, one of which shall be in the vernacular language of the locality concerned, informing that the project has been accorded environmental clearance and copies of clearance letters are available with the State Pollution Control Board/ Committee and may also be seen at website of the Ministry of Environment and Forests at <a href="http://www.envfor.nic.in">http://www.envfor.nic.in</a> .	Complied
(xxii)	A separate environment monitoring cell (EMC) with suitable qualified staff should be set up for implementation of the stipulated environmental safeguards.	Complied We have established separate environmental monitoring cell with well qualified staff to carry out regular surveillance for implementation of stipulated environmental safeguards
(xxiii)	A half yearly report on the status of implantation of the stipulated conditions and environmental safeguards should be submitted to this Ministry, its Regional Office at Bhopal, CPCB and SPCB	Complied Six monthly compliance reports are being submitted regularly. Last compliance report for the period of October'2022- March '2023 submitted vide

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		letter no. APL/EPMPL/EMD/EC/ MoEFCC/207/05/23 dated 23.05.2023.
(xxiv)	Regional Office of the Ministry of Environment & Forests located at Bhopal will monitor the implementation of the stipulated conditions. A complete set of documents including Impact Assessment Report and Environment Management Plan along with the additional information submitted from time to time shall be forwarded to the Regional Office for their use during monitoring.	Complied. All necessary information forwarded to the MoEFCC Regional Office, Bhopal on regular basis.
(xxv)	Separate funds should be allocated for implementation of environmental protection measures along with item-wise break-up. This cost should be included as part of the project cost. The funds earmarked for the environment protection measures should not be diverted for other purposes and year-wise expenditure should be reported to the Ministry.	Complied Separate Budget has been allocated for the Environmental Protection Measures by Mahan Energen Limited.
(xxvi)	Full cooperation should be extended to the scientists/ officers from the Ministry/ Regional Office of the Ministry at Bhopal/ the CPCB/ the SPCB who would be monitoring the compliance of environmental status.	Full co-operation & support is being extended to all the Govt visiting officials always.
<b>EC Amendment vide letter no. J-13011/56/2006 -IA, II (T) dated: 23.08.2013</b>		
(xxvii)	The project proponent shall upload the status of compliance of the conditions stipulated in the environmental clearance issued vide this Ministry's letter of even no. dated 20.04.2007. in its website and updated periodically and also simultaneously send the same by e-mail to the Regional Office of the Ministry of Environment and Forests.	Complied. EC compliance report of Mahan Energen Limited is being uploaded on Adani Power website and soft copy is being sent to Regional Office of MoEFCC, CPCB and MPPCB.
(xxviii)	Criteria pollutants levels including NOx, RSPM (PM-10 & PM-2.5) SO2, NOx (from stack & ambient air) shall be regularly monitored and results displayed in your website and also at the main gate of the power plant	Complied. Criteria pollutants levels including NOx, RSPM (PM-10 & PM-2.5) SO2, NOx (from stack & ambient air) being regularly monitored, and results are displayed at the main gate of the Power Plant & same being submitted to concern authorities. Monthly Env. Monitoring are being done by third party also and report is being sent to pollution control board on monthly basis. Environmental monitoring report is enclosed as <b>Annexure-I</b> .
(xxix)	Avenue plantation along the route (both sides of the road) of imported coal transportation from railway siding at	Complied Domestic Coal is being used for the operation of Power Plant and Coal is procured through

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	Mahadiya /Singrauli Railway Siding to Rajmilan-Bandhoura- Power Plant site, over a distance of 63 kms shall be raised by the project proponent at its own cost. The status of implementation shall be submitted to the Regional Office of the Ministry.	Forward e-auction from the nearby Coal mines of SECL/NCL.  Currently transportation of the coal is not being done through <b>Mahadiya Coal siding</b> .
(xxx)	It shall be ensured that only mechanized covered trucks are used for imported coal transportation.	Complied The transportation by road is done through mechanically covered trucks to the extent possible, else through tarpaulin covered trucks so as to prevent coal dust dispersion in the atmosphere.
(xxxi)	A long term study of radioactivity and heavy metals contents on coal to be used shall be carried out through a reputed institute once the power plant becomes operational. Thereafter mechanism for all in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place.	Complied Domestic Coal are being used for power generation for Mahan TPP. Periodical coal and ash analysis are being carried out through a reputed institute. M/s Bhabha Atomic Research Centre (BARC), Department of Atomic Energy, Govt. of India for Radioactivity and heavy metal contents and reports is being submitted periodically with Six monthly EC compliance report to Ministry, CPCB and MPPCB. For provision of In-built mechanism continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash), the technology and monitoring instrument is not available with the suppliers in the country and is not feasible to monitor in this mechanism. <b>MoEFCC has already amended in Environmental Clearance (EC) in CONDITION NO. (xxxi) vide F. No. J-13011/56/2006-IA-II(T) dated; 16th July' 2023. Copy of same enclosed as Annexure A</b>
(xxxii)	The recommendation of the Central Electricity Authority issued vide it's letter no. 159/100ITP&I/CEA/2011, dated 01.02.2013, on the feasibility of transportation of coal from Mahadiya Railway Siding to Mahan TPP site shall be implemented.	Transportation of the coal is not being done from Mahadiya Railway siding. Coal is procured through e-auction from the nearby Coal mines of Northern coal Field and APMDCL-Suliyari Coal mine.
(xxxiii)	The project proponent shall maintain a log book of imported coal and Bill of Imports for coal to establish that the coal used for the power project are additional coal coming to the country. These documents shall be submitted to the Regional Office of the Ministry from time to time.	MEL are not using imported Coal for Power plant. We are mostly procuring the Coal through Forward e-auction from the nearby coal mines as NCL & SECL.
	<b>EC Amendment vide letter no. J-13011/56/2006 -IA.II (T) dated 08.04.2016</b>	

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(xxxiv)	The Sulphur and ash contents of domestic coal shall not exceed 0.5% and 35 % respectively. The coal shall be sourced through e-auction only in case of emergency and non-viability of imported coal. In case of variation of quality at any point of time, fresh reference shall be made to the Ministry for suitable amendments to the environmental clearance. However, for the imported coal, the ash and sulphur contents will be as specified in the earlier order.	Complied Mahan Energen Limited currently procuring coal through domestic sources only. Ash and Sulphur and ash content in the coal is being maintained below 35% & 0.5% respectively and also being complied as per notification of <b>Pit head based TPP</b> .
(xxxv)	The road transportation shall be restricted to the route as approved earlier vide amendment dated 23.08.2013.	Complied Road transportation is being done as per the local administration instruction/approved route only and with mechanically covered truck and with instruction of Local Administration. Feasibility study and survey has been completed from Gajara Bahara Railway Siding to Mahan TPP. Schedule/timeline for installation of coal Pipe Conveyor belt from Gajara Bahara Railway Siding to TPP is already submitted.
(xxxvi)	The transportation by road shall be through mechanically covered trucks to the extent feasible, else through tarpaulin covered trucks so as to prevent coal dust dispersion in the atmosphere.	Complied & followed. Transporting of the coal is being done through trucks covered with tarpaulin with proper sealing arrangement as per the MoEFCC and local authority direction.
(xxxvii)	Harnessing solar power within the premises of the plant particularly at available roof tops shall be carried out and status of implementation including actual generation of solar power shall be submitted along with half yearly monitoring report.	Being Complied >100 Nos. Solar Power streetlights has been installed within the plant premises. We have already installed Solar Power Panels in Township.
(xxxviii)	Monitoring of surface water quantity and quality shall also be regularly conducted, and records maintained. The monitored data shall be submitted to the Ministry regularly. Further, monitoring points shall be located between the plant and drainage in the direction of flow of ground water and records maintained. Monitoring for heavy metals in ground water shall also be undertaken and results/findings submitted along with half yearly monitoring report.	Complied Regular monitoring of surface water quality is being carried out on regular basis. Record are maintained & also report are sent to the Regional Office of the Ministry, CPCB & MPPCB on regular basis.  Analysis Report of Surface Water Quality is enclosed as <b>Annexure-I</b> .
(xxxix)	No water bodies including natural drainage system in the area shall be disturbed due to activities associated with the setting up / operation of the power plant	Complied There is no disturbance caused to any water body including natural drainage system in the area due to operation of the plant

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(xi)	CSR schemes identified based on need-based assessment shall be implemented in consultation with the village Panchayat and the District Administration starting from the development of project itself. As part of CSR prior identification of local employable youth and eventual employment in the project after imparting relevant training shall be also undertaken. Company shall provide separate budget for community development activities and income generating programs.	Compiled & being followed. CSR activities / programs are totally based on the need of the community having special focus on livelihood generation, health and education. Separate budget is allocated for CSR programs. For livelihood restoration of displaced people monthly sustenance allowance (Bhatta) is being given to PAPs. Local youths are also engaged under different contractors working inside the plant to provide them relevant training, exposure & livelihood. CSR progress report is enclosed as <b>Annexure-V</b> .
(xli)	For proper and periodic monitoring of CSR activities, a CSR committee or a Social Audit committee or a suitable credible external agency shall be appointed. CSR activities shall also be evaluated by an independent external agency. This evaluation shall be both concurrent and final.	Being Complied & compliance assured on regular basis. CSR activities are implemented in consultation and collaboration with nearby community & Panchayats leader as well as District Administration. Regular community meetings are organised in all the villages to understand the issues of community. Social development activities have been carried out for Need Based under the CSR activities by <b>Adani Foundation</b> .
(xlii)	An Environmental Cell comprising of at least one expert in environmental science/ engineering, ecology, occupational health and social science, shall be created preferably at the project site itself and shall be headed by an officer of appropriate superiority and qualification. It shall be ensured that the Head of the Cell shall directly report to the Head of the Plant who would be accountable for implementation of environmental regulations and social impact improvement/mitigation measures.	Complied We have established separate environmental monitoring cell with well qualified staff to carry out regular surveillance for implementation of stipulated environmental safeguards.
<b>EC Transferred from Essar to Mahan Energen Limited on dated 15<sup>th</sup> September 2022</b>		
1.	2X600 MW Mahan Super Thermal Power Project at Tehsil Mada, District- Singrauli (Madhya Pradesh)- Transfer of environmental clearance from M/s Essar Power (M.P.) Ltd. to M/s Mahan Energen Limited-reg This has reference to your online proposal no. IA/MP/THE/269676/2022 dated 26 <sup>th</sup> April 2022 regarding transfer of the Environmental clearance (EC) for the above said project from M/s Essar Power (M.P.) Ltd to M/s <b>Mahan Energen Limited</b> .	Noted



## Mahan Energen Limited

2.	The ministry had earlier issued EC for 4x200 MW Mahan super thermal power project at tehsil Mada, District- Singrauli (Madhya Pradesh) in favour of M/s Essar Power (M.P.) Limited vide letter dated 20 <sup>th</sup> April 2007, the said EC was further amended vide letter 10 <sup>th</sup> Feb 2009, 23 <sup>rd</sup> August'2013 and 18 <sup>th</sup> April'2016 for reducing the power generation capacity to 3 x 600 MW, changing the fuel source and extending the validity of EC.	Noted.
3.	As per details submitted by the PP the M/s Essar Power (M.P.) Limited (earlier owner) could achieve the capacity of 2 x 600 = 1200 MW only within the validity period of EC i.e.,19.04.2017 against the EC generated (reduced the capacity 3x 600 MW) by the Ministry to the aforesaid plant. Accordingly, CTO was obtained from SPCB vide letter dated 30.08.2016 from commissioned capacity i.e. 2 x 600 MW.	Noted
4.	M/s Mahan Energen Limited has informed that the unit of M/s Essar power M P Limited was admitted into the corporate Insolvency Resolution process (CIRP) vide order dated 29.09.2020 passed by National Company Law Tribunal New Delhi and M/s Adani Power Ltd has acquired 100% paid share capital and Management control of M/s Essar power (M.P.) Ltd, and thus necessitating transfer of all requisite approvals in the name of M/s Mahan Energen Limited.	Noted & agreed.
5.	M/s Mahan Energen Limited has submitted and affidavit to abide by the terms and conditions stipulated in the environmental clearance 20 <sup>th</sup> April 2007 and its subsequent amendments dated 10 <sup>th</sup> February 2009, 23 <sup>rd</sup> August 2013 and 08 <sup>th</sup> April, 2016 issued in the name of M/s Mahan Energen Limited.	Noted and being complied. Environment clearance 20 <sup>th</sup> April 2007 and its subsequent amendments dated 10 <sup>th</sup> February 2009, 23 <sup>rd</sup> August 2013 and 08 <sup>th</sup> April 2016.
6.	As per the relevant provision of the EIA Notification 2006, the environmental clearance granted by the ministry vide letter No. J-13011/56/2006-IA-II(T) dated 20 <sup>th</sup> April 2007 and its subsequent amendments dated 10 <sup>th</sup> February, 2009, 23 <sup>rd</sup> August, 2013 and 8 <sup>th</sup> April, 2016 to the project 4 x200 MW (3X600 MW reduced capacity) MW Mahan Super Thermal Power Project at Tehsil- Mada, Village- Bandhaura, Nagwa, Karsualal and Khairahi, District- Singrauli, Madhya Pradesh is hereby	Noted & agreed.

## **Mahan Energen Limited**

	transferred from M/s Essar power (M.P) Limited to M/s Mahan Energen Limited, with the condition that the aforesaid power plant will be operated on the power generation capacity 2 x600 MW Further expansion shall be taken up only after prior Environmental Clearance under the vision of the EIA Notification, 2006, as amended. The other terms and condition as mentioned in the initial Environmental Clearance and its further amendments shall remaining unchanged.	
7.	This issued with approval of the competent authority.	Noted.

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सत्यमेव जयते

**File No.: J-13011/56/2006-IA.II(T)**  
**Government of India**  
**Ministry of Environment, Forest and Climate Change**  
**IA Division**

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Dated 16/07/2023



To,

Shri RN Shukla  
M/s ESSAR POWER M P LIMITED  
Prakesh Deep, 10th Floor, 7 Tolstoy Marg, New Delhi , Bandhaura, Nagwa, Karsualal and Khairahi,,  
SINGRAULI, MADHYA PRADESH, Mahan TPP, 110001  
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**Subject:** 2x600 MW Mahan Super Thermal Power Plant at village Bandhaura, Tehsil Mada, District Singrauli, Madhya Pradesh by Mahan Energen Limited - Amendment in Environmental Clearance (EC) – reg.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number IA/MP/THE/425011/2023 dated 05/04/2023 for grant of an amendment in Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006, as amended.

2. The particulars of the proposal are as below :

(i) EC Identification No.	EC23A0601MP5554545A
(ii) File No.	J-13011/56/2006-IA.II(T)
(iii) Clearance Type	Amendment in EC
(iv) Category	A
(v) Schedule No./ Project Activity	1(d) Thermal Power Plants
(vi) Sector	Thermal Projects
(vii) Name of Project	2x600 MW Mahan Super Thermal Power Plant at Village Bandhaura Nagwa Karsualal and Khairahi Tehsil Mada District Singrauli Madhya Pradesh
(viii) Location of Project (District, State)	SINGRAULI, MADHYA PRADESH
(ix) Issuing Authority	MoEF&CC
(x) EC Date	20/04/2007
(xi) Applicability of General Conditions	NO
(xiii) Status of implementation of the project	

3.The Environmental Clearance (EC) granted by the Ministry vide letter dated 20.04.2007 for the 4x500 MW Mahan Super Thermal Power Plant at village Bandhaura, Tehsil Mada, District Singrauli, Madhya Pradesh by Mahan Energen Limited. Further, the Ministry vide letter dated 10.02.2009 has changed the capacity from 4x500 MW to 3x600 MW, followed by amendment in EC dated 23.08.2013 and 8.04.2016. The Ministry has also transferred the EC vide letter dated 15.09.2022 from M/s Essar Power (M.P.) Ltd to M/s Mahan Energen Limited.

4.PP submitted proposal for amendment in Environmental Clearance for amendment in Condition no. (xxx) of mechanism for in-built continuous monitoring for radio activity and heavy metals in coal and fly ash. The amendment has been sought with the details are attached at **Annexure A**.

5.The proposal was considered by the EAC (Thermal power projects) in its 40<sup>th</sup> meeting held on 25.04.2023. The EAC after detailed deliberation on the information submitted **recommended** the proposal for proposed amendment.

6.Based on recommendations of the EAC, the Ministry of Environment, Forest and Climate Change hereby accords approval for amendments in the environmental clearance dated 20.04.2007 as stated in para 4 above, for the project 2x600 MW Mahan Super Thermal Power Plant at village Bandhaura, Tehsil Mada, District Singrauli, Madhya Pradesh by Mahan Energen Limited.

7.All other terms and conditions stipulated in the environmental clearance dated 20.04.2007 shall remain unchanged.

8.This issues with approval of the competent authority.

**Annexure 1**

**Standard EC Conditions for (Thermal Power Plants)**

**1 Air quality monitoring and Management**

Sr. No	EC Conditions
1.1	NA

**Annexure 2**

**Amendment Logs**

Description	Reference	Existing	Proposed / Amendment	Reason
NA	NA	NA	NA	NA

**Copy To**

1.The Secretary, Ministry of Power, Shram Shakti Bhawan, Rafi Marg, NewDelhi - 110 001.

2.The Chairman, Central Electricity Authority, SewaBhawan, R. K. Puram, New Delhi - 110 066.

- 3.The Deputy Director General of Forests, Ministry of Environment, Forest and Climate Change, Integrated Regional Office, E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road No.3, Ravishankar Nagar, Bhopal –462 016.
- 4.The Secretary, Department of Environment, Government of Madhya Pradesh, Secretariat, Bhopal.
- 5.The Member Secretary, Central Pollution Control Board, Parivesh Bhawan, East Arjun Nagar, Delhi - 110 032.
- 6.The Member Secretary, Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal – 462016.
- 7.Guard file/Monitoring file/Website of MoEF&CC.



## Annexure A

S. No.	Details as per EC	Amendment sought	Justification
1.	Amendment in Office Order dated 23.08.2013 Condition no. (xxxi) "A long-term study of radioactivity and heavy metals contents on coal to be used shall be carried out through a reputed institute once the power plant becomes operational. Thereafter mechanism for all in-built continuous monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place"	A long-term study of radioactivity and heavy metals contents on coal to be used shall be carried out through a reputed institute once the power plant becomes operational. Thereafter mechanism for all in-built periodical monitoring for radio activity and heavy metals in coal and fly ash (including bottom ash) shall be put in place"	For provision of In-built mechanism for continuous monitoring for radioactivity and heavy metals in coal and fly ash (including bottom ash), the technology and monitoring instrument is not available with the suppliers in the Country and is also technically not feasible to monitor in this mechanism.

\*\*\*\*\*

Signature valid

Digitally Signed by : Yogendra Pal Singh  
Member Secretary, MoEFCC (EC)

Date: 17/07/2023

**Mahan Energen Limited**  
**Summary of Environmental Monitoring Report**  
Period from April'2023 to September'2023

Ambient Air Quality Monitoring Results													
Location		Near Admin Building				Near Gate No. 2				Near Gate No. 3			
Month & Year	Date	PM-10	PM-2.5	SO2	NO2	PM-10	PM-2.5	SO2	NO2	PM-10	PM-2.5	SO2	NO2
		Unit-µg/Nm3				Unit-µg/Nm3				Unit-µg/Nm3			
	Permissible Limit	100	60	80	80	100	60	80	80	100	60	80	80
April-23	03.04.2023	62.0	34.2	12.7	22.8	66.2	38.3	13.4	20	53.2	29.6	12.7	24.4
	06.04.2023	67.9	35.8	14.1	24.3	71.4	39.2	12.7	23.8	56.5	28.7	11.9	21.8
	10.04.2023	61.5	33.3	13.9	24.7	64	31.2	16.6	24.5	60.5	34.6	13.4	23.5
	13.04.2023	66	35.4	13.4	22	67.3	37.0	15.19	20.9	61.2	31.2	14.3	21.6
	17.04.2023	67.3	36.7	14.7	23.3	68.7	37.9	16.3	25.8	58.3	30.4	12.4	23.5
	20.04.2023	65.4	33.7	12.7	24.7	72.5	40	13.7	24.5	52	29.4	13.1	21
	24.04.2023	67.1	34.6	13.7	22.7	74.1	36.2	14	26.3	54.8	30.2	11.8	22.5
	27.04.2023	63.9	35.8	12.7	21.6	66.9	33.3	15	25.8	61.8	32.1	12.3	20.3
	Avg. Value	65.1	34.9	13.5	23.3	68.9	36.6	14.6	24.0	57.3	30.8	12.7	22.3
May-23	02.05.2023	65.8	36.2	13.8	21.6	68.6	36.9	14.0	22.5	59.6	31.7	13.1	22
	05.05.2023	69.5	37.8	15.2	22.8	72.8	38.8	14.8	22.6	61.5	32.5	14.4	24
	08.05.2023	64.3	33.9	12.9	20.9	65.4	33.6	12.9	20.9	64	34.2	12.5	21.4
	11.05.2023	68.5	35.2	15.2	22.5	68.2	35.9	14.1	22.1	59.2	30.9	13.8	21.6
	15.05.2023	62.5	34.2	13.7	21.1	71.6	39.5	15.3	23.2	53.1	29.5	11.3	20.7
	18.05.2023	66.1	35.8	16.3	23.5	68.9	37.6	13.2	21.9	56.7	31.8	14.8	22.4
	22.05.2023	65.7	33.1	12.6	21.5	73.4	41.2	12.7	20.8	53.9	30.6	12.2	21.2
	25.05.2023	66.8	34.6	13.3	20.9	69.5	35.6	14.5	23.2	62.6	33.5	13.3	20.7
	29.05.2023	67.2	33.4	14.8	20.2	68.5	32.9	12.6	21.7	61.2	31.2	12.6	19.9
	Avg. Value	66.3	34.9	14.2	21.7	69.7	36.9	13.8	22.1	59.1	31.8	13.1	21.5
June-23	01.06.2023	66.9	36.2	15.1	22.4	66.1	34.2	13.7	19.9	63.9	33.3	12.9	21.5
	05.06.2023	66.7	34.6	14.7	21.0	63.7	31.8	12.9	18.2	66.5	34.6	14.7	22.3
	08.06.2023	63.4	32.9	14.0	19.9	68.7	35.4	13.2	20.4	63.0	32.5	12.8	21.3
	12.06.2023	66.3	34.2	13.5	20.7	64.2	33.3	12.0	18.4	67.5	35.0	13.9	22.4
	16.06.2023	62.6	32.5	12.8	19.9	67.5	34.1	13.6	20.6	63.0	32.9	14.6	23.2
	19.06.2023	60.4	31.2	12.0	18.7	70.3	36.2	14.2	22.1	65.6	34.2	15.2	19.2
	22.06.2023	63.7	33.3	13.2	20.1	66.7	33.9	12.8	20.2	61.5	32.1	14.4	21.6
	26.06.2023	67.2	35.0	14.8	21.4	69.5	35.2	13.5	21.4	62.8	30.4	13.6	21.0
	29.06.2023	65.4	32.4	12.4	18.6	68.5	30.5	14.1	20.8	65.9	29.8	15.4	20.2
	Avg. Value	64.7	33.6	13.6	20.3	67.2	33.8	13.3	20.2	64.4	32.8	14.2	21.4

July-23	10.07.2023	40.0	23.6	9.8	14.3	43.3	24.1	12.4	18.4	44.6	20.2	13.0	17.6
	13.07.2023	33.9	18.5	10.4	11.8	47.7	21.9	14.7	19.6	50.9	22.4	15.3	18.6
	17.07.2023	43.5	17.6	11.6	19.0	51.7	23.9	14.0	20.5	55.9	23.8	15.7	21.1
	20.07.2023	54.0	21.1	13.9	17.0	62.9	26.4	16.3	22.0	59.0	25.2	17.3	25.1
	24.07.2023	61.1	28.8	14.2	17.5	70.5	28.3	16.7	20.9	71.0	29.4	18.0	24.2
	27.07.2023	53.8	24.1	12.9	15.6	57.0	24.7	13.3	21.4	59.3	21.7	13.1	18.7
	31.07.2023	45.1	19.5	9.4	15.1	50.3	17.3	11.2	13.3	48.0	16.5	10.7	14.0
	<b>Avg. Value</b>	<b>47.4</b>	<b>21.9</b>	<b>11.7</b>	<b>15.8</b>	<b>54.8</b>	<b>23.8</b>	<b>14.1</b>	<b>19.4</b>	<b>55.5</b>	<b>22.7</b>	<b>14.7</b>	<b>19.9</b>
Aug-23	01.08.2023	45.7	21.3	8.9	16.6	48.1	19.7	11.6	19.4	45.2	23.2	10.1	16.9
	04.08.2023	36.3	19.8	11.7	15.5	51.0	22.2	13.6	16.6	46.9	21.4	13.2	13.5
	07.08.2023	44.6	19.5	9.5	17.9	49.4	21.9	9.9	18.0	44.4	22.5	10.0	19.7
	11.08.2023	54.6	22.5	15.4	19.3	60.5	24.1	16.2	21.6	48.5	21.6	8.2	18.0
	14.08.2023	44.3	18.5	13.7	15.3	48.3	19.6	14.8	16.9	49.2	20.0	12.2	17.0
	17.08.2023	33.6	14.2	9.6	11.7	38.9	15.2	10.1	12.3	43.5	15.7	9.3	12.9
	21.08.2023	40.9	16.2	10.6	18.4	49.3	18.1	12.6	20.1	47.3	17.4	15.2	20.1
	24.08.2023	48.2	17.1	9.5	14.7	51.8	17.2	10.4	16.9	42.6	16.9	11.4	13.6
	28.08.2023	53.9	25.0	16.9	23.3	58.5	26.3	17.5	23.9	39.4	19.5	14.4	19.5
	30.08.2023	47.9	23.3	14.8	21.6	49.8	23.5	15.7	23.6	40.9	20.0	16.0	21.8
	<b>Avg. Value</b>	<b>45.0</b>	<b>19.7</b>	<b>12.1</b>	<b>17.4</b>	<b>50.6</b>	<b>20.8</b>	<b>13.2</b>	<b>18.9</b>	<b>44.8</b>	<b>19.8</b>	<b>12.0</b>	<b>17.3</b>
Sept-23	04.09.2023	49.0	23.4	10.0	17.1	52.4	23.7	11.3	16.8	43.7	21.8	8.4	14.1
	07.09.2023	42.3	21.9	9.1	14.2	50.6	23.8	14.5	19.1	40.2	23.9	11.0	16.4
	11.09.2023	47.6	25.7	11.2	13.9	53.8	27.6	13.9	17.1	39.8	20.3	12.1	12.7
	14.09.2023	53.0	29.4	13.2	15.8	56.4	30.4	10.8	19.1	42.5	21.9	7.7	11.8
	18.09.2023	55.3	27.7	12.2	17.9	57.2	32.5	13.8	15.6	44.5	23.4	10.2	13.8
	21.09.2023	46.8	25.0	14.2	18.0	51.5	31.3	15.8	14.5	42.4	20.1	9.7	12.7
	25.09.2023	42.0	20.4	13.0	16.5	49.7	29.6	13.8	18.4	43.1	19.5	13.1	16.1
	28.09.2023	43.1	22.7	15.2	18.4	46.9	27.5	14.2	17.9	39.5	22.7	11.3	13.8
	<b>Avg. Value</b>	<b>47.4</b>	<b>24.5</b>	<b>12.2</b>	<b>16.5</b>	<b>52.3</b>	<b>28.3</b>	<b>13.5</b>	<b>17.3</b>	<b>42.0</b>	<b>21.7</b>	<b>10.4</b>	<b>13.9</b>



## Mahan Energen Limited

Stack Emission Monitoring Results (April-2023 to Sept.-2023)									
Location		Unit-1				Unit-2			
Month	Date of Sampling	PM	SO2	NOx	Mercury (Hg)	PM	SO2	NOx	Mercury (Hg)
		Unit-mg/Nm³				Unit-mg/Nm³			
	Permissible Limit	50	200**	450	0.03	50	200**	450	0.03
April-23	24.04.2023	41.31	723.00	329.00	BQL (0.01)	44.22	667.00	288.00	BQL (0.01)
May-23	25.05.2023	43.15	719.00	368.00	BQL (0.01)	45.60	676.00	276.00	BQL (0.01)
June-23	21.06.2023	38.66	795.74	368.15	BQL (0.01)	37.07	770.71	341.42	BQL (0.01)
July-23	Unit:1 17.07.2023	44.22	790.00	354.32	BQL (0.01)	39.71	763.58	285.00	BQL (0.01)
	Unit: 2 29.07.2023								
August-23	Unit:1 Shutdown	Shut down			BQL (0.01)	42.22	753.00	264.00	BQL (0.01)
	Unit:2 22.09.2023								
Sept.-23	22.10.2023	44.50	802.52	334.11	BQL (0.01)	41.63	775.18	295.08	BQL (0.01)

\*\* Further As per MoEF&CC notification dated 05<sup>th</sup> Sep 2022, MEL is a Category "C" TPP and timelines for compliance of SO<sub>2</sub> emission is up to 31st December 2026.

**Mahan Energen Limited**  
**Ground Water Monitoring Results**  
**(April-2023 to September-2023)**

Month			April-2023			August-2023		
Sampling Date			11.04.2023			19.08.2023		
Sr. NO.	Parameters	Unit	Bandhaura Village	Railla Village	Karsuaraja Village	Bandhaura Village	Railla Village	Karsuaraja Village
1	pH @ 25 oC	-	7.36	7.23	7.46	7.54	7.65	7.48
2	Turbidity	NTU	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	**BLQ(**LOQ-1.0)	**BLQ(**LOQ-1.0)	**BLQ(**LOQ-1.0)
3	Total Dissolved Solids @ 180 OC	mg/L	588.0	462.0	572.0	372.00	338.00	335.00
4	Total Hardness as CaCO3	mg/L	320.0	202.0	282.0	188.00	212.00	206.00
5	Alkalinity as CaCO3	mg/L	265.0	213.30	270.0	156.00	188.00	176.00
6	Calcium as Ca	mg/L	96.59	52.10	63.33	42.00	52.00	58.00
7	Magnesium (Mg)	mg/L	19.20	17.50	30.13	20.22	19.99	14.89
8	Sulphate	mg/L	29.22	54.35	45.97	56.00	38.00	35.00
9	Nitrate	mg/L	2.19	1.09	1.07	10.60	6.50	5.90
10	Iron	mg/L	0.039	0.061	0.118	0.045	0.054	0.017
11	Fluoride	mg/L	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	0.35	0.42	0.38
12	Sulphide	mg/L	BQL(QL=0.2)	BQL(QL=0.2)	BQL(QL=0.2)	BLQ(QL=0.2)	BLQ(QL=0.2)	BLQ(QL=0.2)
13	Zinc (Zn)	mg/L	0.117	0.124	1.021	0.028	0.038	0.020
14	Chloride	mg/L	174.95	88.97	147.95	82.00	75.00	65.00
15	Residual Chlorine	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	BLQ(QL=0.05)	BLQ(QL=0.05)	BLQ(QL=0.05)
16	Colour	Hazen	BQL(QL=1)	BQL(QL=1)	BQL(QL=1)	**BLQ(**LOQ-1.0)	**BLQ(**LOQ-1.0)	**BLQ(**LOQ-1.0)
17	Odour	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
18	Mineral Oil	mg/L	BQL(QL=1)	BQL(QL=1)	BQL(QL=1)	BLQ (QL=1)	BQL(QL=1)	BQL(QL=1)
19	Ammonia	mg/L	BQL(QL=0.5)	BQL(QL=0.5)	BQL(QL=0.5)	BLQ(QL=0.5)	BLQ(QL=0.5)	BLQ(QL=0.5)
20	Taste	-	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable	Agreeable
21	Chloramines as Cl2	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)
22	Cyanide	mg/L	BQL(QL=0.025)	BQL(QL=0.025)	BQL(QL=0.025)	**BLQ(**LOQ-0.02)	**BLQ(**LOQ-0.02)	**BLQ(**LOQ-0.02)
23	Aluminum (Al)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	**BLQ(**LOQ-0.05)	**BLQ(**LOQ-0.05)	**BLQ(**LOQ-0.05)
24	Arsenic (As)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	BQL(QL=0.005)	**BLQ(**LOQ-0.005)	**BLQ(**LOQ-0.005)	**BLQ(**LOQ-0.005)
25	Barium as Ba	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	BLQ(QL=0.02)	BLQ(QL=0.02)	BLQ(QL=0.02)
26	Boron (B)	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	**BLQ(**LOQ-0.1)	**BLQ(**LOQ-0.1)	**BLQ(**LOQ-0.1)
27	Cadmium (Cd)	mg/L	BQL(QL=0.002)	BQL(QL=0.002)	BQL(QL=0.002)	**BLQ(**LOQ-0.002)	**BLQ(**LOQ-0.002)	**BLQ(**LOQ-0.002)
28	Copper (Cu)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	**BLQ(**LOQ-0.002)	**BLQ(**LOQ-0.002)	**BLQ(**LOQ-0.002)
29	Lead (Pb)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	BQL(QL=0.005)	**BLQ(**LOQ-0.002)	**BLQ(**LOQ-0.002)	**BLQ(**LOQ-0.002)
30	Manganese (Mn)	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	**BLQ(**LOQ-0.1)	**BLQ(**LOQ-0.1)	**BLQ(**LOQ-0.1)
31	Mercury (Hg)	mg/L	BQL(QL=0.0005)	BQL(QL=0.0005)	BQL(QL=0.0005)	**BLQ(**LOQ-0.0005)	**BLQ(**LOQ-0.0005)	**BLQ(**LOQ-0.0005)
32	Selenium (Se)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	BQL(QL=0.005)	**BLQ(**LOQ-0.001)	**BLQ(**LOQ-0.001)	**BLQ(**LOQ-0.001)
33	Molybdenum as Mo	mg/L	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)	BLQ(QL=0.01)	BLQ(QL=0.01)	BLQ(QL=0.01)
34	Total Chromium Cr	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	**BLQ(**LOQ-0.002)	**BLQ(**LOQ-0.002)	**BLQ(**LOQ-0.002)
35	Nickel as (Ni)	mg/L	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)	BLQ(QL=0.01)	BLQ(QL=0.01)	BLQ(QL=0.01)
36	Silver (Ag)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	BLQ(QL=0.02)	BLQ(QL=0.02)	BLQ(QL=0.02)
37	Anionic Detergent	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	**BLQ(**LOQ-0.05)	**BLQ(**LOQ-0.05)	**BLQ(**LOQ-0.05)
38	Naphthalene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	**BLQ(QL=10)	**BLQ(QL=10)	**BLQ(QL=10)
39	E.Coli (MPN/100 ml)	MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent
40	Total Coliform	MPN/100ml	Absent	Absent	Absent	Absent	Absent	Absent

**Mahan Energen Limited**  
**Surface Water Quality Monitoring Results**  
**(April-2023 to September-2023)**

Month			April-2023		August-2023	
Date			11.04.2023		20.08.2023	
Sr. NO.	Parameters	Unit	Nr. Gate No. 1	Nr. Gate No. 3	Nr. Gate No. 1	Nr. Gate No. 3
1	pH @ 25 oC	-	7.41	7.35	7.60	7.14
2	Turbidity	NTU	BQL(QL=0.1)	BQL(QL=0.1)	*BQL(**LOQ-1.0)	*BQL(**LOQ-1.0)
3	Total Dissolved Solids @ 180 °C	mg/L	411.0	341.0	319.0	163.0
4	Total Hardness as CaCO <sub>3</sub>	mg/L	212.0	148.0	208.0	58.0
5	Alkalinity as CaCO <sub>3</sub>	mg/L	205.0	193.3	176.0	75.0
6	Calcium as Ca	mg/L	62.52	43.29	68.0	10.0
7	Magnesium (Mg)	mg/L	13.61	9.7	9.32	8.03
8	Sulphate	mg/L	28.83	29.41	42.0	10.0
9	Nitrate	mg/L	0.59	0.36	18.50	*BQL(**LOQ-1.0)
10	Iron	mg/L	0.106	0.484	0.024	0.032
11	Fluoride	mg/L	BQL(QL=0.1)	BQL(QL=0.1)	0.32	0.21
12	Sulphide	mg/L	BQL(QL=0.2)	BQL(QL=0.2)	BQL(QL=0.2)	BQL(QL=0.2)
13	Zinc (Zn)	mg/L	0.074	BQL(QL=0.02)	*BQL(**LOQ-0.01)	BQL(**LOQ-0.01)
14	Chloride	mg/L	90.97	58.98	68.0	20.0
15	Residual Chlorine	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)
16	Colour	Hazen	BQL(QL=1)	BQL(QL=1)	*BQL(**LOQ-0.1)	*BQL(**LOQ-1.0)
17	Odour	-	Agreeable	Agreeable	Unobjectionable	Unobjectionable
18	Mineral Oil	mg/L	BQL(QL=1)	BQL(QL=1)	*BQL(**LOQ-0.1)	*BQL(**LOQ-0.1)
19	Ammonia	mg/L	1.40	0.84		
20	Taste	-	Agreeable	Agreeable	Unobjectionable	Unobjectionable
21	Chloramines as Cl <sub>2</sub>	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)
22	Cyanide	mg/L	BQL(QL=0.025)	BQL(QL=0.025)	*BQL(**LOQ-0.02)	*BQL(**LOQ-0.02)
23	Aluminum (Al)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	*BQL(**LOQ-0.005)	0.009
24	Arsenic (As)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	*BQL(**LOQ-0.005)	*BQL(**LOQ-0.005)
25	Barium as Ba	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)
26	Boron (B)	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	*BQL(**LOQ-0.1)	*BQL(**LOQ-0.1)
27	Cadmium (Cd)	mg/L	BQL(QL=0.002)	BQL(QL=0.002)	*BQL(**LOQ-0.002)	*BQL(**LOQ-0.002)
28	Copper (Cu)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	*BQL(**LOQ-0.002)	*BQL(**LOQ-0.002)
29	Lead (Pb)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	*BQL(**LOQ-0.002)	*BQL(**LOQ-0.002)
30	Manganese (Mn)	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	*BQL(**LOQ-0.1)	*BQL(**LOQ-0.1)
31	Mercury (Hg)	mg/L	BQL(QL=0.0005)	BQL(QL=0.0005)	*BQL(**LOQ-0.0005)	*BQL(**LOQ-0.0005)
32	Selenium (Se)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	*BQL(**LOQ-0.001)	*BQL(**LOQ-0.001)
33	Molybdenum as Mo	mg/L	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)
34	Total Chromium Cr	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	*BQL(**LOQ-0.002)	*BQL(**LOQ-0.002)
35	Nickel as (Ni)	mg/L	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)
36	Silver (Ag)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.0)	BQL(QL=0.02)
37	Anionic Detergent	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	*BQL(**LOQ-0.05)	*BQL(**LOQ-0.05)
38	E.Coli (MPN/100 ml)	MPN/100 ml	Absent	Absent	Absent	Absent
39	Total Coliform	MPN/100ml	Absent	Absent	Absent	Absent

### STP Treated Water Test Results

(April'2023 to September'2023)

Location of Sewage Treatment Plant (STP): Near Admin Building						
Month	Date	Parameters				
		pH	TSS (mg/L)	BOD (mg/L)	COD (mg/L)	Oil & Grease (mg/L)
April-23	11.04.2023	7.63	29	17.00	60.00	(QL=2)
May-23	11.05.2023	7.21	24	14.00	50.00	(QL=2)
June-23	14.06.2023	6.84	28	15.60	60.00	(QL=2)
July-23	18.07.2023	7.54	35	15.08	58.82	0.56
August-23	19.08.2023	7.74	42	17.98	60.25	0.64
Sept.-23	16.09.2023	7.57	56	18.46	62.52	0.58

### ETP Treated Water Test Results

(April -2023 to September-2023)

Location of Effluent Treatment Plant (ETP):						
Month	Date	Parameters				
		pH	TSS (mg/L)	BOD (mg/L)	COD (mg/L)	Oil & Grease (mg/L)
April-23	11.04.2023	7.56	39	15	50.00	(QL=2)
May-23	11.05.2023	7.12	34	12	40.00	(QL=2)
June-23	14.06.2023	6.92	39	15	50.00	(QL=2)
July-23	18.07.2023	6.70	43	13	52.11	0.38
August-23	19.08.2023	6.30	46	10.22	55.74	0.48
Sept.-23	16.09.2023	6.30	49	8.9	48.20	0.41

# Mahan Energen Limited

## Ambient Noise Monitoring Results

April-2023 to September-2023

Location			Admin			Gate No.1			Gate No. 2			Gate No. 3		
Month	Date	Duration	Leq dB(A)	Max dB(A)	Min dB(A)	Leq dB(A)	Max dB(A)	Min dB(A)	Leq dB(A)	Max dB(A)	Min dB(A)	Leq dB(A)	Max dB(A)	Min dB(A)
April-23	04.04.2023	Day	66.3	68.5	60.1	63.1	71.4	59.4	65.5	68.0	62	54.6	56.7	49.3
		Night	53.4	56.6	47.2	55.3	57.4	51.9	61.8	63.7	58.6	47.1	50.4	40.3
May-23	05.05.2023	Day	63.5	69.3	53.7	61.3	69.2	54.3	60.5	67.4	54.2	56.6	59.3	53.1
		Night	54.0	57.3	46.5	54.7	58.2	50.8	56.1	59.6	53.8	57	61.4	51.9
June-23	16.06.2023	Day	57.4	60.2	52.9	58.8	67.5	52.3	57.2	65.2	52.8	57.6	59.9	53.6
		Night	50.5	57.1	43.1	52.8	56.3	47.6	51.4	54.8	46.3	49.8	53.5	43.2
July-23	20.07.2023	Day	62.6	73.4	55.6	68.6	71.2	54.2	64.3	68.1	51	58.0	66.3	48.5
		Night	55.3	64.2	52.3	61.9	67.3	49.8	59.4	60.5	47.3	52.4	59.4	41.3
Aug-23	10.08.2023	Day	57.4	68.6	46.4	66.8	70.2	52.2	65.2	69.8	51.4	61.2	72.7	56.8
		Night	50.8	55.3	40.7	59.6	65.9	45.3	56.6	62.2	49.7	53.8	67.1	50.6
Sept.-23	14.09.2023	Day	62.6	67.1	52.6	60.8	73.4	55.3	64.6	74.8	68.5	61.6	68.2	56.8
		Night	55.3	60.5	50.0	52.3	66.5	50.6	57.6	57.2	47.1	50.0	55.4	42.6

GO Green Mechanisms Pvt Ltd						
Analysis Results For The Month of April-23						
On Site 24 Hourly Monitoring Results						
Company Name		Mahan Energen Limited				
Sample Type		AMBIENT AIR QUALITY MONITORING				
Sample Description		Near Admin Building				
Sr. No	Parameters	PM (<10)	PM (<2.5)	SO <sub>2</sub>	NO <sub>2</sub>	Mercury(Hg)
	Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>
	Reference Method	IS 5182 part-23	GGMPL/SOP/AA/60	IS 5182 Part-2	IS 5182 Part-6	Method IO-3.4
	Norms	100	60	80	80	NS
	Date of Monitoring					
1	03-04-2023	62.0	34.2	12.7	22.8	BQL (QL=1)
2	06-04-2023	67.9	35.8	14.1	24.3	BQL (QL=1)
3	10-04-2023	61.5	33.3	13.9	24.7	BQL (QL=1)
4	13-04-2023	66.0	35.4	13.4	22.0	BQL (QL=1)
5	17-04-2023	67.3	36.7	14.7	23.3	BQL (QL=1)
6	20-04-2023	65.4	33.7	12.7	24.7	BQL (QL=1)
7	24-04-2023	67.1	34.6	13.7	22.7	BQL (QL=1)
8	27-04-2023	63.9	35.8	12.7	21.6	BQL (QL=1)
AVERAGE		65.1	34.9	13.5	23.3	BQL (QL=1)

BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified

Norms- As per national Ambient Air Quality Standards

Analyses By

Shiyal K.B.  
Shiyal Kishor

Approved By

P.  
Pankil Patel

.....END.....



<b>GO Green Mechanisms Pvt Ltd</b> <b>Analysis Results For The Month of April-23</b> <b>On Site 24 Hourly Monitoring Results</b>						
Company Name		Mahan Energen Limited				
Sample Type		AMBIENT AIR QUALITY MONITORING				
Sample Description		Near Gate No - 02				
Sr. No	Parameters	PM (<10)	PM (<2.5)	SO <sub>2</sub>	NO <sub>2</sub>	Mercury(Hg)
	Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m3
	Reference Method	IS 5182 part-23	GGMPL/SOP/AA/60	IS 5182 Part-2	IS 5182 Part-6	Method IO-3.4
	Norms	100	60	80	80	NS
	Date of Monitoring					
1	03-04-2023	66.2	38.3	13.4	20.0	BQL(QL=1)
2	06-04-2023	71.4	39.2	12.7	23.8	BQL(QL=1)
3	10-04-2023	64.0	31.2	16.6	24.5	BQL(QL=1)
4	13-04-2023	67.34	37.08	15.19	20.95	BQL(QL=1)
5	17-04-2023	68.7	37.9	16.3	25.8	BQL(QL=1)
6	20-04-2023	72.5	40.0	13.7	24.5	BQL(QL=1)
7	24-04-2023	74.1	36.2	14.0	26.3	BQL(QL=1)
8	27-04-2023	66.9	33.3	15.0	25.8	BQL(QL=1)
AVERAGE		68.9	36.7	14.6	24.0	BQL (QL=1)

BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified

Norms- As per national Ambient Air Quality Standards

Analyses By <i>Shiyal Kishor</i> Shiyal Kishor	Approved By <i>P.</i> Pankil Patel
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**GO Green Mechanisms Pvt Ltd**  
**Analysis Results For The Month of April-23**  
**On Site 24 Hourly Monitoring Results**

<b>Company Name</b>		<b>Mahan Energen Limited</b>				
<b>Sample Type</b>		<b>AMBIENT AIR QUALITY MONITORING</b>				
<b>Sample Description</b>		<b>Near Gate No-03</b>				
<b>Sr. No</b>	<b>Parameters</b>	<b>PM (&lt;10)</b>	<b>PM (&lt;2.5)</b>	<b>SO<sub>2</sub></b>	<b>NO<sub>2</sub></b>	<b>Mercury(Hg)</b>
	<b>Unit</b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>µg/m<sup>3</sup></b>	<b>ng/m<sup>3</sup></b>
	<b>Reference Method</b>	<b>IS 5182 part-23</b>	<b>GGMPL/SOP/AA/60</b>	<b>IS 5182 Part-2</b>	<b>IS 5182 Part-6</b>	<b>Method IO-3.4</b>
	<b>Norms</b>	<b>100</b>	<b>60</b>	<b>80</b>	<b>80</b>	<b>NS</b>
	<b>Date of Monitoring</b>					
1	03-04-2023	53.2	29.6	12.7	24.2	BQL(QL=1)
2	06-04-2023	56.5	28.7	11.9	21.8	BQL(QL=1)
3	10-04-2023	60.5	34.6	13.4	23.5	BQL(QL=1)
4	13-04-2023	61.2	31.2	14.3	21.6	BQL(QL=1)
5	17-04-2023	58.3	30.4	12.4	23.5	BQL(QL=1)
6	20-04-2023	52.0	29.4	13.1	21.0	BQL(QL=1)
7	24-04-2023	54.8	30.2	11.8	22.5	BQL(QL=1)
8	27-04-2023	61.8	32.1	12.3	20.3	BQL(QL=1)
<b>AVERAGE</b>		<b>57.3</b>	<b>30.8</b>	<b>12.7</b>	<b>22.3</b>	<b>BQL(QL=1)</b>

**BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified**

**Norms- As per national Ambient Air Quality Standards**

**Analyes By**

*Shiyal K.B.*  
**Shiyal Kishor**

**Approved By**

*P.*  
**Pankil Patel**

.....**END**.....





GO Green Mechanisms Pvt Ltd Analysis Results For The Month of May-23 On Site 24 Hourly Monitoring Results						
Company Name		Mahan Energen Limited				
Sample Type		AMBIENT AIR QUALITY MONITORING				
Sample Description		Near Admin Building				
Sr. No	Parameters	PM (<10)	PM (<2.5)	SO <sub>2</sub>	NO <sub>2</sub>	Mercury(Hg)
	Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>
	Reference Method	IS 5182 part-23	GGMPL/SOP/AA/60	IS 5182 Part-2	IS 5182 Part-6	Method IO-3.4
	Norms	100	60	80	80	NS
	Date of Monitoring					
1	02-05-2023	65.8	36.2	13.8	21.6	BQL(QL=1)
2	05-05-2023	69.5	37.8	15.2	22.8	BQL(QL=1)
3	08-05-2023	64.3	33.9	12.9	20.9	BQL(QL=1)
4	11-05-2023	68.5	35.2	15.2	22.5	BQL(QL=1)
5	15-05-2023	62.5	34.2	13.7	21.1	BQL(QL=1)
6	18-05-2023	66.1	35.8	16.3	23.5	BQL(QL=1)
7	22-05-2023	65.7	33.1	12.6	21.5	BQL(QL=1)
8	25-05-2023	66.8	34.6	13.3	20.9	BQL(QL=1)
9	29-05-2023	67.2	33.4	14.8	20.2	BQL(QL=1)
AVERAGE		66.3	34.9	14.2	21.7	BQL(QL=1)

BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified

Norms- As per national Ambient Air Quality Standards

Analyses By  Shiyal Kishor		Approved By  Pankil Patel
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END

GO Green Mechanisms Pvt Ltd						
Analysis Results For The Month of May-23						
On Site 24 Hourly Monitoring Results						
Company Name		Mahan Energen Limited				
Sample Type		AMBIENT AIR QUALITY MONITORING				
Sample Description		Near Gate No - 02				
Sr. No	Parameters	PM (<10)	PM (<2.5)	SO <sub>2</sub>	NO <sub>2</sub>	Mercury(Hg)
	Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>
	Reference Method	IS 5182 part-23	GGMPL/SOP/AA/60	IS 5182 Part-2	IS 5182 Part-6	Method IO-3.4
	Norms	100	60	80	80	NS
	Date of Monitoring					
1	02-05-2023	68.6	36.9	14.0	22.5	BQL (QL=1)
2	05-05-2023	72.8	38.8	14.8	22.6	BQL (QL=1)
3	08-05-2023	65.4	33.6	12.9	20.9	BQL(QL=1)
4	11-05-2023	68.2	35.9	14.1	22.1	BQL(QL=1)
5	15-05-2023	71.6	39.5	15.3	23.2	BQL (QL=1)
6	18-05-2023	68.9	37.6	13.2	21.9	BQL (QL=1)
7	22-05-2023	73.4	41.2	12.7	20.8	BQL (QL=1)
8	25-05-2023	69.5	35.6	14.5	23.2	BQL (QL=1)
9	29-05-2023	68.5	32.9	12.6	21.7	BQL (QL=1)
AVERAGE		69.7	36.9	13.8	22.1	BQL (QL=1)

BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified

Norms- As per national Ambient Air Quality Standards

Analyses By  Shiyal Kishor		Approved By  Pankil Patel
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GO Green Mechanisms Pvt Ltd						
Analysis Results For The Month of May-23						
On Site 24 Hourly Monitoring Results						
Company Name		Mahan Energen Limited				
Sample Type		AMBIENT AIR QUALITY MONITORING				
Sample Description		Near Gate No-03				
Sr. No	Parameters	PM (<10)	PM (<2.5)	SO <sub>2</sub>	NO <sub>2</sub>	Mercury(Hg)
	Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>
	Reference Method	IS 5182 part-23	GGMPL/SOP/AA/60	IS 5182 Part-2	IS 5182 Part-6	Method IO-3.4
	Norms	100	60	80	80	NS
	Date of Monitoring					
1	02-05-2023	59.6	31.7	13.1	22.0	BQL(QL=1)
2	05-05-2023	61.5	32.5	14.4	24.0	BQL(QL=1)
3	08-05-2023	64.0	34.2	12.5	21.4	BQL(QL=1)
4	11-05-2023	59.2	30.9	13.8	21.6	BQL(QL=1)
5	15-05-2023	53.1	29.5	11.3	20.7	BQL(QL=1)
6	18-05-2023	56.7	31.8	14.8	22.4	BQL(QL=1)
7	22-05-2023	53.9	30.6	12.2	21.2	BQL(QL=1)
8	25-05-2023	62.6	33.5	13.3	20.7	BQL(QL=1)
9	29-05-2023	61.2	31.2	12.6	19.9	BQL(QL=1)
AVERAGE		59.1	31.8	13.1	21.5	BQL(QL=1)

BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified  
 Norms- As per national Ambient Air Quality Standards

Analyses By  Shiyal Kishor		Approved By  Pankil Patel
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GO Green Mechanisms Pvt Ltd  
Analysis Results For The Month of June -2023  
On Site 24 Hourly Monitoring Results

Company Name		Mahon Energen Limited												
Sample Type		AMBIENT AIR QUALITY MONITORING												
Sample Description		Near Admin Building												
Sr. No	Parameters	PM (<10)	PM (<2.5)	SO <sub>2</sub>	NO <sub>2</sub>	Mercury(Hg)	O <sub>3</sub>	NH <sub>3</sub>	CO	Benzene	Benzo (a) Pyrene	Pb	Ni	As
	Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>
	Reference Method	IS 5182 Part-23	GGMPL/SCP/AA/60	IS 5182 Part-2	IS 5182 Part-6	Method IO-3.4	IS 5182 Part-9	GGMPL/SOP/A/62	IS 5182 Part-10	IS 5182 Part-11	IS 5182 Part-12	Method IO 3.4	Method IO 3.4	Method IO 3.4
	Norms	100	60	80	80	NS	100	400	4	5	1	1	20	6
Date of Monitoring														
1	01-06-2023	69.9	36.2	15.1	22.4	BQL(QL=1)	15.8	13.2	0.38	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
2	05-06-2023	66.7	34.6	14.7	21.0	BQL(QL=1)	16.1	14.4	0.34	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
3	08-06-2023	63.4	32.9	14.0	19.9	BQL(QL=1)	14.8	12.8	0.32	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
4	12-06-2023	66.3	34.2	13.5	20.7	BQL(QL=1)	15.1	15.7	0.30	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
5	16-06-2023	62.6	32.5	12.8	19.9	BQL(QL=1)	14.5	11.6	0.35	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
6	19-06-2023	60.4	31.2	12.0	18.7	BQL(QL=1)	13.9	13.2	0.30	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
7	22-06-2023	63.7	33.3	13.2	20.1	BQL(QL=1)	14.2	13.7	0.29	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
8	26-06-2023	67.2	35.0	14.8	21.4	BQL(QL=1)	15.1	14.1	0.32	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
9	29-06-2023	65.4	32.4	12.4	18.6	BQL(QL=1)	15.8	13.6	0.36	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
AVERAGE		65.1	33.6	13.6	20.3	BQL(QL=1)	15.0	13.6	0.33	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)

BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified

Norms- As per national Ambient Air Quality Standards

Analysed By

*Shiyal K.B.*  
Shiyal Kishor



Approved By

*P*  
Pankil Patel

END

**GO Green Mechanisms Pvt Ltd**  
**Analysis Results For The Month of June-2023**  
**On Site 24 Hourly Monitoring Results**

<b>Company Name</b>		Mahan Energen Limited												
<b>Sample Type</b>		AMBIENT AIR QUALITY MONITORING												
<b>Sample Description</b>		Near Gate No - 02												
Sr. No	Parameters	PM (<10)	PM (<2.5)	SO <sub>2</sub>	NO <sub>2</sub>	Mercury(Hg)	O3	NH3	CO	Benzene	Benzo (a) Pyrene	Pb	Ni	As
	Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>
	Reference Method	IS 5182 Part-23	GGMPL/SOP/AA/60	IS 5182 Part-2	IS 5182 Part-6	Method IO-3.4	IS 5182 Part-9	GGMPL/SOP/A/62	IS 5182 Part-10	IS 5182 Part-11	IS 5182 Part-12	Method IO 3.4	Method IO 3.4	Method IO 3.4
	Norms	100	60	80	80	NS	100	400	4	5	1	1	20	6
Date of Monitoring														
1	01-06-2023	66.1	34.2	13.7	19.9	BQL (QL=1)	10.7	14.2	0.32	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
2	05-06-2023	63.7	31.8	12.9	18.2	BQL (QL=1)	10.1	14.5	0.28	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
3	08-06-2023	68.7	35.4	13.2	20.4	BQL(QL=1)	10.7	15.4	0.34	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
4	12-06-2023	64.2	33.3	12.0	18.4	BQL (QL=1)	9.8	14.8	0.29	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
5	16-06-2023	67.5	34.1	13.6	20.6	BQL (QL=1)	10.4	14.2	0.33	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
6	19-06-2023	70.3	36.2	14.2	22.1	BQL (QL=1)	9.8	13.8	0.37	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
7	22-06-2023	66.7	33.9	12.8	20.2	BQL (QL=1)	9.5	13.5	0.38	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
8	26-06-2023	69.5	35.2	13.5	21.4	BQL (QL=1)	10.1	14.1	0.31	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
9	29-06-2023	68.5	30.5	14.1	20.8	BQL (QL=1)	10.4	15.4	0.35	EQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
<b>AVERAGE</b>		<b>67.2</b>	<b>33.8</b>	<b>13.3</b>	<b>20.2</b>	<b>BQL(QL=1)</b>	<b>10.2</b>	<b>14.4</b>	<b>0.33</b>	<b>BQL(QL=2.5)</b>	<b>BQL(QL=0.5)</b>	<b>BQL(QL=0.001)</b>	<b>BQL(QL=5)</b>	<b>BQL(QL=1)</b>

BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified

Norms- As per national Ambient Air Quality Standards

Analysed By

*Shivaji K. B.*  
 Shivaji Kishor



Approved By

*P*  
 Pankaj Patel

END

GO Green Mechanisms Pvt Ltd  
Analysis Results For The Month of June-2023  
On Site 24 Hourly Monitoring Results

Company Name		Mahan Energan Limited												
Sample Type		AMBIENT AIR QUALITY MONITORING												
Sample Description		Near Gate No-03												
Sr. No	Parameters	PM (<10)	PM (<2.5)	SO <sub>2</sub>	NO <sub>2</sub>	Mercury(Hg)	O <sub>3</sub>	NH <sub>3</sub>	CO	Eenzene	Benzo (a) Pyrene	Pb	Ni	As
	Unit	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	µg/m <sup>3</sup>	ng/m <sup>3</sup>	ng/m <sup>3</sup>
	Reference Method	IS 5182 Part-23	GGNPL/SOP/AA/60	IS 5182 Part-2	IS 5182 Part-6	Method IO-3.4	IS 5182 Part-9	GGMPL/SOP/AA/62	IS 5182 Part-10	IS 5182 Part-11	IS 5182 Part-12	Method IO 3.4	Method IO 3.4	Method IO 3.4
	Norms	100	60	80	80	NS	100	400	4	5	1	1	20	6
Date of Monitoring														
1	01-06-2023	63.9	33.3	12.9	21.5	BQL(QL=1)	12.2	14.2	0.37	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
2	05-06-2023	66.5	34.6	14.7	22.3	BQL(QL=1)	10.2	14.5	0.39	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
3	08-06-2023	63.0	32.5	12.8	21.3	BQL(QL=1)	10.7	15.4	0.35	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
4	12-06-2023	67.5	35.0	13.9	22.4	BQL(QL=1)	11.5	14.8	0.36	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
5	16-06-2023	63.0	32.9	14.6	23.2	BQL(QL=1)	10.9	14.2	0.33	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
6	19-06-2023	65.6	34.2	15.2	19.2	BQL(QL=1)	10.5	13.8	0.36	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
7	22-06-2023	61.5	32.1	14.4	21.6	BQL(QL=1)	11.3	13.5	0.32	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
8	26-06-2023	62.8	30.4	13.6	21.0	BQL(QL=1)	10.2	14.1	0.31	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
9	29-06-2023	65.9	29.8	15.4	20.2	BQL(QL=1)	9.6	15.4	0.30	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)
AVERAGE		64.4	32.8	14.2	21.4	BQL(QL=1)	10.8	14.4	0.34	BQL(QL=2.5)	BQL(QL=0.5)	BQL(QL=0.001)	BQL(QL=5)	BQL(QL=1)

BQL - Below Quantification Limit; Avg. - Average; NS- Not Specified

Norms - As per national Ambient Air Quality Standards

Analyses By

*Shiyal Kishor*  
Shiyal Kishor

Approved By

*Pankil Patal*  
Pankil Patal



END





**Vardan EnviroLab**  
Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Hr)  
ISO 9001 | ISO 14001 | ISO 45001

**Test Report**

**SUMMARY SHEET OF AMBIENT AIR QUALITY MONITORING**

**Name & Address of the Party:** M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

S. No.	Date of Sampling	Near Admin Buliding				Near Gate No. - 2				Near Gate No. - 3			
		Parameters & Results				Parameters & Results				Parameters & Results			
		PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )
1.	10/07/2023 To 11/07/2023	40.03	23.64	9.84	14.25	43.29	24.07	12.42	18.36	44.62	20.15	13.04	17.64
2.	13/07/2023 To 14/07/2023	33.89	18.52	10.42	11.76	47.69	21.89	14.66	19.63	50.85	22.41	15.30	18.55
3.	17/07/2023 To 18/07/2023	43.49	17.63	11.55	19.02	51.65	23.88	13.99	20.47	55.94	23.77	15.73	21.05
4.	20/07/2023 To 21/07/2023	54.02	21.08	13.90	16.97	62.89	26.39	16.32	22.02	59.01	25.20	17.25	25.13
5.	24/07/2023 To 25/07/2023	61.12	28.76	14.20	17.54	70.49	28.33	16.74	20.85	71.00	29.41	17.98	24.17
6.	27/07/2023 To 28/07/2023	53.79	24.13	12.89	15.61	57.00	24.65	13.32	21.44	59.33	21.66	13.10	18.73
7.	31/07/2023 To 01/08/2023	45.11	19.46	9.35	15.13	50.33	17.33	11.23	13.25	48.01	16.45	10.67	13.98
8.	Maximum	61.12	28.76	14.20	19.02	70.49	28.33	16.74	22.02	71.00	29.41	17.98	25.13
9.	Minimum	33.89	17.63	9.35	11.76	43.29	17.33	11.23	13.25	44.62	16.45	10.67	13.98
10.	Average	47.35	21.89	11.74	15.75	54.76	23.79	14.10	19.43	55.54	22.72	14.72	19.89
11.	Limits As Per CPCB	100	60	80	80	100	60	80	80	100	60	80	80

Note:- CPCB: Central Pollution Control Board.

\*\*\*End of Report\*\*\*



**Terms & Conditions**

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- The report no. with Safety Assessment Report.
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- During operation does not imply endorsement of the tested sample by the lab. Under no circumstances, the lab accepts any liability caused by the use or misuse of the test report.



# SUMMARY SHEET OF AMBIENT AIR QUALITY MONITORING - AUGUST 2023

Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Reporting Date: 08/09/2023

S. No.	Date of Sampling	Near Admin Buliding				Near Gate No. - 2				Near Gate No. - 3			
		Parameters & Results				Parameters & Results				Parameters & Results			
		PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )
1.	01/08/2023 To 02/08/2023	45.74	21.25	8.91	16.55	48.14	19.65	11.59	19.38	45.20	23.18	10.08	16.89
2.	04/08/2023 To 05/08/2023	36.28	19.82	11.65	15.54	50.97	22.18	13.55	16.61	46.90	21.42	13.21	13.54
3.	07/08/2023 To 08/08/2023	44.63	19.50	9.54	17.91	49.39	21.88	9.87	18.04	44.40	22.51	10.04	19.67
4.	10/08/2023 To 11/08/2023	54.62	22.48	15.37	19.25	60.47	24.10	16.22	21.57	48.50	21.63	08.19	18.03
5.	14/08/2023 To 15/08/2023	44.31	18.47	13.65	15.33	48.28	19.55	14.81	16.85	49.20	20.01	12.17	16.97
6.	17/08/2023 To 18/08/2023	33.62	14.16	9.55	11.65	38.94	15.22	10.08	12.34	43.50	15.72	09.25	12.85
7.	21/08/2023 To 22/08/2023	40.85	16.16	10.64	18.37	49.28	18.05	12.61	20.09	47.30	17.39	15.16	20.14
8.	24/08/2023 To 25/08/2023	48.19	17.09	9.54	14.69	51.82	17.22	10.42	16.89	42.60	16.89	11.35	13.57
9.	28/08/2023 To 29/08/2023	53.89	24.95	16.89	23.31	58.48	26.31	17.52	23.87	39.40	19.49	14.43	19.52
10.	30/08/2023 To 31/08/2023	47.87	23.25	14.82	21.58	49.82	23.48	15.74	23.58	40.90	20.04	16.04	21.76
11.	Maximum	54.62	24.95	16.89	23.31	60.47	26.31	17.52	23.87	49.20	23.18	16.04	21.76
12.	Minimum	33.62	14.16	8.91	11.65	38.94	15.22	9.87	12.34	39.40	15.72	08.19	12.85
13.	Average	45.00	19.71	12.06	17.42	50.56	20.76	13.24	18.92	44.79	19.82	11.99	17.29
14.	Limits As Per CPCB	100	60	80	80	100	60	80	80	100	60	80	80

Note:- CPCB: Central Pollution Control Board.

Vardan EnviroLab



Approvals & Certifications

Laboratory:

Plot No. 82A, Sector -5, IMT Manesar, Gurugram - 122051, Haryana  
Tel : +91 124 4343750, 4343752, 4343753

E-mail: lab@vardan.co.in, bd@vardan.co.in  
www.vardan.co.in



# SUMMARY SHEET OF AMBIENT AIR QUALITY MONITORING – September - 2023

Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Reporting Date: 05/10/2023

S. No.	Date of Sampling	Near Admin Buliding				Near Gate No. - 2				Near Gate No. - 3			
		Parameters & Results				Parameters & Results				Parameters & Results			
		PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	PM10 ( $\mu\text{g}/\text{m}^3$ )	PM2.5 ( $\mu\text{g}/\text{m}^3$ )	SO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )	NO <sub>2</sub> ( $\mu\text{g}/\text{m}^3$ )
1.	04/09/2023 To 05/09/2023	48.95	23.42	10.40	17.13	52.41	23.74	11.31	16.78	43.73	21.77	8.38	14.11
2.	07/09/2023 To 08/09/2023	42.31	21.91	9.13	14.15	50.63	23.79	14.45	19.12	40.19	23.93	11.03	16.44
3.	11/09/2023 To 12/09/2023	47.63	25.65	11.15	13.94	53.75	27.56	13.92	17.14	39.78	20.28	12.05	12.68
4.	14/09/2023 To 15/09/2023	52.96	29.43	13.17	15.83	56.43	30.43	10.83	19.05	42.45	21.92	7.71	11.79
5.	18/09/2023 To 19/09/2023	55.34	27.69	12.15	17.89	57.15	32.48	13.79	15.57	44.53	23.41	10.18	13.83
6.	21/09/2023 To 22/09/2023	46.82	24.96	14.18	18.01	51.49	31.33	15.80	14.50	42.39	20.12	9.67	12.74
7.	25/09/2023 To 26/09/2023	41.97	20.44	12.97	16.45	49.74	29.64	13.77	18.43	43.13	19.47	13.12	16.11
8.	28/09/2023 To 29/09/2023	43.13	22.72	15.19	18.43	46.89	27.52	14.19	17.94	39.46	22.68	11.29	13.84
9.	Maximum	55.34	29.43	15.19	18.43	57.15	32.48	15.80	19.12	44.53	23.93	13.12	16.44
10.	Minimum	41.97	20.44	9.13	13.94	46.89	23.74	10.83	14.50	39.46	19.47	7.71	11.79
11.	Average	47.39	24.53	12.29	16.48	52.31	28.31	13.51	17.32	41.96	21.70	10.43	13.94
12.	Limits As Per CPCB	100	60	80	80	100	60	80	80	100	60	80	80

Note:- CPCB: Central Pollution Control Board.



Approvals & Certifications



Laboratory:

Plot No. 82A, Sector -5, IMT Manesar, Gurugram - 12051, Haryana  
Tel : +91 124 4343750, 4343752, 4343753

E-mail: lab@vardan.co.in, bd@vardan.co.in  
www.vardan.co.in

GO Green Mechanisms Pvt Ltd						
Analysis Result for the Month of April-23						
Company Name	Mahan Energen Limited					
Sample Type	Stack Emission					
Stack Attached To	Boiler					
Stack Hihgt & Dia (m)	276 & 6.9					
Monitoring Platform	105 mtr					
Area of Stack	37.37 m2					
Date of Sampling	24.04.2023					
Sample Collected By	Laboratory Representative					
Sr. No.	Parameters	Result (Unit1)	Results (Unit2)	Unit	Reference Method	Limit (mg/Nm3)
1	Stack Temperature	125.00	128.00	°C	IS 11255 Part-3	-
2	Barometric Pressure	758.00	758.00	mmHg	GGMPL/SOP/MP/01	-
3	Velocity	26.53	25.86	m/s	IS 11255 Part-3	-
4	Volumetric Flow Rate	991.53	966.49	Nm3/s	IS 11255 Part-3	-
5	Particulate Matter (PM)	41.31	44.22	mg/Nm <sup>3</sup>	IS 11255 Part-1	50
6	Sulphur Dioxide (SO <sub>2</sub> )	723.00	667.00	mg/Nm <sup>3</sup>	GGMPL/SOP/SEA/68	200
7	Oxides of Nitrogen(NOx)	329.00	288.00	mg/Nm <sup>3</sup>	GGMPL/SOP/SEA/68	450
8	Mercury as Hg	BQL(QL=0.01)	BQL(QL=0.01)	mg/Nm <sup>3</sup>	EPA Method 21	0.03

BQL= Below Quantification Limit

Limit as per Thermal Power Plant Gazzate 2015

Analysed By	Approved By
<i>Shiyal Kishor</i>	<i>P</i>
Shiyal Kishor	Pankil Patel

END



GO Green Mechanisms Pvt Ltd						
Analysis Result for the Month of May-23						
Company Name	Mahan Energen Limited					
Sample Type	Stack Emission					
Stack Attached To	Boiler					
Stack Hihgt & Dia (m)	276 & 6.9					
Monitoring Platform	105 mtr					
Area of Stack	37.37 m2					
Date of Sampling	25.05.2023					
Sample Collected By	Laboratory Representative					
Sr. No.	Parameters	Result (Unit1)	Results (Unit2)	Unit	Reference Method	Limit (mg/Nm3)
1	Stack Temperature	122.00	124.00	°C	IS 11255 Part-3	-
2	Barometric Pressure	757.00	757.00	mmHg	GGMPL/SOP/MP/01	-
3	Velocity	25.42	25.76	m/s	IS 11255 Part-3	-
4	Volumetric Flow Rate	950.04	962.75	Nm3/s	IS 11255 Part-3	-
5	Particulate Matter (PM)	43.15	45.60	mg/Nm <sup>3</sup>	IS 11255 Part-1	50
6	Sulphur Dioxide (SO <sub>2</sub> )	719.00	676.00	mg/Nm <sup>3</sup>	GGMPL/SOP/SEA/68	200
7	Oxides of Nitrogen(NO <sub>x</sub> )	368.00	276.00	mg/Nm <sup>3</sup>	GGMPL/SOP/SEA/68	450
8	Mercury as Hg	BQL(QL=0.01)	BQL(QL=0.01)	mg/Nm <sup>3</sup>	EPA Method 21	0.03

BQL= Below Quantification Limit	
Limit as per Thermal Power Plant Gazzate 2015	
Analysed By <i>Shiyal K.B.</i> Shiyal Kishor	Approved By <i>P</i> Pankil Patel

.....END.....



GO Green Mechanisms Pvt Ltd						
Analysis Result for the Month of June- 2023						
Company Name	Mahan Energen Limited					
Sample Type	Stack Emission					
Stack Attached To	Boiler					
Stack Hihgt & Dia (m)	276 & 6.9					
Monitoring Platform	105 mtr					
Area of Stack	37.40 m2					
Date of Sampling	21.06.2023					
Sample Collected By	Laboratory Representative					
Sr. No.	Parameters	Result (Unit1)	Results (Unit2)	Unit	Reference Method	Limit (mg/Nm3)
1	Stack Temperature	135.50	130.75	°C	IS 11255 Part-3	-
2	Barometric Pressure	750.00	750.00	mmHg	GGMPL/SOP/MP/01	-
3	Velocity	27.05	26.14	m/s	IS 11255 Part-3	-
4	Volumetric Flow Rate	1010.96	976.95	Nm3/s	IS 11255 Part-3	-
5	Particulate Matter (PM)	38.66	37.07	mg/Nm <sup>3</sup>	IS 11255 Part-1	50
6	Sulphur Dioxide (SO <sub>2</sub> )	795.74	770.71	mg/Nm <sup>3</sup>	GGMPL/SOP/SEA/68	200
7	Oxides of Nitrogen(NOx)	368.15	341.42	mg/Nm <sup>3</sup>	GGMPL/SOP/SEA/68	450
8	Mercury as Hg	BQL(QL=0.01)	BQL(QL=0.01)	mg/Nm <sup>3</sup>	EPA Method 21	0.03

BQL= Below Quantification Limit

Limit as per Thermal Power Plant Gazzate 2015

Analysed By	Approved By
<i>Shiyal K.B.</i>	<i>P</i>
Shiyal Kishor	Pankil Patel

END







## Test Report

Sample Number:	VEL/S/01	Report No.:	VEL/S/2307200005
Name & Address of the Party:	M/s Mahan Energen Limited	Format No.:	7.8 F-03
	Village: Bandhora, Post: Karsualal,	Party Reference No.:	5703009832
	Tehsil: Mada, Distt.: Singrauli,	Date :	14/06/2023
	Madhya Pradesh - 486886	Reporting Date:	24/07/2023
		Period of Analysis:	20/07/2023 - 24/07/2023
		Receipt Date:	20/07/2023
		Page No.:	1 of 1

Sample Description: STACK EMISSION MONITORING

General Information	
Sampling Location	: Bolier Unit -01
Sample Collected By	: VEL Representative (Mr. Amit Pandey)
Sampling Instrument Used	: Stack Monitoring Kit
Instrument Code	: VEL/INS/ENV/SMK/04
Instrument Calibration Status	: Calibrated
Date of Monitoring	: 17/07/2023
Meteorological Condition During Monitoring	: Clear Sky
Stack Attached To	: Bolier Unit -01
Stack Diameter (m)	: 6.9
Stack Height (m)	: 275
Make of Stack	: MS
Sampling Duration (Minutes)	: 39.0
Ambient Temperature - Ta (°C)	: 36.0
Temperature of Stack Gases - Ts (°C)	: 127.0
Velocity of Stack Gases (m/sec.)	: 24.83
Flow Rate of PM (LPM)	: 26.0
Flow Rate of Gas (LPM)	: 2.0
Sampling Condition	: Isokinetic
Sampling & Analysis Protocol	: CPCB Guidelines & IS: 11255
Parameter Required	: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	Limits As Per CPCB
1.	Particulate Matter (as PM)	IS: 11255 (P-1)	44.22	mg/Nm <sup>3</sup>	50
2.	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 11255 (P-2)	790.00	mg/Nm <sup>3</sup>	200
3.	Oxides of Nitrogen (as NO <sub>2</sub> )	IS: 11255 (P-7)	354.32	mg/Nm <sup>3</sup>	450
4.	Mercury (as Hg)	VEL/ENV/STP/144, Issue No.- 01, Issue Date : 01/11/2021	BLQ(LOQ-0.005)	mg/Nm <sup>3</sup>	0.03

Note: STP- Standard Testing Procedure, \*BLQ- Below Limit of Quantification, \*\*LOQ- Limit of Quantification.

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## Test Report

Sample Number:	VEL/S/02	Report No.:	VEL/S/2308010006
Name & Address of the Party:	M/s Mahan Energen Limited	Format No.:	7.8 F-03
	Village: Bandhora, Post: Karsualal,	Party Reference No.:	5703009832
	Tehsil: Mada, Distt.: Singrauli,	Date :	14/06/2023
	Madhya Pradesh - 486886	Reporting Date:	04/08/2023
		Period of Analysis:	01/08/2023 - 04/08/2023
		Receipt Date:	01/08/2023
		Page No.:	1 of 1

Sample Description: STACK EMISSION MONITORING

General Information	:	
Sampling Location	:	Bolier Unit -02
Sample Collected By	:	VEL Representative (Mr. Amit Pandey)
Sampling Instrument Used	:	Stack Monitoring Kit
Instrument Code	:	VEL/INS/ENV/SMK/04
Instrument Calibration Status	:	Calibrated
Date of Monitoring	:	29/07/2023
Meteorological Condition During Monitoring	:	Clear Sky
Stack Attached To	:	Bolier Unit -02
Stack Diameter (m)	:	6.9
Stack Height (m)	:	275
Make of Stack	:	MS
Sampling Duration (Minutes)	:	42.0
Ambient Temperature - Ta (°C)	:	38.0
Temperature of Stack Gases - Ts (°C)	:	136.0
Velocity of Stack Gases (m/sec.)	:	25.91
Flow Rate of PM (LPM)	:	27.0
Flow Rate of Gas (LPM)	:	2.0
Sampling Condition	:	Isokinetic
Sampling & Analysis Protocol	:	CPCB Guidelines & IS: 11255
Parameter Required	:	As Per Work Order

S. No.	Parameters	Test Method	Results	Units	Limits As Per CPCB
1.	Particulate Matter (as PM)	IS: 11255 (P-1)	39.71	mg/Nm <sup>3</sup>	50
2.	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 11255 (P-2)	763.58	mg/Nm <sup>3</sup>	200
3.	Oxides of Nitrogen (as NO <sub>2</sub> )	IS: 11255 (P-7)	285.00	mg/Nm <sup>3</sup>	450
4.	Mercury (as Hg)	VEL/ENV/STP/144, Issue No.- 01, Issue Date : 01/11/2021	BLQ(LOQ-0.005)	mg/Nm <sup>3</sup>	0.03

Note: STP- Standard Testing Procedure, \*BLQ- Below Limit of Quantification, \*\*LOQ- Limit of Quantification.

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## Test Report

Sample Number: VEL/S/01  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/S/2308250001  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 31/08/2023  
Period of Analysis: 25/08/2023 - 31/08/2023  
Receipt Date: 25/08/2023  
Page No.: 1 of 1

Sample Description: STACK EMISSION MONITORING

General Information  
Sampling Location : Boiler Unit -02  
Sample Collected By : VEL Representative (Mr. Amit Pandey)  
Sampling Instrument Used : Stack Monitoring Kit  
Instrument Code : VEL/INS/ENV/SMK/04  
Instrument Calibration Status : Calibrated  
Date of Monitoring : 21/08/2023  
Meteorological Condition During Monitoring : Clear Sky  
Stack Attached To : Boiler Unit -02  
Stack Diameter (m) : 6.9  
Stack Height (m) : 275  
Plant Load (MWh) : 405  
Make of Stack : MS  
Sampling Duration (Minutes) : 116.0  
Ambient Temperature - Ta (°C) : 38.0  
Temperature of Stack Gases - Ts (°C) : 127.0  
Velocity of Stack Gases (m/sec.) : 24.78  
Flow Rate of PM (LPM) : 27.0  
Flow Rate of Gas (LPM) : 2.0  
Sampling Condition : Isokinetic  
Sampling & Analysis Protocol : CPCB Guidelines & IS: 11255  
Parameter Required : As Per Work Order

S. No.	Parameters	Test Method	Results	Units	Limits As Per CPCB
1.	Particulate Matter (as PM)	IS: 11255 (P-1)	42.22	mg/Nm <sup>3</sup>	50
2.	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 11255 (P-2)	753.00	mg/Nm <sup>3</sup>	200
3.	Oxides of Nitrogen (as NO <sub>x</sub> )	IS: 11255 (P-7)	264.00	mg/Nm <sup>3</sup>	450
4.	Mercury (as Hg)	VEL/ENV/STP/144, Issue No.- 01, Issue Date : 01/11/2021	BLQ(LOQ-0.005)	mg/Nm <sup>3</sup>	0.03

Note: STP- Standard Testing Procedure, \*BLQ- Below Limit of Quantification, \*\*LOQ- Limit of Quantification.

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## Test Report

Sample Number:	VEL/S/01	Report No.:	VEL/S/2309250001
Name & Address of the Party:	M/s Mahan Energen Limited Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli, Madhya Pradesh - 486886	Format No.:	7.8 F-03
		Party Reference No.:	5703009832
		Date :	14/06/2023
		Reporting Date:	28/09/2023
		Period of Analysis:	25/09/2023 - 28/09/2023
		Receipt Date:	25/09/2023
		Page No.:	1 of 1

Sample Description: STACK EMISSION MONITORING

General Information	
Sampling Location	: Boiler Unit -01
Sample Collected By	: VEL Representative (Mr. Amit Pandey)
Sampling Instrument Used	: Stack Monitoring Kit
Instrument Code	: VEL/INS/ENV/SMK/04
Instrument Calibration Status	: Calibrated
Date of Monitoring	: 22/09/2023
Meteorological Condition During Monitoring	: Clear Sky
Stack Attached To	: Boiler Unit -01
Stack Diameter (m)	: 6.9
Stack Height (m)	: 275
Plant Load (MWh)	: 305
Make of Stack	: MS
Sampling Duration (Minutes)	: 41.66
Ambient Temperature - Ta (°C)	: 36.0
Temperature of Stack Gases - Ts (°C)	: 124.0
Velocity of Stack Gases (m/sec.)	: 25.20
Flow Rate of PM (LPM)	: 24.0
Flow Rate of Gas (LPM)	: 2.0
Sampling Condition	: Isokinetic
Sampling & Analysis Protocol	: CPCB Guidelines & IS: 11255
Parameter Required	: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	Limits As Per CPCB
1.	Particulate Matter (as PM)	IS: 11255 (P-1)	44.50	mg/Nm <sup>3</sup>	50
2.	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 11255 (P-2)	802.52	mg/Nm <sup>3</sup>	200
3.	Oxides of Nitrogen (as NO <sub>x</sub> )	IS: 11255 (P-7)	334.11	mg/Nm <sup>3</sup>	450
4.	Mercury (as Hg)	VEL/ENV/STP/144, Issue No.- 01, Issue Date : 01/11/2021	BLQ(LOQ-0.005)	mg/Nm <sup>3</sup>	0.03

Note: STP- Standard Testing Procedure, \*BLQ- Below Limit of Quantification, \*\*LOQ- Limit of Quantification.

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## Test Report

Sample Number:	VEL/S/02	Report No.:	VEL/S/2309250002
Name & Address of the Party:	M/s Mahan Energen Limited Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli, Madhya Pradesh - 486886	Format No.:	7.8 F-03
		Party Reference No.:	5703009832
		Date :	14/06/2023
		Reporting Date:	28/09/2023
		Period of Analysis:	25/09/2023 - 28/09/2023
		Receipt Date:	25/09/2023
		Page No.:	1 of 1

Sample Description: STACK EMISSION MONITORING

General Information	:	Boiler Unit -02
Sampling Location	:	VEL Representative (Mr. Amit Pandey)
Sample Collected By	:	Stack Monitoring Kit
Sampling Instrument Used	:	VEL/INS/ENV/SMK/04
Instrument Code	:	Calibrated
Instrument Calibration Status	:	22/09/2023
Date of Monitoring	:	Clear Sky
Meteorological Condition During Monitoring	:	Boiler Unit -02
Stack Attached To	:	6.9
Stack Diameter (m)	:	275
Stack Height (m)	:	303
Plant Load (MWh)	:	MS
Make of Stack	:	40.0
Sampling Duration (Minutes)	:	38.0
Ambient Temperature - Ta (°C)	:	122.0
Temperature of Stack Gases - Ts (°C)	:	25.55
Velocity of Stack Gases (m/sec.)	:	25.0
Flow Rate of PM (LPM)	:	2.0
Flow Rate of Gas (LPM)	:	Isokinetic
Sampling Condition	:	CPCB Guidelines & IS: 11255
Sampling & Analysis Protocol	:	As Per Work Order
Parameter Required	:	

S. No.	Parameters	Test Method	Results	Units	Limits As Per CPCB
1.	Particulate Matter (as PM)	IS: 11255 (P-1)	41.63	mg/Nm <sup>3</sup>	50
2.	Sulphur Dioxide (as SO <sub>2</sub> )	IS: 11255 (P-2)	775.18	mg/Nm <sup>3</sup>	200
3.	Oxides of Nitrogen (as NO <sub>x</sub> )	IS: 11255 (P-7)	295.08	mg/Nm <sup>3</sup>	450
4.	Mercury (as Hg)	VEL/ENV/STP/144, Issue No.- 01, Issue Date : 01/11/2021	BLQ(LOQ-0.005)	mg/Nm <sup>3</sup>	0.03

Note: STP- Standard Testing Procedure, \*BLQ- Below Limit of Quantification, \*\*LOQ- Limit of Quantification.

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# GO Green Mechanisms Pvt Ltd

## Analysis Results for the Month of April-23

Company Name	Mahan Energen Limited.
Sample Type	Ground Water
Sample Quantity	8L
Sample Collected By	Laboratory Representative
Date of Sampling	11.04.2023
Analysis Period	17.04.2023 to, 22.04.2023

SL. No	PARAMETER	UNIT	Location			Reference Method	As per IS:10500	
			Bandhaura Village	Railla Village	Karsuaraja Village		AL	PL
1	pH @ 25 °C	-	7.36	7.23	7.46	IS 3025-Part 11	6.5-8.5	No relaxation
2	Turbidity	NTU	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	APHA 23rd Edition (2130 B)	1	5
3	Total Dissolved Solids @ 180 °C	mg/L	588.00	462.00	572.00	APHA 23rd Edition (2540 C)	500	2000
4	Total Hardness as CaCO <sub>3</sub>	mg/L	320.00	202.00	282.00	APHA 23rd Edition (2340 C)	200	600
5	Alkalinity as CaCO <sub>3</sub>	mg/L	265.00	213.30	270.00	APHA 23rd Edition (2320 B)	200	600
6	Calcium as Ca	mg/L	96.59	52.10	63.33	APHA 23rd Edition (3120 B)	75	200
7	Magnesium (Mg)	mg/L	19.20	17.50	30.13	APHA 23rd Edition (3120 B)	30	100
8	Sulphate	mg/L	29.22	54.35	45.97	APHA 23rd Edition (4500 SO <sub>4</sub> E)	200	400
9	Nitrate	mg/L	2.19	1.09	1.07	IS 3025 (Part 34)	45	No relaxation
10	Iron	mg/L	0.039	0.061	0.118	APHA 23rd Edition (3120 B)	0.3	No relaxation
11	Fluoride	mg/L	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	APHA 23rd Edition (4500 F D)	1	1.5
12	Sulphide	mg/L	BQL(QL=0.2)	BQL(QL=0.2)	BQL(QL=0.2)	APHA 23rd Edition (4500 S2 F)	0.05	No relaxation
13	Zinc (Zn)	mg/L	0.117	0.124	1.021	APHA 23rd Edition (3120 B)	5	15
14	Chloride	mg/L	174.95	88.97	147.95	IS 3025-Part 32	250	1000
15	Residual Chlorine	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	APHA 23rd Edition (4500 Cl B)	0.2	1
16	Colour	Hazen	BQL(QL=1)	BQL(QL=1)	BQL(QL=1)	IS 3025 part 4	5	15
17	Odour	-	Agreeable	Agreeable	Agreeable	IS 3025 part 5	Agreeable	Agreeable
18	Mineral Oil	mg/L	BQL(QL=1)	BQL(QL=1)	BQL(QL=1)	IS 3025 part 39	0.5	No relaxation
19	Ammonia	mg/L	BQL(QL=0.5)	BQL(QL=0.5)	BQL(QL=0.5)	APHA 23rd Edition (4500 NH <sub>3</sub> C)	0.5	No relaxation
20	Taste	-	Agreeable	Agreeable	Agreeable	IS 3025 Part-7	Agreeable	Agreeable
21	Chloramines as Cl <sub>2</sub>	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	IS 3025 (Pt 26)	4	No relaxation
22	Cyanide	mg/L	BQL(QL=0.025)	BQL(QL=0.025)	BQL(QL=0.025)	GGMPL/SOP/N/43	0.05	No relaxation
23	Aluminum (Al)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	0.03	0.2
24	Arsenic (As)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	BQL(QL=0.005)	APHA 23rd Edition (3120 B)	0.01	0.05
25	Barium as Ba	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	0.7	No relaxation
26	Boron (B)	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	APHA 23rd Edition (3120 B)	0.5	1
27	Cadmium (Cd)	mg/L	BQL(QL=0.002)	BQL(QL=0.002)	BQL(QL=0.002)	APHA 23rd Edition (3120 B)	0.003	No relaxation
28	Copper (Cu)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	0.05	1.5
29	Lead (Pb)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	BQL(QL=0.005)	APHA 23rd Edition (3120 B)	0.01	No relaxation
30	Manganese (Mn)	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	APHA 23rd Edition (3120 B)	0.1	0.3
31	Mercury (Hg)	mg/L	BQL(QL=0.0005)	BQL(QL=0.0005)	BQL(QL=0.0005)	APHA 23rd Edition (3112 B)	0.001	No relaxation
32	Selenium (Se)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	BQL(QL=0.005)	APHA 23rd Edition (3120 B)	0.01	No relaxation
33	Molybdenum as Mo	mg/L	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)	APHA 23rd Edition (3120 B)	0.07	No relaxation
34	Total Chromium Cr	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	0.05	No relaxation
35	Nickel as (Ni)	mg/L	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)	APHA 23rd Edition (3120 B)	0.2	No relaxation
36	Silver (Ag)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	0.1	No relaxation
37	Anionic Detergent	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	IS 13428 (Annex K) : 2018	0.2	1
38	PAH						0.0001	No relaxation
38.1	Naphthalene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.2	1-Methylnaphthalene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.3	2-Methylnaphthalene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.4	Acenaphthylene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.5	Acenaphthene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.6	Fluorene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.7	Phenanthrene	µg/L	BQL(QL=5)	BQL(QL=5)	BQL(QL=5)	APHA 6440 B	-	-
38.8	Anthracene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.9	Fluoranthene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.10	Pyrene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-

38	<b>PAH</b>					
38.1	Naphthalene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.2	1-Methylnaphthalene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.3	2-Methylnaphthalene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.4	Acenaphthylene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.5	Acenaphthene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.6	Fluorene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.7	Phenanthrene	µg/L	BQL(QL=5)	BQL(QL=5)	APHA 6440 B	-
38.8	Anthracene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.9	Fluoranthene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.10	Pyrene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.11	Benzo(a) anthracene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.12	Chrysene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.13	Benzo (b) fluoranthene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.14	Benzo(K) fluoranthene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.15	Benzo(a)pyrene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.16	Dibenzo(a,h)anthracene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.17	Benzo (g,h,i)perylene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
38.18	Indeno(1,2,3-cd)pyrene	µg/L	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-
39	<b>Polychlorinated biphenyls</b>					
39.1	PCB 1016	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	NS
39.2	PCB 1221	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	NS
39.3	PCB 1232	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	NS
39.4	PCB 1242	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	NS
39.5	PCB 1248	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	NS
39.6	PCB 1254	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	NS
39.7	PCB 1260	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	NS
40	<b>Trihalomethanes</b>					
40.1	Bromoform	mg/L	BQL(QL=0.1)	BQL(QL=0.1)	APHA 6232	NS
40.2	Dibromochloromethane	mg/L	BQL(QL=0.1)	BQL(QL=0.1)	APHA 6232	NS
40.3	Bromodichloromethane	mg/L	BQL(QL=0.06)	BQL(QL=0.06)	APHA 6232	NS
40.4	Chloroform	mg/L	BQL(QL=0.2)	BQL(QL=0.2)	APHA 6232	NS
41	<b>Pesticides</b>					
41.1	o,p-DDT	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.2	p,p-DDT	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.3	o,p-DDE	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.4	p,p-DDE	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.5	o,p-DDD	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.6	p,p-DDD	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.7	Isoproturon	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 532	-
41.8	Alachlor	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 525.2	-
41.9	Atrazine	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 8141A	-
41.10	Aldrin/Dieldrin	µg/L	BQL(QL=0.01)	BQL(QL=0.01)	USEPA 508	-
41.11	Gamma-HCH(Lindane)	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 508	-
41.12	Alpha HCH	µg/L	BQL(QL=0.005)	BQL(QL=0.005)	USEPA 508	-
41.13	Beta HCH	µg/L	BQL(QL=0.002)	BQL(QL=0.002)	USEPA 508	-
41.14	Delta HCH	µg/L	BQL(QL=0.002)	BQL(QL=0.002)	USEPA 508	-
41.15	Endosulfan (alpha)	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.16	Endosulfan (Beta)	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.17	Endosulfan (Sulphate)	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	-
41.18	Monocrotophos	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 8141A	-
41.19	Ethion	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 1657A	-
41.20	Chlorpyrifos	µg/L	BQL(QL=0.25)	BQL(QL=0.25)	USEPA 8141A	-
41.21	Phorate	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 8141A	-
41.22	Butachlor	µg/L	BQL(QL=20)	BQL(QL=20)	USEPA 8141A	-
41.23	Methyl Parathion	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 8141A	-
41.24	Malathion	µg/L	BQL(QL=0.25)	BQL(QL=0.25)	USEPA 8141A	-
42	<b>Microbiological</b>					
42.1	E.Coli (MPN/100 ml)	MPN/100ml	Absent	Absent	IS 1622	NS
42.2	Total Coliform	MPN/100ml	Absent	Absent	IS 1622	5000

BQL = Below Quantification Limit; NA = Not Applicable  
 Norms as per IS: 2296/Class C

Analysed By:

Shikhar B.  
 Shiyal Kishor

Approved By:

Pankil Patel

END





## Test Report

Sample Number: VEL/W/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Sample Description: Ground Water Sample (Piezometer)  
Location: Piezometer #1 NNE (Near AWRS)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP  
Ground Water Level: 4.48 meter

Report No.: VEL/W/2308010005  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 05/08/2023  
Period of Analysis: 01/08/2023 - 05/08/2023  
Receipt Date: 01/08/2023  
Sampling Date: 25/07/2023  
Sampling Quantity: 5 Ltrs. + 250 ml  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 1 Organoleptic and Physical Parameters						
1.	pH (at 25°C)	IS: 3025 (P-11)	7.33	--	6.5 to 8.5	No Relaxation
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen	5	15
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU	1	5
4.	Odour	IS: 3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS: 3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Dissolved Solids	IS: 3025 (P-16)	535.00	mg/L	500	2000
Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts						
7.	Calcium as Ca	IS: 3025 (P-40)	85.39	mg/L	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	158.02	mg/L	200	600
9.	Chloride as Cl	IS: 3025 (P-32)	188.55	mg/L	250	1000
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	16.16	mg/L	30	100
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	279.55	mg/L	200	600
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	121.48	mg/L	200	400
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.58	mg/L	1.0	1.5



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## Test Report

Sample No.: VEL/W/02			Report No.: VEL/W/2308010005			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable) Limit	Permissible Limit in the Absence of Alternate Source
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	13.22	mg/L	45	No Relaxation
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.27	mg/L	1.0	No Relaxation
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	1.65	mg/L	0.03	0.2
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.5	2.4
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	No Relaxation
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L	0.001	0.002
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L	1.0	No Relaxation
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L	0.2	1.0
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	2.33	mg/L	5.0	15.0
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	1.5
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.1	0.3
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L	0.01	No Relaxation
<b>Table 3 Parameters Concerning Toxic Substances</b>						
26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.003	No Relaxation
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.01	No Relaxation
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L	0.05	No Relaxation
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L	0.01	No Relaxation
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L	0.001	No Relaxation



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## Test Report

Sample No.: VEL/W/02			Report No.: VEL/W/2308010005			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable) Limit	Permissible Limit in the Absence of Alternate Source
Table 6 Bacteriological Quality of Drinking Water						
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.  
Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS Method of  
Total Coliform & E. coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

\*\*\*End of Report\*\*\*

(Checked By)  
**SATYADEV**  
Dy. Technical Manager-Micro

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## Test Report

Sample Number: VEL/W/03  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/W/2308010006  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 05/08/2023  
Period of Analysis: 01/08/2023 - 05/08/2023

Sample Description: Ground Water Sample (Piezometer)  
Location: Piezometer #2 ESS  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP  
Ground Water Level: 2.31 meter

Receipt Date: 01/08/2023  
Sampling Date: 25/07/2023  
Sampling Quantity: 5 Ltrs. + 250 ml  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 1 Organoleptic and Physical Parameters						
1.	pH (at 25°C)	IS: 3025 (P-11)	7.53	--	6.5 to 8.5	No Relaxation
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen	5	15
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU	1	5
4.	Odour	IS: 3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS: 3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Dissolved Solids	IS: 3025 (P-16)	435.00	mg/L	500	2000
Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts						
7.	Calcium as Ca	IS: 3025 (P-40)	42.05	mg/L	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	58.1	mg/L	200	600
9.	Chloride as Cl	IS: 3025 (P-32)	69.59	mg/L	250	1000
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	25.42	mg/L	30	100
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	201.33	mg/L	200	600
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	38.77	mg/L	200	400
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.62	mg/L	1.0	1.5

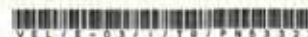


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## Test Report

Sample No.: VEL/W/03				Report No.: VEL/W/2308010006		
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable) Limit	Permissible Limit in the Absence of Alternate Source
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	9.87	mg/L	45	No Relaxation
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.19	mg/L	1.0	No Relaxation
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	2.01	mg/L	0.03	0.2
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.5	2.4
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	No Relaxation
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L	0.001	0.002
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L	1.0	No Relaxation
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L	0.2	1.0
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	2.98	mg/L	5.0	15.0
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	1.5
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.1	0.3
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L	0.01	No Relaxation

Table 3 Parameters Concerning Toxic Substances

26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.003	No Relaxation
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.01	No Relaxation
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L	0.05	No Relaxation
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L	0.01	No Relaxation
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L	0.001	No Relaxation



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## Test Report

Sample No.: VEL/W/03			Report No.: VEL/W/2308010006			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable) Limit	Permissible Limit in the Absence of Alternate Source
Table 6 Bacteriological Quality of Drinking Water						
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.  
Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS Method of  
Total Coliform & E. coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

\*\*\*End of Report\*\*\*

*(Signature)*  
08/08/2023  
(Checked By)  
Dy. Technical Manager-Micro

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## Test Report

Sample Number: VEL/W/04  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/W/2308010007  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 05/08/2023  
Period of Analysis: 01/08/2023 - 05/08/2023  
Receipt Date: 01/08/2023  
Sampling Date: 25/07/2023  
Sampling Quantity: 5 Ltrs. + 250 ml  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order  
Sample Description: Ground Water Sample (Piezometer)  
Location: Piezometer #3 SWW  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP  
Ground Water Level: 1.94 meter

S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source

Table 1 Organoleptic and Physical Parameters

1.	pH (at 25°C)	IS: 3025 (P-11)	7.24	--	6.5 to 8.5	No Relaxation
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen	5	15
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU	1	5
4.	Odour	IS: 3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS: 3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Dissolved Solids	IS: 3025 (P-16)	469.00	mg/L	500	2000

Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts

7.	Calcium as Ca	IS: 3025 (P-40)	58.32	mg/L	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	86.35	mg/L	200	600
9.	Chloride as Cl	IS: 3025 (P-32)	79.58	mg/L	250	1000
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	21.99	mg/L	30	100
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	236.01	mg/L	200	600
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	39.24	mg/L	200	400
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.6	mg/L	1.0	1.5



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## Test Report

Sample No.: VEL/W/04				Report No.: VEL/W/2308010007		
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable) Limit	Permissible Limit in the Absence of Alternate Source
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	12.01	mg/L	45	No Relaxation
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.16	mg/L	1.0	No Relaxation
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	1.26	mg/L	0.03	0.2
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.5	2.4
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	No Relaxation
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L	0.001	0.002
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L	1.0	No Relaxation
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L	0.2	1.0
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	2.74	mg/L	5.0	15.0
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	1.5
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.1	0.3
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L	0.01	No Relaxation
<b>Table 3 Parameters Concerning Toxic Substances</b>						
26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.003	No Relaxation
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.01	No Relaxation
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L	0.05	No Relaxation
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L	0.01	No Relaxation
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L	0.001	No Relaxation



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## Test Report

Sample No.: VEL/W/04				Report No.: VEL/W/2308010007		
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable) Limit	Permissible Limit in the Absence of Alternate Source
Table 6 Bacteriological Quality of Drinking Water						
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.  
Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS Method of  
Total Coliform & E. coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

\*\*\*End of Report\*\*\*

8/8/2023  
Checked By DEV  
Dy. Technical Manager-Micro

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## Test Report

Sample Number: VEL/W/05  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/W/2308010008  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 05/08/2023  
Period of Analysis: 01/08/2023 - 05/08/2023  
Receipt Date: 01/08/2023  
Sampling Date: 25/07/2023  
Sampling Quantity: 5 Ltrs. + 250 ml  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

Sample Description: Ground Water Sample (Piezometer)  
Location: Piezometer #4 WVN  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP  
Ground Water Level: 1.93 meter

S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 1 Organoleptic and Physical Parameters						
1.	pH (at 25°C)	IS: 3025 (P-11)	7.68	--	6.5 to 8.5	No Relaxation
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen	5	15
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU	1	5
4.	Odour	IS: 3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS: 3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Dissolved Solids	IS: 3025 (P-16)	386.00	mg/L	500	2000
Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts						
7.	Calcium as Ca	IS: 3025 (P-40)	33.07	mg/L	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	64.59	mg/L	200	600
9.	Chloride as Cl	IS: 3025 (P-32)	52.59	mg/L	250	1000
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	7.27	mg/L	30	100
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	112.43	mg/L	200	600
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	24.69	mg/L	200	400
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.46	mg/L	1.0	1.5



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## Test Report

Sample No.: VEL/W/05				Report No.: VEL/W/2308010008		
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable) Limit	Permissible Limit in the Absence of Alternate Source
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	6.24	mg/L	45	No Relaxation
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.16	mg/L	1.0	No Relaxation
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	1.91	mg/L	0.03	0.2
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.5	2.4
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	No Relaxation
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L	0.001	0.002
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L	1.0	No Relaxation
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L	0.2	1.0
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	2.55	mg/L	5.0	15.0
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	1.5
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.1	0.3
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L	0.01	No Relaxation
<b>Table 3 Parameters Concerning Toxic Substances</b>						
26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.003	No Relaxation
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.01	No Relaxation
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L	0.05	No Relaxation
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L	0.01	No Relaxation
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L	0.001	No Relaxation



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## Test Report

Sample No.: VEL/W/05			Report No.: VEL/W/2308010008			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable) Limit	Permissible Limit in the Absence of Alternate Source
Table 6 Bacteriological Quality of Drinking Water						
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.  
Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS Method of  
Total Coliform & E. coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

\*\*\*End of Report\*\*\*

(Checked By)

SATYA DEV

Dy. Technical Manager-Micro

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## Test Report

Sample Number:	VEL/W/01	Report No.:	VEL/W/2308280006
Name & Address of the Party:	M/s Mahan Energen Limited Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli, Madhya Pradesh - 486886	Format No.:	7.8 F-03
		Party Reference No.:	5703009832
		Date :	14/06/2023
		Reporting Date:	04/09/2023
		Period of Analysis:	28/08/2023 - 04/09/2023
		Receipt Date:	28/08/2023
		Sampling Date:	19/08/2023
		Sampling Quantity:	5 Ltrs. + 250 ml
		Sampling Type:	Grab
		Preservation:	Ice Box
		Parameter Required:	As Per Work Order

Sample Description: Ground Water Sample  
Location: Village - Baundhra (Near Primary School)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP

S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 1 Organoleptic and Physical Parameters						
1.	pH (at 25°C)	IS: 3025 (P-11)	7.54	--	6.5 to 8.5	No Relaxation
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen	5	15
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU	1	5
4.	Odour	IS: 3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS: 3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Dissolved Solids	IS: 3025 (P-16)	372.00	mg/L	500	2000
Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts						
7.	Calcium as Ca	IS: 3025 (P-40)	42.00	mg/L	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	156.00	mg/L	200	600
9.	Chloride as Cl	IS: 3025 (P-32)	82.00	mg/L	250	1000
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	20.22	mg/L	30	100
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	188.00	mg/L	200	600
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	56.00	mg/L	200	400
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.35	mg/L	1.0	1.5



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## Test Report

Sample No.: VEL/W/01			Report No.: VEL/W/2308280006			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	10.60	mg/L	45	No Relaxation
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.045	mg/L	1.0	No Relaxation
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.05)	mg/L	0.03	0.2
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.5	2.4
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	No Relaxation
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L	0.001	0.002
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L	1.0	No Relaxation
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L	0.2	1.0
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.028	mg/L	5.0	15.0
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	1.5
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.1	0.3
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L	0.01	No Relaxation
<b>Table 3 Parameters Concerning Toxic Substances</b>						
26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.003	No Relaxation
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.01	No Relaxation
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L	0.05	No Relaxation
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L	0.01	No Relaxation
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L	0.001	No Relaxation



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## Test Report

Sample No.: VEL/W/01			Report No.: VEL/W/2308280006			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 6 Bacteriological Quality of Drinking Water						
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.  
Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS Method of  
Total Coliform & E. coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

\*\*\*End of Report\*\*\*

*CHANDRABHAN SINGH*  
(Checked By) **CHANDRABHAN SINGH**  
**Sr. Microbiologist**

Page No. 3 of 3

*09/09/2023*  
**Dhamendra Kumar**  
Diast (Approved By)  
Technical Manager-Microbiology

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## Test Report

Sample Number: VEL/W/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/W/2308280007  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 04/09/2023  
Period of Analysis: 28/08/2023 - 04/09/2023

Sample Description: Ground Water Sample  
Location: Village - Ralla (Near Primary School)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP

Receipt Date: 28/08/2023  
Sampling Date: 19/08/2023  
Sampling Quantity: 5 Ltrs. + 250 ml  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 1 Organoleptic and Physical Parameters						
1.	pH (at 25°C)	IS: 3025 (P-11)	7.65	--	6.5 to 8.5	No Relaxation
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen	5	15
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU	1	5
4.	Odour	IS: 3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS: 3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Dissolved Solids	IS: 3025 (P-16)	338.00	mg/L	500	2000
Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts						
7.	Calcium as Ca	IS: 3025 (P-40)	52.00	mg/L	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	188.00	mg/L	200	600
9.	Chloride as Cl	IS: 3025 (P-32)	75.00	mg/L	250	1000
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	19.99	mg/L	30	100
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	212.00	mg/L	200	600
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	38.00	mg/L	200	400
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.42	mg/L	1.0	1.5



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## Test Report

Sample No.: VEL/W/02			Report No.: VEL/W/2308280007			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	6.50	mg/L	45	No Relaxation
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.054	mg/L	1.0	No Relaxation
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.05)	mg/L	0.03	0.2
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.5	2.4
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	No Relaxation
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L	0.001	0.002
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L	1.0	No Relaxation
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L	0.2	1.0
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.038	mg/L	5.0	15.0
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	1.5
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.1	0.3
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L	0.01	No Relaxation
<b>Table 3 Parameters Concerning Toxic Substances</b>						
26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.003	No Relaxation
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.01	No Relaxation
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L	0.05	No Relaxation
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L	0.01	No Relaxation
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L	0.001	No Relaxation



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## Test Report

Sample No.: VEL/W/02				Report No.: VEL/W/2308280007		
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 6 Bacteriological Quality of Drinking Water						
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.  
Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS Method of  
Total Coliform & E. coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

\*\*\*End of Report\*\*\*

*Chh*  
24/09/2023  
(Checked) **CHANDRABHAN SINGH**  
Sr. Microbiologist

Page No. 3 of 3



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## Test Report

Sample Number: VEL/W/03  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Dist.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/W/2308280008  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 04/09/2023  
Period of Analysis: 28/08/2023 - 04/09/2023  
Receipt Date: 28/08/2023  
Sampling Date: 19/08/2023  
Sampling Quantity: 5 Ltrs. + 250 ml  
Sampling Type: Grab  
Sample Description: Ground Water Sample  
Location: Village - Karshwa Raja  
(Near Karshwa Raja Market)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 1 Organoleptic and Physical Parameters						
1.	pH (at 25°C)	IS: 3025 (P-11)	7.48	--	6.5 to 8.5	No Relaxation
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen	5	15
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU	1	5
4.	Odour	IS: 3025 (P-5)	Agreeable	--	Agreeable	Agreeable
5.	Taste	IS: 3025 (P-8)	Agreeable	--	Agreeable	Agreeable
6.	Total Dissolved Solids	IS: 3025 (P-16)	335.00	mg/L	500	2000
Table 2 General Parameters Concerning Substances Undesirable in Excessive Amounts						
7.	Calcium as Ca	IS: 3025 (P-40)	58.00	mg/L	75	200
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	176.00	mg/L	200	600
9.	Chloride as Cl	IS: 3025 (P-32)	65.00	mg/L	250	1000
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	14.89	mg/L	30	100
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	206.00	mg/L	200	600
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	35.00	mg/L	200	400
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.38	mg/L	1.0	1.5



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## Test Report

Sample No.: VEL/W/03			Report No.: VEL/W/2308280008			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	5.90	mg/L	45	No Relaxation
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.017	mg/L	1.0	No Relaxation
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.05)	mg/L	0.03	0.2
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.5	2.4
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	No Relaxation
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L	0.001	0.002
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L	1.0	No Relaxation
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L	0.2	1.0
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	0.020	mg/L	5.0	15.0
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.05	1.5
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L	0.1	0.3
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L	0.01	No Relaxation
<b>Table 3 Parameters Concerning Toxic Substances</b>						
26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.003	No Relaxation
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L	0.01	No Relaxation
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L	0.05	No Relaxation
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L	0.01	No Relaxation
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L	0.001	No Relaxation



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## Test Report

Sample No.: VEL/W/03			Report No.: VEL/W/2308280008			
S. No.	Parameters	Test Method	Results	Units	Limits As Per IS: 10500-2012	
					Requirement (Acceptable Limit)	Permissible Limit in the Absence of Alternate Source
Table 6 Bacteriological Quality of Drinking Water						
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml	Shall not be detectable in any 100 ml sample	--

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.  
Amendment No.1 in June 2015 (Limits of Iron & Arsenic) and Amendment No.2 in Sept. 2018 (Limit of Boron & IS Method of  
Total Coliform & E. coli) & Amendment No.3 in Feb. 2021 (Limit of Mineral Oil).

\*\*\*End of Report\*\*\*

*CH*  
04/09/2023  
(Checked By)  
**CHANDRABHAN SINGH**  
Sr. Microbiologist

Page No. 3 of 3

**VARDAN ENVIROLAB**  
Chandrabhan Singh  
Distt  
(Approved By)  
04/09/2023  
Technical Manager-Microbiology

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**GO Green Mechanisms Pvt Ltd**  
**Analysis Results for the Month of April-23**

<b>Company Name</b>		<b>Mahan Energen Limited.</b>				
<b>Sample Type</b>		<b>Surface Water</b>				
<b>Sample Quantity</b>		<b>8L</b>				
<b>Sample Collected By</b>		<b>Laboratory Representative</b>				
<b>Date of Sampling</b>		<b>11.04.2023</b>				
<b>Analysis Period</b>		<b>17.04.2023 to, 22.04.2023</b>				
SL. No.	PARAMETER	UNIT	Location		Reference Method	Norms
			Nr. Gate No. 1	Nr. Gate No. 3		
1	pH @ 25 °C	-	7.41	7.35	IS 3025-Part 11	8.5
2	Turbidity	NTU	BQL(QL=0.1)	BQL(QL=0.1)	APHA 23rd Edition (2130 B)	-
3	Total Dissolved Solids @ 180 °C	mg/L	411.0	341.0	APHA 23rd Edition (2540 C)	1500
4	Total Hardness as CaCO <sub>3</sub>	mg/L	212.0	148.0	APHA 23rd Edition (2340 C)	-
5	Alkalinity as CaCO <sub>3</sub>	mg/L	205.0	193.3	APHA 23rd Edition (2320 B)	200
6	Calcium as Ca	mg/L	62.52	43.29	APHA 23rd Edition (3120 B)	75
7	Magnesium (Mg)	mg/L	13.61	9.72	APHA 23rd Edition (3120 B)	-
8	Sulphate	mg/L	28.83	29.41	APHA 23rd Edition (4500 SO4 E)	400
9	Nitrate	mg/L	0.59	0.36	IS 3025 (Part 34)	50
10	Iron	mg/L	0.106	0.484	APHA 23rd Edition (3120 B)	50
11	Fluoride	mg/L	BQL(QL=0.1)	BQL(QL=0.1)	APHA 23rd Edition (4500 F D)	1.5
12	Sulphide	mg/L	BQL(QL=0.2)	BQL(QL=0.2)	APHA 23rd Edition (4500 S2 F)	-
13	Zinc (Zn)	mg/L	0.074	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	15
14	Chloride	mg/L	90.97	58.98	IS 3025-Part 32	600
15	Residual Chlorine	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	APHA 23rd Edition (4500 Cl B)	-
16	Colour	Hazen	BQL(QL=1)	BQL(QL=1)	IS 3025 part 4	300
17	Odour	-	Agreeable	Agreeable	IS 3025 part 5	-
18	Mineral Oil	mg/L	BQL(QL=1)	BQL(QL=1)	IS 3025 part 39	-
19	Ammonia	mg/L	1.40	0.84	APHA 23rd Edition (4500 NH3 C)	-
20	Taste	-	Agreeable	Agreeable	IS 3025 Part-7	-
21	Chloramines as Cl <sub>2</sub>	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	IS 3025 (Pt 26)	NS
22	Cyanide	mg/L	BQL(QL=0.025)	BQL(QL=0.025)	GGMPL/SOP/W/43	0.05
23	Aluminum (Al)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	NS
24	Arsenic (As)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	APHA 23rd Edition (3120 B)	0.2
25	Barium as Ba	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	-
26	Boron (B)	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	APHA 23rd Edition (3120 B)	2
27	Cadmium (Cd)	mg/L	BQL(QL=0.002)	BQL(QL=0.002)	APHA 23rd Edition (3120 B)	0.01
28	Copper (Cu)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	1.5
29	Lead (Pb)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	APHA 23rd Edition (3120 B)	0.1
30	Manganese (Mn)	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	APHA 23rd Edition (3120 B)	-
31	Mercury (Hg)	mg/L	BQL(QL=0.0005)	BQL(QL=0.0005)	APHA 23rd Edition (3120 B)	-
32	Selenium (Se)	mg/L	BQL(QL=0.005)	BQL(QL=0.005)	APHA 23rd Edition (3120 B)	0.05
33	Molybdenum as Mo	mg/L	BQL(QL=0.01)	BQL(QL=0.01)	APHA 23rd Edition (3120 B)	NS
34	Total Chromium Cr	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	0.05
35	Nickel as (Ni)	mg/L	BQL(QL=0.01)	BQL(QL=0.01)	APHA 23rd Edition (3120 B)	NS
36	Silver (Ag)	mg/L	BQL(QL=0.02)	BQL(QL=0.02)	APHA 23rd Edition (3120 B)	-
37	Anionic Detergent	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	IS 13428 (Annex K) : 2018	1





38.11	Benzo(a) anthracene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.12	Chrysene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.13	Benzo (b) fluoranthene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.14	Benzo(K) fluoranthene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.15	Benzo(a)pyrene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.16	Dibenzo(a,h)anthracene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.17	Benzo (g,h,i)perylene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
38.18	Indenol(1,2,3-cd)pyrene	µg/L	BQL(QL=10)	BQL(QL=10)	BQL(QL=10)	APHA 6440 B	-	-
39	<b>Polychlorinated biphenyls</b>						0.0005	No relaxation
39.1	PCB 1016	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	-	-
39.2	PCB 1221	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	-	-
39.3	PCB 1232	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	-	-
39.4	PCB 1242	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	-	-
39.5	PCB 1248	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	-	-
39.6	PCB 1254	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	-	-
39.7	PCB 1260	µg/L	BQL(QL=0.03)	BQL(QL=0.03)	BQL(QL=0.03)	USEPA 508	-	-
40	<b>Trihalomethanes</b>							
40.1	Bromoform	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	APHA 6232	0.1	No relaxation
40.2	Dibromochloromethane	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	APHA 6232	0.1	No relaxation
40.3	Bromodichloromethane	mg/L	BQL(QL=0.03)	BQL(QL=0.03)	BQL(QL=0.03)	APHA 6232	0.06	No relaxation
40.4	Chloroform	mg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	APHA 6232	0.2	No relaxation
41	<b>Pesticides</b>						<b>Limits as Per IS:10500</b>	
41.1	o,p-DDT	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	1	
41.2	p,p-DDT	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508		
41.3	o,p-DDE	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508		
41.4	p,p-DDE	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508		
41.5	o,p-DDD	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508		
41.6	p,p-DDD	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508		
41.7	Isoproturon	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 532		
41.8	Alachlor	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 525.2	20	
41.9	Atrazine	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 8141A	2	
41.10	Aldrin/Dieldrin	µg/L	BQL(QL=0.01)	BQL(QL=0.01)	BQL(QL=0.01)	USEPA 508	0.03	
41.11	Gamma-HCH(Lindane)	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 508	2	
41.12	Alpha HCH	µg/L	BQL(QL=0.005)	BQL(QL=0.005)	BQL(QL=0.005)	USEPA 508	0.01	
41.13	Beta HCH	µg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	USEPA 508	0.04	
41.14	Delta HCH	µg/L	BQL(QL=0.02)	BQL(QL=0.02)	BQL(QL=0.02)	USEPA 508	0.04	
41.15	Endosulfan (alpha)	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508	0.4	
41.16	Endosulfan (Beta)	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508		
41.17	Endosulfan (Sulphate)	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 508		
41.18	Monocrotophos	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 8141A	1	
41.19	Ethion	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 1657A	3	
41.20	Chlorpyrifos	µg/L	BQL(QL=0.25)	BQL(QL=0.25)	BQL(QL=0.25)	USEPA 8141A	30	
41.21	Phorate	µg/L	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	USEPA 8141A	2	
41.22	Butachlor	µg/L	BQL(QL=20)	BQL(QL=20)	BQL(QL=20)	USEPA 8141A	125	
41.23	Methyl Parathion	µg/L	BQL(QL=0.05)	BQL(QL=0.05)	BQL(QL=0.05)	USEPA 8141A	0.3	
41.24	Malathion	µg/L	BQL(QL=0.25)	BQL(QL=0.25)	BQL(QL=0.25)	USEPA 8141A	190	
42	<b>Microbiological</b>						<b>Requirements as per IS:10500</b>	
42.1	E.Coli (MPN/100 ml)	MPN/100ml	Absent	Absent	Absent	IS 1622	Absent	
42.2	Total Coliform	MPN/100ml	Absent	Absent	Absent	IS 1622	Absent	

BQL =Below Quantification Limit; NA = Not Applicable

Analysed By:

Shiyal Kishor

Approved By:

Pankil Patel

END



## Test Report

Sample Number: VEL/SW/01  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/SW/2308280001  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 04/09/2023  
Period of Analysis: 28/08/2023 - 04/09/2023  
Receipt Date: 28/08/2023  
Sampling Date: 20/08/2023  
Sampling Quantity: 5 Ltrs. + 250 ml  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

Sample Description: Surface Water Sample  
Location: Near Main Gate No. - 01  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP

S. No.	Parameters	Test Method	Results	Units
1.	pH (at 25°C)	IS: 3025 (P-11)	7.60	--
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU
4.	Odour	IS: 3025 (P-5)	Unobjectionable	--
5.	Taste	IS: 3025 (P-8)	Unobjectionable	--
6.	Total Dissolved Solids	IS: 3025 (P-16)	319.00	mg/L
7.	Calcium as Ca	IS: 3025 (P-40)	68.00	mg/L
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	176.00	mg/L
9.	Chloride as Cl	IS: 3025 (P-32)	68.00	mg/L
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	9.32	mg/L
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	208.00	mg/L
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	42.00	mg/L
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.32	mg/L
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	18.50	mg/L
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date: 01/11/2021	0.024	mg/L
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date: 01/11/2021	*BLQ(**LOQ-0.005)	mg/L
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date: 01/11/2021	*BLQ(**LOQ-0.1)	mg/L
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date: 01/11/2021	*BLQ(**LOQ-0.002)	mg/L
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L



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## Test Report

Sample No.: VEL/SW/01		Report No.: VEL/SW/2308280001		
S. No.	Parameters	Test Method	Results	Units
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.01)	mg/L
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L
26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.

\*\*\*End of Report\*\*\*



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## Test Report

Sample Number: VEL/SW/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Dist.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/SW/2308280002  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 04/09/2023  
Period of Analysis: 28/08/2023 - 04/09/2023

Sample Description: Surface Water Sample  
Location: Near Main Gate No. - 03  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025, APHA 23<sup>rd</sup> Edition 2017 & STP

Receipt Date: 28/08/2023  
Sampling Date: 20/08/2023  
Sampling Quantity: 5 Ltrs. + 250 ml  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units
1.	pH (at 25°C)	IS: 3025 (P-11)	7.14	--
2.	Colour	IS: 3025 (P-4)	*BLQ(**LOQ-1.0)	Hazen
3.	Turbidity	IS: 3025 (P-10)	*BLQ(**LOQ-1.0)	NTU
4.	Odour	IS: 3025 (P-5)	Agreeable	--
5.	Taste	IS: 3025 (P-8)	Agreeable	--
6.	Total Dissolved Solids	IS: 3025 (P-16)	163	mg/L
7.	Calcium as Ca	IS: 3025 (P-40)	10.00	mg/L
8.	Total Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23)	75.00	mg/L
9.	Chloride as Cl	IS: 3025 (P-32)	20.00	mg/L
10.	Magnesium as Mg	APHA, 3500 Mg B, Calculation Method	8.03	mg/L
11.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21)	58.00	mg/L
12.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24)	10.00	mg/L
13.	Fluoride as F	APHA, 4500 F D, SPADNS Method	0.21	mg/L
14.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34)	*BLQ(**LOQ-1.0)	mg/L
15.	Iron as Fe	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date: 01/11/2021	0.032	mg/L
16.	Aluminium as Al	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date: 01/11/2021	0.009	mg/L
17.	Boron as B	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date: 01/11/2021	*BLQ(**LOQ-0.1)	mg/L
18.	Total Chromium as Cr	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date: 01/11/2021	*BLQ(**LOQ-0.002)	mg/L
19.	Phenolic Compounds as C <sub>6</sub> H <sub>5</sub> OH	IS: 3025 (P-43)	*BLQ(**LOQ-0.0005)	mg/L
20.	Mineral Oil	IS: 3025 (P-39)	*BLQ(**LOQ-0.1)	mg/L
21.	Anionic Detergents as MBAS	IS: 3025 (P-68)	*BLQ(**LOQ-0.05)	mg/L

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## Test Report

Sample No.: VEL/SW/02		Report No.: VEL/SW/2308280002		
S. No.	Parameters	Test Method	Results	Units
22.	Zinc as Zn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.01)	mg/L
23.	Copper as Cu	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L
24.	Manganese as Mn	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.1)	mg/L
25.	Selenium as Se	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.001)	mg/L
26.	Cadmium as Cd	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L
27.	Lead as Pb	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.002)	mg/L
28.	Cyanide as CN	IS: 3025 (P-27)	*BLQ(**LOQ-0.02)	mg/L
29.	Arsenic as As	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.005)	mg/L
30.	Mercury as Hg	VEL/STP/ICP/W-01, Issue No.- 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.0005)	mg/L
31.	Total Coliform	IS: 15185:2016	Absent	Per 100 ml
32.	E. coli	IS: 15185:2016	Absent	Per 100 ml

Note:- STP: Standard Testing Procedure, \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification.

\*\*\*End of Report\*\*\*



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**GO Green Mechanisms Pvt Ltd**

**Analysis Results for the Month of April -23**

<b>Company Name</b>		Mahan Energen Limited.			
<b>Sample Type</b>		Waste Water			
<b>Sample Quantity</b>		2 L			
<b>Sample Collected By</b>		Laboratory Representative			
<b>Date of Sampling</b>		11.04.2023			
<b>Analysis Period</b>		17.04.2023 to. 22.04.2023			
SL. No.	PARAMETER	UNIT	Location	Reference Method	Norms
			ETP Outlet		
1	pH @ 25 °C	-	7.56	IS 3025-Part 11	6.5-9.0
2	Total Suspended Solids	mg/L	39.00	APHA 23rd Edition (2540 D)	100
3	BOD at 27°C – 3 Days	mg/L	15	IS 3025-Part 44	30
4	Chemical Oxygen Demand	mg/L	50.00	APHA 23rd Edition(5220 B)	250
5	Oil & Grease	mg/L	BQL(Q <sub>L</sub> =2)	IS 3025-Part 39	10
6	Chloride	mg/L	90.97	IS 3025- Part 32	1000
7	Total Dissolved Solids	mg/L	665.00	APHA 23rd Edn 2540 C	2100

BQL =Below Quantification Limit; NA = Not Applicable

Norms as per CTE.

<b>Analysed By:</b>  Shiyal Kishor	<b>Approved By:</b>  Pankil Patel
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END





GO Green Mechanisms Pvt Ltd					
Analysis Results for the Month of May -23					
Company Name			Mahan Energen Limited.		
Sample Type			Waste Water		
Sample Quantity			2 L		
Sample Collected By			Laboratory Representative		
Date of Sampling			11.05.2023		
Analysis Period			16.05.2023 to, 21.05.2023		
SL. No.	PARAMETER	UNIT	Location	Reference Method	Norms
			ETP Outlet		
1	pH @ 25 °C	-	7.12	IS 3025-Part 11	6.5-9.0
2	Total Suspended Solids	mg/L	34.00	APHA 23rd Edition (2540 D)	100
3	BOD at 27°C – 3 Days	mg/L	12	IS 3025-Part 44	30
4	Chemical Oxygen Demand	mg/L	40.0	APHA 23rd Edition(5220 B)	250
5	Oil & Grease	mg/L	BQL(QL=2)	IS 3025-Part 39	10
6	Chloride	mg/L	86.97	IS 3025- Part 32	1000
7	Total Dissolved Solids	mg/L	648.00	APHA 23rd Edn 2540 C	2100

BQL =Below Quantification Limit; NA = Not Applicable

Norms as per CTE.

Analysed By:

Shiyal Kishor

Approved By:

Pankil Patel

END



GO Green Mechanisms Pvt Ltd					
Analysis Results for the Month of June -2023					
Company Name			Mahan Energen Limited.		
Sample Type			Waste Water		
Sample Quantity			2L		
Sample Collected By			Laboratory Representative		
Date of Sampling			14.06.2023		
Analysis Period			21.06.2023 To 26.06.2023		
SL. No.	PARAMETER	UNIT	Location	Reference Method	Norms
			ETP Outlet		
1	pH @ 25 °C	-	6.92	IS 3025-Part 11	6.5-9.0
2	Total Suspended Solids	mg/L	39.00	APHA 23rd Edition (2540 D)	100
3	BOD at 27°C – 3 Days	mg/L	15	IS 3025-Part 44	30
4	Chemical Oxygen Demand	mg/L	50.00	APHA 23rd Edition(5220 B)	250
5	Oil & Grease	mg/L	BQL(QL=2)	IS 3025-Part 39	10
6	Chloride	mg/L	91.47	IS 3025- Part 32	1000
7	Total Dissolved Solids	mg/L	660.00	APHA 23rd Edn 2540 C	2100

BQL =Below Quantification Limit; NA = Not Applicable

Norms as per CTE.

<p>Analysed By:</p> <p><i>Shiyal K.B.</i></p> <p>Shiyal Kishor</p>	<p>Approved By:</p> <p><i>P</i></p> <p>Pankil Patel</p>
--	---

END





## Test Report

Sample Number: VEL/WW/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/WW/2307260002  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Callout No.: Date : 14/06/2023  
Reporting Date: 31/07/2023  
Period of Analysis: 26/07/2023 - 31/07/2023

Sample Description: Waste Water Sample  
Sample Location: ETP Outlet (ETP Plant)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025 & STP

Receipt Date: 26/07/2023  
Sampling Date: 18/07/2023  
Sampling Quantity: 2 Ltrs.  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	General Standards As Per The Environment (Protection) Rules, 1986		
					Inland Surface Water (a)	Public Sewers (b)	Land for Irrigation (c)
1.	pH (at 25°C)	IS: 3025 (P-11)	6.70	--	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
2.	Total Suspended Solids	IS: 3025 (P-17)	43.0	mg/L	100	600	200
3.	B.O.D. (3 Days @27°C)	IS: 3025 (P-44)	13.00	mg/L	30	350	100
4.	Chemical Oxygen Demand (C.O.D.)	IS: 3025 (P-58)	52.11	mg/L	250	--	--
5.	Oil & Grease	Clause No. 5 of IS: 3025 (P-39)	0.38	mg/L	10	20	10
6.	Total Dissolved Solids	IS: 3025 (P-16)	128.00	mg/L	--	--	--
7.	Chloride (as Cl)	IS: 3025( P-23)	32.68	mg/L	--	--	--

Note:- GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART-A : EFFLUENTS  
As Per The Environment (Protection) Rules, 1986 [SCHEDULE - VI] (See Rule 3A)



\*\*\*End of Report\*\*\*

Page No. 1 of 1



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## Test Report

Sample Number: VEL/WW/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Sample Description: Waste Water Sample  
Sample Location: ETP Outlet (ETP Plant)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025 & STP

Report No.: VEL/WW/2308280010  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Callout No.: Date : 14/06/2023  
Reporting Date: 31/08/2023  
Period of Analysis: 28/08/2023 - 31/08/2023  
Receipt Date: 28/08/2023  
Sampling Date: 19/08/2023  
Sampling Quantity: 2 Ltrs.  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	General Standards As Per The Environment (Protection) Rules, 1986		
					Inland Surface Water (a)	Public Sewers (b)	Land for Irrigation (c)
1.	pH (at 25°C)	IS: 3025 (P-11)	6.30	--	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
2.	Total Suspended Solids	IS: 3025 (P-17)	46.00	mg/L	100	600	200
3.	B.O.D. (3 Days @27°C)	IS: 3025 (P-44)	10.22	mg/L	30	350	100
4.	Chemical Oxygen Demand (C.O.D.)	IS: 3025 (P-58)	55.74	mg/L	250	--	--
5.	Oil & Grease	Clause No. 5 of IS: 3025 (P-39)	0.48	mg/L	10	20	10
6.	Total Dissolved Solids	IS: 3025 (P-16)	142.00	mg/L	--	--	--
7.	Chloride (as Cl)	IS: 3025 (P-23)	34.87	mg/L	--	--	--

Note:- GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART-A : EFFLUENTS  
As Per The Environment (Protection) Rules, 1986 [SCHEDULE - VI] (See Rule 3A)

\*\*\*End of Report\*\*\*



Page No. 1 of 1



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## Test Report

Sample Number: VEL/WW/03  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/WW/2309180007  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Callout No.: Date : 14/06/2023  
Reporting Date: 21/09/2023  
Period of Analysis: 18/09/2023 - 21/09/2023

Sample Description: Waste Water Sample  
Sample Location: ETP Outlet (ETP Plant)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025 & STP

Receipt Date: 18/09/2023  
Sampling Date: 16/09/2023  
Sampling Quantity: 2 Ltrs.  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	General Standards As Per The Environment (Protection) Rules, 1986		
					Inland Surface Water (a)	Public Sewers (b)	Land for Irrigation (c)
1.	pH (at 25°C)	IS: 3025 (P-11)	6.3	--	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
2.	Total Suspended Solids	IS: 3025 (P-17)	49.00	mg/L	100	600	200
3.	B.O.D. (3 Days @27°C)	IS: 3025 (P-44)	8.9	mg/L	30	350	100
4.	Chemical Oxygen Demand (C.O.D.)	IS: 3025 (P-58)	48.20	mg/L	250	--	--
5.	Oil & Grease	Clause No. 5 of IS: 3025 (P-39)	0.41	mg/L	10	20	10
6.	Total Dissolved Solids	IS: 3025 (P-16)	174.00	mg/L	--	--	--
7.	Chloride (as Cl)	IS: 3025( P-23)	36.51	mg/L	--	--	--

Note:- GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART-A : EFFLUENTS  
As Per The Environment (Protection) Rules, 1986 [SCHEDULE - VI] (See Rule 3A)

\*\*\*End of Report\*\*\*



Page No. 1 of 1



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**GO Green Mechanisms Pvt Ltd**

**Analysis Results for the Month of April -23**

<b>Company Name</b>		Mahan Energen Limited.			
<b>Sample Type</b>		Waste Water			
<b>Sample Collected By</b>		Laboratory Representative			
<b>Sample Quantity</b>		2L			
<b>Date of Sampling</b>		11.04.2023			
<b>Analysis Period</b>		17.04.2023 to. 22.04.2023			
SL. No.	PARAMETER	UNIT	Location	Reference Method	Norms
			STP Outlet		
1	pH @ 25 °C	-	7.63	IS 3025-Part 11	6.5-9.0
2	Total Suspended Solids	mg/L	29.00	APHA 23rd Edition (2540 D)	100
3	BOD at 27°C – 3 Days	mg/L	17	IS 3025-Part 44	30
4	Chemical Oxygen Demand	mg/L	60.00	APHA 23rd Edition(5220 B)	250
5	Oil & Grease	mg/L	BQL(QL=2)	IS 3025-Part 39	10
6	Faecal Coliform	MPN/100ML	Absent	IS 1622	<1000

BQL =Below Quantification Limit; NA = Not Applicable

Norms as per CTE.

**Analysed By:**

*Shiyal K.B.*  
Shiyal Kishor

**Approved By:**

*P.*  
Pankil Patel

END





GO Green Mechanisms Pvt Ltd					
Analysis Results for the Month of May -23					
Company Name			Mahan Energen Limited.		
Sample Type			Waste Water		
Sample Collected By			Laboratory Representative		
Sample Quantity			2L		
Date of Sampling			11.05.2023		
Analysis Period			16.05.2023 to. 21.05.2023		
SL. No.	PARAMETER	UNIT	Location	Reference Method	Norms
			STP Outlet		
1	pH @ 25 °C	-	7.21	IS 3025-Part 11	6.5-9.0
2	Total Suspended Solids	mg/L	24.00	APHA 23rd Edition (2540 D)	100
3	BOD at 27°C – 3 Days	mg/L	14	IS 3025-Part 44	30
4	Chemical Oxygen Demand	mg/L	50.00	APHA 23rd Edition(5220 B)	250
5	Oil & Grease	mg/L	BQL(QL=2)	IS 3025-Part 39	10
6	Faecal Coliform	MPN/100ML	Absent	IS 1622	<1000

BQL =Below Quantification Limit; NA = Not Applicable

Norms as per CTE.

Analysed By:	Approved By:
<i>Shiyal K.B.</i>	<i>Pankil Patel</i>
Shiyal Kishor	Pankil Patel

END



GO Green Mechanisms Pvt Ltd					
Analysis Results for the Month of June -2023					
Company Name			Mahan Energen Limited.		
Sample Type			Waste Water		
Sample Collected By			Laboratory Representative		
Sample Quantity			2L		
Date of Sampling			14.06.2023		
Analysis Period			21.06.2023 To 26.06.2023		
SL. No.	PARAMETER	UNIT	Location	Reference Method	Norms
			STP Outlet		
1	pH @ 25 °C	-	6.84	IS 3025-Part 11	6.5-9.0
2	Total Suspended Solids	mg/L	28.00	APHA 23rd Edition (2540 D)	100
3	BOD at 27°C – 3 Days	mg/L	15.60	IS 3025-Part 44	30
4	Chemical Oxygen Demand	mg/L	60.00	APHA 23rd Edition(5220 B)	250
5	Oil & Grease	mg/L	BQL(QL=2)	IS 3025-Part 39	10
6	Faecal Coliform	MPN/100ML	Absent	IS 1622	<1000

BQL =Below Quantification Limit; NA = Not Applicable

Norms as per CTE.

<p>Analysed By:</p> <p><i>Shiyal K.B.</i></p> <p>Shiyal Kishor</p>	<p>Approved By:</p> <p><i>Pankil Patel</i></p> <p>Pankil Patel</p>
--	--

END





## Test Report

Sample Number: VEL/WW/01  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/WW/2307260001  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Callout No.: Date : 14/06/2023  
Reporting Date: 31/07/2023  
Period of Analysis: 26/07/2023 - 31/07/2023

Sample Description: Waste Water Sample  
Sample Location: STP Outlet (STP Plant)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025 & STP

Receipt Date: 26/07/2023  
Sampling Date: 18/07/2023  
Sampling Quantity: 2 Ltrs.  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	General Standards As Per The Environment (Protection) Rules, 1986		
					Inland Surface Water (a)	Public Sewers (b)	Land for Irrigation (c)
1.	pH (at 25°C)	IS: 3025 (P-11)	7.54	--	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
2.	Total Suspended Solids	IS: 3025 (P-17)	35.00	mg/L	100	600	200
3.	B.O.D. (3 Days @27°C)	IS: 3025 (P-44)	15.08	mg/L	30	350	100
4.	Chemical Oxygen Demand (C.O.D.)	IS: 3025 (P-58)	58.32	mg/L	250	--	--
5.	Oil & Grease	Clause No. 5 of IS: 3025 (P-39)	0.56	mg/L	10	20	10
6.	Faecal Coliform	IS: 1622:1981	<2	MPN/100 ml	--	--	--

Note:- GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART-A : EFFLUENTS  
As Per The Environment (Protection) Rules, 1986 [SCHEDULE - VI] (See Rule 3A)

\*\*\*End of Report\*\*\*



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31/07/2023  
SATYA DEV  
Dy. Technical Manager-Micro



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## Test Report

Sample Number:	VEL/WW/01	Report No.:	VEL/WW/2308280009
Name & Address of the Party:	M/s Mahan Energen Limited Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli, Madhya Pradesh - 486886	Format No.:	7.8 F-03
		Party Reference No.:	5703009832
		Callout No.:	Date : 14/06/2023
		Reporting Date:	31/08/2023
		Period of Analysis:	28/08/2023 - 31/08/2023
		Receipt Date:	28/08/2023
		Sampling Date:	19/08/2023
Sample Description:	Waste Water Sample	Sampling Quantity:	2 Ltrs.
Sample Location:	STP Outlet (STP Plant)	Sampling Type:	Grab
Sample Collected By:	VEL Representative (Mr. Amit Pandey)	Preservation:	Ice Box
Sampling and Analysis Protocol:	IS: 3025 & STP	Parameter Required:	As Per Work Order

S. No.	Parameters	Test Method	Results	Units	General Standards As Per The Environment (Protection) Rules, 1986		
					Inland Surface Water (a)	Public Sewers (b)	Land for Irrigation (c)
1.	pH (at 25°C)	IS: 3025 (P-11)	7.74	--	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
2.	Total Suspended Solids	IS: 3025 (P-17)	42.00	mg/L	100	600	200
3.	B.O.D. (3 Days @27°C)	IS: 3025 (P-44)	17.98	mg/L	30	350	100
4.	Chemical Oxygen Demand (C.O.D.)	IS: 3025 (P-58)	60.25	mg/L	250	--	--
5.	Oil & Grease	Clause No. 5 of IS: 3025 (P-39)	0.64	mg/L	10	20	10
6.	Faecal Coliform	IS: 1622:1981	<2	MPN/100 ml	--	--	--

Note:- GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART-A : EFFLUENTS  
As Per The Environment (Protection) Rules, 1986 [SCHEDULE - VI] (See Rule 3A)

\*\*\*End of Report\*\*\*

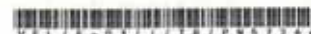


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## Test Report

Sample Number: VEL/WW/01  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/WW/2309180005  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Callout No.: Date : 14/06/2023  
Reporting Date: 21/09/2023  
Period of Analysis: 18/09/2023 - 21/09/2023

Sample Description: Waste Water Sample  
Sample Location: STP Outlet (STP Plant)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 3025 & STP

Receipt Date: 18/09/2023  
Sampling Date: 16/09/2023  
Sampling Quantity: 2 Ltrs.  
Sampling Type: Grab  
Preservation: Ice Box  
Parameter Required: As Per Work Order

S. No.	Parameters	Test Method	Results	Units	General Standards As Per The Environment (Protection) Rules, 1986		
					Inland Surface Water (a)	Public Sewers (b)	Land for Irrigation (c)
1.	pH (at 25°C)	IS: 3025 (P-11)	7.57	--	5.5 to 9.0	5.5 to 9.0	5.5 to 9.0
2.	Total Suspended Solids	IS: 3025 (P-17)	56.00	mg/L	100	600	200
3.	B.O.D. (3 Days @27°C)	IS: 3025 (P-44)	18.46	mg/L	30	350	100
4.	Chemical Oxygen Demand (C.O.D.)	IS: 3025 (P-58)	62.52	mg/L	250	--	--
5.	Oil & Grease	Clause No. 5 of IS: 3025 (P-39)	0.58	mg/L	10	20	10
6.	Faecal Coliform	IS: 1622:1981	<2	MPN/100 ml	--	--	--

Note:- GENERAL STANDARDS FOR DISCHARGE OF ENVIRONMENTAL POLLUTANTS PART-A : EFFLUENTS  
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**GO Green Mechanisms Pvt Ltd**  
**Ambient Noise Monitoring For The Month of April-23**  
**On Site 24 Hourly Monitoring Results**

Company Name	Mahan Energen Limited.
Sample Collected By	Laboratory Representative
Sample Type	Ambient Noise Monitoring

Sr. No.	Sampling Date	Location		Day Time in dB (A) leq (6:00 Am to 10:00 Pm)	Norms (Day Time)	Night Time in dB (A) leq (10:00 Pm to 06:00 Am)	Norms (Night Time)
1	04.04.2023	Nr. Admin Building	Leq :	66.3	75.0	53.4	70.0
			Max :	68.5		56.6	
			Min :	60.1		47.2	
2	05.04.2023	Nr. Gate No. 1	Leq :	63.1	75.0	55.3	70.0
			Max :	71.4		57.4	
			Min :	59.4		51.9	
3	06.04.2023	Nr. Gate No. 2	Leq :	65.6	75.0	61.8	70.0
			Max :	68.0		63.7	
			Min :	62		58.6	
4	07.04.2023	Nr. Gate No. 3	Leq :	54.6	75.0	47.1	70.0
			Max :	56.7		50.4	
			Min :	49.3		40.3	

NORMS AS PER NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 (Industrial Area)	
Analysed By <i>Shiyal K.B.</i> Shiyal Kishor	Approved By <i>P.</i> Pankil Patel

\*\*\*\*\*END\*\*\*\*\*





## GO Green Mechanisms Pvt Ltd

## Ambient Noise Monitoring For The Month of April-23

## On Site 24 Hourly Monitoring Results

Company Name		Mahan Energen Limited.					
Sample Collected By		Laboratory Representative					
Sample Type		Ambient Noise Monitoring					
Sr. No.	Sampling Date	Location		Day Time in dB (A) leq (6:00 Am to 10:00 Pm)	Norms (Day Time)	Night Time in dB (A) leq (10:00 Pm to 06:00 Am)	Norms (Night Time)
1	05.05.2023	Nr. Admin Building	Leq :	63.5	75.0	54.0	70.0
			Max :	69.3		57.3	
			Min :	53.7		46.5	
2	08.05.2023	Nr. Gate No. 1	Leq :	61.3	75.0	54.7	70.0
			Max :	69.2		58.2	
			Min :	54.3		50.8	
3	17.05.2023	Nr. Gate No. 2	Leq :	60.5	75.0	56.1	70.0
			Max :	67.4		59.6	
			Min :	54.2		53.8	
4	24.05.2023	Nr. Gate No. 3	Leq :	56.6	75.0	57.0	70.0
			Max :	59.3		61.4	
			Min :	53.1		51.9	

## NORMS AS PER NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 (Industrial Area)

Analysed By

Shiyal Kishor

Shiyal Kishor

Approved By

Pankil Patel

Pankil Patel

END



**GO Green Mechanisms Pvt Ltd**

**Ambient Noise Monitoring For The Month of June-23**

**On Site 24 Hourly Monitoring Results**

<b>Company Name</b>		Mahan Energen Limited.					
<b>Sample Collected By</b>		Laboratory Representative					
<b>Sample Type</b>		Ambient Noise Monitoring					
Sr. No.	Sampling Date	Location		Day Time in dB (A) leq (6:00 Am to 10:00 Pm)	Norms (Day Time)	Night Time in dB (A) leq (10:00 Pm to 06:00 Am)	Norms (Night Time)
1	16.06.2023	Nr. Admin Building	Leq :	57.4	75.0	50.5	70.0
			Max :	60.2		57.1	
			Min :	52.9		43.1	
2	17.06.2023	Nr. Gate No. 1	Leq :	58.8	75.0	52.8	70.0
			Max :	67.5		56.3	
			Min :	52.3		47.6	
3	21.06.2023	Nr. Gate No. 2	Leq :	57.3	75.0	51.4	70.0
			Max :	65.2		54.8	
			Min :	52.8		46.3	
4	22.06.2023	Nr. Gate No. 3	Leq :	57.6	75.0	49.8	70.0
			Max :	59.9		53.5	
			Min :	53.6		43.2	

NORMS AS PER NOISE POLLUTION (REGULATION AND CONTROL) RULES, 2000 (Industrial Area)	
<b>Analyzed By</b>  <b>Shiyal Kishor</b>	<b>Approved By</b>  <b>Pankil Patel</b>

.....END.....





## Test Report

Sample Number: VEL/N/01  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/N/2307260026  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 31/07/2023  
Period of Analysis: 26/07/2023 - 31/07/2023  
Receipt Date: 26/07/2023  
Page No.: 1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information  
Sampling Location : Near Gate No - 1  
Sample Collected By : VEL Representative (Mr. Amit Pandey)  
Sampling Instrument Used : Sound Level Meter  
Instrument Code : VEL/INS/ENV/SLM/10  
Instrument Calibration Status : Calibrated  
Meteorological Condition During Monitoring : Clear Sky  
Date of Monitoring : 18/07/2023 To 19/07/2023  
Time of Monitoring : 06:00 A.M. To 06:00 A.M.  
Ambient Temperature (°C) : Min.23°C, Max.31°C  
Surrounding Activity : Human & Vehicular Activities  
Scope of Monitoring : Regulatory Requirement  
Sampling & Analysis Protocol : IS: 9989  
Sampling Duration : 24 Hours  
Parameter Required : As Per Work Order

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max.</sub>	IS: 9989	71.2	67.3	dB (A)
2.	L <sub>Min.</sub>	IS: 9989	54.2	49.8	dB (A)
3.	L <sub>Eq.</sub>	IS: 9989	68.64	61.87	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq.</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

\*\*\*End of Report\*\*\*



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## Test Report

Sample Number: VEL/N/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Dist.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/N/2307260027  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date : 14/06/2023  
Reporting Date: 31/07/2023  
Period of Analysis: 26/07/2023 - 31/07/2023  
Receipt Date: 26/07/2023  
Page No.: 1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information  
Sampling Location : Near Admin Building  
Sample Collected By : VEL Representative (Mr. Amit Pandey)  
Sampling Instrument Used : Sound Level Meter  
Instrument Code : VEL/INS/ENV/SLM/10  
Instrument Calibration Status : Calibrated  
Meteorological Condition During Monitoring : Clear Sky  
Date of Monitoring : 20/07/2023 To 21/07/2023  
Time of Monitoring : 06:00 A.M. To 06:00 A.M.  
Ambient Temperature (°C) : Min.26°C, Max.33°C  
Surrounding Activity : Human & Vehicular Activities  
Scope of Monitoring : Regulatory Requirement  
Sampling & Analysis Protocol : IS: 9989  
Sampling Duration : 24 Hours  
Parameter Required : As Per Work Order

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	$L_{Max}$	IS: 9989	73.4	64.2	dB (A)
2.	$L_{Min}$	IS: 9989	55.6	52.3	dB (A)
3.	$L_{Eq}$	IS: 9989	62.58	55.28	dB (A)
4.	CPCB Limits In dB (A*) $L_{Eq}$ (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

\*\*\*End of Report\*\*\*



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## Test Report

Sample Number: VEL/N/03  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/N/2307260028  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 31/07/2023  
Period of Analysis: 26/07/2023 - 31/07/2023  
Receipt Date: 26/07/2023  
Page No.: 1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information  
Sampling Location : Near Gate No - 2  
Sample Collected By : VEL Representative (Mr. Amit Pandey)  
Sampling Instrument Used : Sound Level Meter  
Instrument Code : VEL/INS/ENV/SLM/10  
Instrument Calibration Status : Calibrated  
Meteorological Condition During Monitoring : Clear Sky  
Date of Monitoring : 21/07/2023 To 22/07/2023  
Time of Monitoring : 06:00 A.M. To 06:00 A.M.  
Ambient Temperature (°C) : Min.25°C, Max.29°C  
Surrounding Activity : Human & Vehicular Activities  
Scope of Monitoring : Regulatory Requirement  
Sampling & Analysis Protocol : IS: 9989  
Sampling Duration : 24 Hours  
Parameter Required : As Per Work Order

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max</sub>	IS: 9989	68.1	60.5	dB (A)
2.	L <sub>Min</sub>	IS: 9989	51.0	47.3	dB (A)
3.	L <sub>Eq</sub>	IS: 9989	64.26	59.36	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

\*\*\*End of Report\*\*\*



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## Test Report

Sample Number: VEL/N/04  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/N/2307260029  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 31/07/2023  
Period of Analysis: 26/07/2023 - 31/07/2023  
Receipt Date: 26/07/2023  
Page No.: 1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information	: Near Gate No - 3
Sampling Location	: VEL Representative (Mr. Amit Pandey)
Sample Collected By	: Sound Level Meter
Sampling Instrument Used	: VEL/INS/ENV/SLM/10
Instrument Code	: Calibrated
Instrument Calibration Status	: Clear Sky
Meteorological Condition During Monitoring	: 22/07/2023 To 23/07/2023
Date of Monitoring	: 06:00 A.M. To 06:00 A.M.
Time of Monitoring	: Min.25°C, Max.30°C
Ambient Temperature (°C)	: Human & Vehicular Activities
Surrounding Activity	: Regulatory Requirement
Scope of Monitoring	: IS: 9989
Sampling & Analysis Protocol	: 24 Hours
Sampling Duration	: As Per Work Order
Parameter Required	

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max</sub>	IS: 9989	66.3	59.43	dB (A)
2.	L <sub>Min</sub>	IS: 9989	48.5	41.3	dB (A)
3.	L <sub>Eq</sub>	IS: 9989	58.01	52.36	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

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## Test Report

Sample Number: VEL/N/01  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Dist.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/N/2308160025  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 19/08/2023  
Period of Analysis: 16/08/2023 - 19/08/2023  
Receipt Date: 16/08/2023  
Page No.: 1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information	: Near Gate No. - 2
Sampling Location	: VEL Representative (Mr. Amit Pandey)
Sample Collected By	: Sound Level Meter
Sampling Instrument Used	: VEL/INS/ENV/SLM/10
Instrument Code	: Calibrated
Instrument Calibration Status	: Clear Sky
Meteorological Condition During Monitoring	: 07/08/2023 To 08/08/2023
Date of Monitoring	: 06:00 A.M. To 06:00 A.M.
Time of Monitoring	: Min.24°C, Max.28°C
Ambient Temperature (°C)	: Human & Vehicular Activities
Surrounding Activity	: Regulatory Requirement
Scope of Monitoring	: IS: 9989
Sampling & Analysis Protocol	: 24 Hours
Sampling Duration	: As Per Work Order
Parameter Required	

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	$L_{Max}$	IS: 9989	72.7	67.1	dB (A)
2.	$L_{Min}$	IS: 9989	56.8	50.6	dB (A)
3.	$L_{Eq}$	IS: 9989	61.22	53.77	dB (A)
4.	CPCB Limits In dB (A*) $L_{Eq}$ (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.



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## Test Report

Sample Number: VEL/N/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/N/2308160026  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 19/08/2023  
Period of Analysis: 16/08/2023 - 19/08/2023  
Receipt Date: 16/08/2023  
Page No.: 1 of 1  
Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information  
Sampling Location : Near Gate No. - 3  
Sample Collected By : VEL Representative (Mr. Amit Pandey)  
Sampling Instrument Used : Sound Level Meter  
Instrument Code : VEL/INS/ENV/SLM/10  
Instrument Calibration Status : Calibrated  
Meteorological Condition During Monitoring : Clear Sky  
Date of Monitoring : 08/08/2023 To 09/08/2023  
Time of Monitoring : 06:00 A.M. To 06:00 A.M.  
Ambient Temperature (°C) : Min.24°C, Max.28°C  
Surrounding Activity : Human & Vehicular Activities  
Scope of Monitoring : Regulatory Requirement  
Sampling & Analysis Protocol : IS: 9989  
Sampling Duration : 24 Hours  
Parameter Required : As Per Work Order

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max.</sub>	IS: 9989	69.8	62.2	dB (A)
2.	L <sub>Min.</sub>	IS: 9989	51.4	49.7	dB (A)
3.	L <sub>Eq.</sub>	IS: 9989	65.22	56.59	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq.</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

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## Test Report

Sample Number: VEL/N/03  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/N/2308160027  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date : 14/06/2023  
Reporting Date: 19/08/2023  
Period of Analysis: 16/08/2023 - 19/08/2023  
Receipt Date: 16/08/2023  
Page No.: 1 of 1

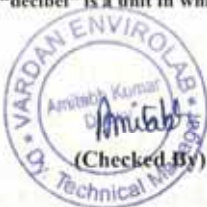
Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information  
Sampling Location : Near Gate No. - 1  
Sample Collected By : VEL Representative (Mr. Amit Pandey)  
Sampling Instrument Used : Sound Level Meter  
Instrument Code : VEL/INS/ENV/SLM/10  
Instrument Calibration Status : Calibrated  
Meteorological Condition During Monitoring : Clear Sky  
Date of Monitoring : 09/08/2023 To 10/08/2023  
Time of Monitoring : 06:00 A.M. To 06:00 A.M.  
Ambient Temperature (°C) : Min.24°C, Max.29°C  
Surrounding Activity : Human & Vehicular Activities  
Scope of Monitoring : Regulatory Requirement  
Sampling & Analysis Protocol : IS: 9989  
Sampling Duration : 24 Hours  
Parameter Required : As Per Work Order

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max</sub>	IS: 9989	70.2	65.9	dB (A)
2.	L <sub>Min</sub>	IS: 9989	52.2	45.3	dB (A)
3.	L <sub>Eq</sub>	IS: 9989	66.78	59.64	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

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## Test Report

Sample Number: VEL/N/04  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/N/2308160028  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date: 14/06/2023  
Reporting Date: 19/08/2023  
Period of Analysis: 16/08/2023 - 19/08/2023  
Receipt Date: 16/08/2023  
Page No.: 1 of 1  
Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information  
Sampling Location : Near Admin Building  
Sample Collected By : VEL Representative (Mr. Amit Pandey)  
Sampling Instrument Used : Sound Level Meter  
Instrument Code : VEL/INS/ENV/SLM/10  
Instrument Calibration Status : Calibrated  
Meteorological Condition During Monitoring : Clear Sky  
Date of Monitoring : 10/08/2023 To 11/08/2023  
Time of Monitoring : 06:00 A.M. To 06:00 A.M.  
Ambient Temperature (°C) : Min.24°C, Max.28°C  
Surrounding Activity : Human & Vehicular Activities  
Scope of Monitoring : Regulatory Requirement  
Sampling & Analysis Protocol : IS: 9989  
Sampling Duration : 24 Hours  
Parameter Required : As Per Work Order

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max.</sub>	IS: 9989	68.6	55.3	dB (A)
2.	L <sub>Min.</sub>	IS: 9989	46.4	40.7	dB (A)
3.	L <sub>Eq.</sub>	IS: 9989	57.37	50.80	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq.</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

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## Test Report

Sample Number:	VEL/N/01	Report No.:	VEL/N/2309110001
Name & Address of the Party:	M/s Mahan Energen Limited Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli, Madhya Pradesh - 486886	Format No.:	7.8 F-03
		Party Reference No.:	5703009832
		Date :	14/06/2023
		Reporting Date:	14/09/2023
		Period of Analysis:	11/09/2023 - 14/09/2023
		Receipt Date:	11/09/2023
		Page No.:	1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information	:	Near Gate No. - 1
Sampling Location	:	VEL Representative (Mr. Amit Pandey)
Sample Collected By	:	Sound Level Meter
Sampling Instrument Used	:	VEL/INS/ENV/SLM/10
Instrument Code	:	Calibrated
Instrument Calibration Status	:	Clear Sky
Meteorological Condition During Monitoring	:	07/09/2023 To 08/09/2023
Date of Monitoring	:	06:00 A.M. To 06:00 A.M.
Time of Monitoring	:	Min.24°C, Max.32°C
Ambient Temperature (°C)	:	Human & Vehicular Activities
Surrounding Activity	:	Regulatory Requirement
Scope of Monitoring	:	IS: 9989
Sampling & Analysis Protocol	:	24 Hours
Sampling Duration	:	As Per Work Order
Parameter Required	:	

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max</sub>	IS: 9989	73.4	66.5	dB (A)
2.	L <sub>Min</sub>	IS: 9989	55.3	50.6	dB (A)
3.	L <sub>Eq</sub>	IS: 9989	60.78	52.58	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq</sub> (Industrial Area)	-	75.00	70.00	dB (A)

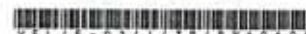
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## Test Report

Sample Number: VEL/N/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Report No.: VEL/N/2309180001  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Date : 14/06/2023  
Reporting Date: 21/09/2023  
Period of Analysis: 18/09/2023 - 21/09/2023  
Receipt Date: 18/09/2023  
Page No.: 1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information  
Sampling Location : Near Admin Building  
Sample Collected By : VEL Representative (Mr. Amit Pandey)  
Sampling Instrument Used : Sound Level Meter  
Instrument Code : VEL/INS/ENV/SLM/10  
Instrument Calibration Status : Calibrated  
Meteorological Condition During Monitoring : Clear Sky  
Date of Monitoring : 14/09/2023 To 15/09/2023  
Time of Monitoring : 06:00 A.M. To 06:00 A.M.  
Ambient Temperature (°C) : Min.25°C, Max.32°C  
Surrounding Activity : Human & Vehicular Activities  
Scope of Monitoring : Regulatory Requirement  
Sampling & Analysis Protocol : IS: 9989  
Sampling Duration : 24 Hours  
Parameter Required : As Per Work Order

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max.</sub>	IS: 9989	67.1	60.5	dB (A)
2.	L <sub>Min.</sub>	IS: 9989	52.6	50.0	dB (A)
3.	L <sub>Eq.</sub>	IS: 9989	62.69	55.28	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq.</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

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## Test Report

Sample Number:	VEL/N/03	Report No.:	VEL/N/2309250007
Name & Address of the Party:	M/s Mahan Energen Limited Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli, Madhya Pradesh - 486886	Format No.:	7.8 F-03
		Party Reference No.:	5703009832
		Date :	14/06/2023
		Reporting Date:	27/09/2023
		Period of Analysis:	25/09/2023 - 27/09/2023
		Receipt Date:	25/09/2023
		Page No.:	1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information	: Near Gate No. - 2
Sampling Location	: VEL Representative (Mr. Amit Pandey)
Sample Collected By	: Sound Level Meter
Sampling Instrument Used	: VEL/INS/ENV/SLM/10
Instrument Code	: Calibrated
Instrument Calibration Status	: Clear Sky
Meteorological Condition During Monitoring	: 21/09/2023 To 22/09/2023
Date of Monitoring	: 06:00 A.M. To 06:00 A.M.
Time of Monitoring	: Min.23°C, Max.29°C
Ambient Temperature (°C)	: Human & Vehicular Activities
Surrounding Activity	: Regulatory Requirement
Scope of Monitoring	: IS: 9989
Sampling & Analysis Protocol	: 24 Hours
Sampling Duration	: As Per Work Order
Parameter Required	

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max.</sub>	IS: 9989	74.8	68.5	dB (A)
2.	L <sub>Min.</sub>	IS: 9989	57.2	47.1	dB (A)
3.	L <sub>Eq.</sub>	IS: 9989	64.58	57.55	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq.</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

\*\*\*End of Report\*\*\*



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## Test Report

Sample Number:	VEL/N/04	Report No.:	VEL/N/2310030002
Name & Address of the Party:	M/s Mahan Energen Limited Village: Bandhora, Post: Karsualal, Tehsil: Mada, Distt.: Singrauli, Madhya Pradesh - 486886	Format No.:	7.8 F-03
		Party Reference No.:	5703009832
		Date :	14/06/2023
		Reporting Date:	05/10/2023
		Period of Analysis:	03/10/2023 – 05/10/2023
		Receipt Date:	03/10/2023
		Page No.:	1 of 1

Sample Description: AMBIENT NOISE LEVEL MONITORING

General Information	:	Near Gate No. – 3
Sampling Location	:	VEL Representative (Mr. Amit Pandey)
Sample Collected By	:	Sound Level Meter
Sampling Instrument Used	:	VEL/INS/ENV/SLM/10
Instrument Code	:	Calibrated
Instrument Calibration Status	:	Clear Sky
Meteorological Condition During Monitoring	:	25/09/2023 To 26/09/2023
Date of Monitoring	:	06:00 A.M. To 06:00 A.M.
Time of Monitoring	:	Min.22°C, Max.29°C
Ambient Temperature (°C)	:	Human & Vehicular Activities
Surrounding Activity	:	Regulatory Requirement
Scope of Monitoring	:	IS: 9989
Sampling & Analysis Protocol	:	24 Hours
Sampling Duration	:	As Per Work Order
Parameter Required	:	

S. No.	Test Parameters	Test Method	Test Results		Units
			Day Time (06:00 A.M. To 10:00 P.M.)	Night Time (10:00 P.M. To 06:00 A.M.)	
1.	L <sub>Max</sub>	IS: 9989	68.2	55.4	dB (A)
2.	L <sub>Min</sub>	IS: 9989	56.8	42.6	dB (A)
3.	L <sub>Eq</sub>	IS: 9989	61.55	49.97	dB (A)
4.	CPCB Limits In dB (A*) L <sub>Eq</sub> (Industrial Area)	-	75.00	70.00	dB (A)

Note:- \*A "decibel" is a unit in which noise is measured.

\*\*\*End of Report\*\*\*



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**GO Green Mechanisms Pvt Ltd**  
**Analysis Results for the Month of April-23**

Company Name	Mahan Energen Limited.
Sample Type	Soil
Sample Quantity	2 Kg
Sample Collected By	Laboratory Representative
Date of Sampling	14.04.2023
Analysis Period	21.04.2023 to. 27.04.2023

SL. No.	PARAMETERS	UNIT	Location			Reference Method
			Near Plant Area Core Zone	Nagwa Village (Buffer Zone)	Bandhura Village (Buffer Zone)	
1	pH	-	6.29	7.24	7.41	IS 2720 (Part 26)
2	Organic Carbon	%	0.53	0.69	0.61	IS 2720 (Part XXII)
3	Available Phosphorus	kg/ha	17.27	17.61	19.49	GGMPL/SOP/SOIL/44
4	Electrical Conductivity	µS/cm	189	242	216	IS 14767
5	Water Holding Capacity	%	42.37	45.86	46.52	IS 14765
11	Potash Available	kg/ha	337.29	329.19	369.67	Method 3051A
12	Nitrogen Available	kg/ha	358.34	292.94	355.37	IS 14684: 2005
13	Molybdenum	mg/kg	BQL(QL=0.1)	BQL(QL=0.1)	BQL(QL=0.1)	Method 3051A
14	Calcium as Ca	%	0.413	0.351	0.253	Method 3051A
15	Magnesium as Mg	%	0.214	0.239	0.181	Method 3051A
16	Zinc as Zn	%	0.00118	0.00102	0.00146	Method 3051A
17	Manganese as Mn	%	0.00174	0.00135	0.00160	Method 3051A
18	Iron as Fe	%	0.00252	0.00310	0.00321	Method 3051A
19	Boron as B	%	0.00078	0.00025	0.00040	Method 3051A
20	Chloride as Cl	%	0.03123	0.03498	0.02749	GGMPL/SOP/SOIL/45
21	Soluble Sulphate	%	0.03770	0.03393	0.03582	IS 2720 (Part 27)
22	Texture	-	Silty Clay	Silty Clay	Silty Clay	USDA Method
23	Sand	%	18.00	21.00	13.00	USDA Method
24	Silt	%	42.00	40.00	44.00	USDA Method
25	Clay	%	40.00	39.00	43.00	USDA Method

BQL =Below Quantification Limit; NA = Not Applicable

Analysed By:

*Shiyal K.B.*  
Shiyal Kishor

Approved By:

*P.*  
Pankil Patel

END







# Vardan EnviroLab

Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Hr)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

Sample Number: VEL/S0/01  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/S0/2309270001  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Callout No.: Date : 14/06/2023

Sample Description: Soil Sample  
Location: Bandhaura Village (Buffer Zone)

Reporting Date: 04/10/2023  
Period of Analysis: 27/09/2023 - 04/10/2023

Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 2720 & STP

Receipt Date: 27/09/2023  
Sampling Date: 16/09/2023

Parameter Required: As Per Work Order

Sampling Quantity: 2.0 Kg.  
Sampling Type: Composite  
Preservation: Temp. Sealed In Zipper Pouch

S. No.	Parameters	Test Method	Results	Units
1.	pH (at 25°C)	IS: 2720 (P- 26)	7.63	-
2.	Oil & Grease	VEL/STP/EN/29, Issued No. - 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.5)	mg/Kg
3.	Chloride (as Cl)	VEL/STP/EN/69, Issue No.- 01, Issue Date : 01/11/2021	178.20	mg/Kg.
4.	Sodium (as Na)	USDA: 1954 Method 10 A (Page-96) RA: 2010	125.00	mg/Kg.
5.	Potassium (as K)	VEL/STP/EN/61, Issue No.- 01, Issue Date : 01/11/2021	55.00	Kg/hect.
6.	Organic Matter	IS: 2720 (P- 22)	0.33	%
7.	Available Nitrogen (as N)	IS: 14684	280.80	Kg/hect.
8.	Available Phosphorus (as P)	VEL/STP/EN/73, Issue No.- 01, Issue Date : 01/11/2021	87.90	Kg/hect.
9.	Cyanide (as CN)	VEL/ENV/STP/S/04, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-5.0)	mg/Kg.



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## Test Report

Sample No.: VEL/S0/01			Report No.: VEL/S0/2308080001	
S. No.	Parameters	Test Method	Results	Units
10.	Total Zinc (as Zn)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	9.07	mg/Kg.
11.	Total Manganese (as Mn)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	79.45	mg/Kg.
12.	Total Chromium (as Cr)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	3.55	mg/Kg.
13.	Total Lead (as Pb)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	1.85	mg/Kg.
14.	Cadmium (as Cd)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-0.1)	mg/Kg.
15.	Total Copper (as Cu)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	1.87	mg/Kg.
16.	Arsenic (as As)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	0.50	mg/Kg.
17.	Iron (as Fe)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	2084.20	mg/Kg.
18.	Mercury (as Hg)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-0.1)	mg/Kg.

Note:- \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification, STP: Standard Testing Procedure

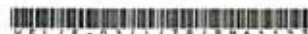


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# Vardan EnviroLab

Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Hr)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

Sample Number: VEL/S0/02  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886  
Sample Description: Soil Sample  
Location: Karsualal Village (Buffer Zone)  
Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 2720 & STP  
Parameter Required: As Per Scope of Work  
Report No.: VEL/S0/2309270002  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Callout No.: Date : 14/06/2023  
Reporting Date: 04/10/2023  
Period of Analysis: 27/09/2023 - 04/10/2023  
Receipt Date: 27/09/2023  
Sampling Date: 16/09/2023  
Sampling Quantity: 2.0 Kg.  
Sampling Type: Composite  
Preservation: Temp. Sealed In Zipper Pouch

S. No.	Parameters	Test Method	Results	Units
1.	pH (at 25°C)	IS: 2720 (P- 26)	7.31	-
2.	Oil & Grease	VEL/STP/EN/29, Issue No. - 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.5)	mg/Kg
3.	Chloride (as Cl)	VEL/STP/EN/69, Issue No.- 01, Issue Date : 01/11/2021	158.22	mg/Kg.
4.	Sodium (as Na)	USDA: 1954 Method 10 A (Page-96) RA: 2010	141.00	mg/Kg.
5.	Potassium (as K)	VEL/STP/EN/61, Issue No.- 01, Issue Date : 01/11/2021	44.00	Kg/hect.
6.	Organic Matter	IS: 2720 (P- 22)	0.30	%
7.	Available Nitrogen (as N)	IS: 14684	265.32	Kg./hect.
8.	Available Phosphorus (as P)	VEL/STP/EN/73, Issue No.- 01, Issue Date : 01/11/2021	80.41	Kg./hect.
9.	Cyanide (as CN)	VEL/ENV/STP/S/04, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-5.0)	mg/Kg.



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## Test Report

Sample No.: VEL/S0/02			Report No.: VEL/S0/2308080002	
S. No.	Parameters	Test Method	Results	Units
10.	Total Zinc (as Zn)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	8.48	mg/Kg.
11.	Total Manganese (as Mn)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	81.55	mg/Kg.
12.	Total Chromium (as Cr)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	2.51	mg/Kg.
13.	Total Lead (as Pb)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	2.33	mg/Kg.
14.	Cadmium (as Cd)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-0.1)	mg/Kg.
15.	Total Copper (as Cu)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	1.95	mg/Kg.
16.	Arsenic (as As)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	0.44	mg/Kg.
17.	Iron (as Fe)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	2054.19	mg/Kg.
18.	Mercury (as Hg)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-0.1)	mg/Kg.

Note:- \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification., STP: Standard Testing Procedure



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# Vardan EnviroLab

Laboratory: Plot No. 82A, Sector - 5, IMT Manesar, Gurugram - 122051 (Hr)  
ISO 9001 | ISO 14001 | ISO 45001

## Test Report

Sample Number: VEL/S0/03  
Name & Address of the Party: M/s Mahan Energen Limited  
Village: Bandhora, Post: Karsualal,  
Tehsil: Mada, Distt.: Singrauli,  
Madhya Pradesh - 486886

Report No.: VEL/S0/2309270003  
Format No.: 7.8 F-03  
Party Reference No.: 5703009832  
Callout No.: Date : 14/06/2023

Sample Description: Soil Sample  
Location: Near Gate No. - 3 (Core Zone)

Reporting Date: 04/10/2023  
Period of Analysis: 27/09/2023 - 04/10/2023

Sample Collected By: VEL Representative (Mr. Amit Pandey)  
Sampling and Analysis Protocol: IS: 2720 & STP

Receipt Date: 27/09/2023  
Sampling Date: 16/09/2023

Parameter Required: As Per Work Order

Sampling Quantity: 2.0 Kg.  
Sampling Type: Composite  
Preservation: Temp. Sealed In Zipper Pouch

S. No.	Parameters	Test Method	Results	Units
1.	pH (at 25°C)	IS: 2720 (P- 26)	7.45	-
2.	Oil & Grease	VEL/STP/EN/29, Issue No. - 01, Issue Date : 01/11/2021	*BLQ(**LOQ-0.5)	mg/Kg
3.	Chloride (as Cl)	VEL/STP/EN/69, Issue No.- 01, Issue Date : 01/11/2021	167.50	mg/Kg.
4.	Sodium (as Na)	USDA: 1954 Method 10 A (Page-96) RA: 2010	110.00	mg/Kg.
5.	Potassium (as K)	VEL/STP/EN/61, Issue No.- 01, Issue Date : 01/11/2021	47.00	Kg/hect.
6.	Organic Matter	IS: 2720 (P- 22)	0.27	%
7.	Available Nitrogen (as N)	IS: 14684	271.50	Kg/hect.
8.	Available Phosphorus (as P)	VEL/STP/EN/73, Issue No.- 01, Issue Date : 01/11/2021	86.80	Kg/hect.
9.	Cyanide (as CN)	VEL/ENV/STP/S/04, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-5.0)	mg/Kg.



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## Test Report

Sample No.: VEL/S0/03			Report No.: VEL/S0/2308080003	
S. No.	Parameters	Test Method	Results	Units
10.	Total Zinc (as Zn)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	8.77	mg/Kg.
11.	Total Manganese (as Mn)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	78.07	mg/Kg.
12.	Total Chromium (as Cr)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	2.74	mg/Kg.
13.	Total Lead (as Pb)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	1.77	mg/Kg.
14.	Cadmium (as Cd)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-0.1)	mg/Kg.
15.	Total Copper (as Cu)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	1.74	mg/Kg.
16.	Arsenic (as As)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	0.47	mg/Kg.
17.	Iron (as Fe)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	2010.94	mg/Kg.
18.	Mercury (as Hg)	VEL/STP/HW/03, Issue No.- 01, Issue Date : 01/10/2021	*BLQ(**LOQ-0.1)	mg/Kg.

Note:- \*BLQ: Below Limit of Quantification, \*\*LOQ: Limit of Quantification., STP: Standard Testing Procedure



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# Mahan Energen Limited

## Annexure-II

### Greenbelt Details:

Year	Total Plantation	Area Covered ( in Ha)	Plantation Survival Rate
<b>FY- 2022-2023</b>	5161	7.0	More than 90 %
<b>FY- 2023-2024</b>	50,160	5.176	
<b>Total Plantation</b>	158,606	121.21	

### PLANTED SPECIES IN AND AROUND PLANT PREMISES

Sr. No.	Scientific Name	Common Name
<b>Trees</b>		
1.	Peltophorum pterocarpum	Yellow Gulmohar
2.	Azadirachta indica	Neem
3.	Madhuca longifolia	Mahua
4.	Vachellia nilotica	Babool
5.	Tectona grandis	Saghrwan
6.	Ficus benjamina	Ficus
7.	Millettia pinnata	Karanj
8.	Albizia saman	Rain Tree
9.	Delonix regia	Gulmohar
10.	Senna siamea	Kasod
11.	Syzygium cumini	Jamun
12.	Mangifera indica	Mango
13.	Psidium guajava	Guava
14.	Manilkara zapota	Chiku
15.	Phyllanthus emblica	Amla
16.	Artocarpus heterophyllus	Jack Fruit
17.	Gmelina arborea	Gumhar
18.	Saraca asoca	Ashoka
19.	Cassia fistula	Amaltaas
20.	Mimusops elengi	Molshree
21.	Terminalia arjuna	Arjun
22.	Dalbergia sissoo	Sisham
23.	Bombax ceiba	Simal
24.	Juniperus	Hapusa
25.	Thuja	Thuja
26.	Moringa oleifera	Drumstick
27.	Brahea	Palm
28.	Lagerstroemia speciosa	Zarul
29.	Aegle marmelos	Bel
<b>Shrubs</b>		
30.	Callistemon	Bottle Brush
31.	Codiaeum variegatum	Croton
32.	Rosa	Rose
33.	Bougainvillea	Bougainvillea
34.	Hibiscus	China rose
35.	Mussaenda erythrophylla	Mussaenda
36.	Plumeria Spp	White Frangipani
37.	ixora coccinea	ixora
38.	Tabernaemontana divaricata	Pinwheel flower
39.	Cycas revoluta	Cycas
40.	Lantana camara	Lantana
41.	Berberis thunbergii	Hedge

ASH PERCENTAGE IN COAL
(April'2023 to September'2023)

Month	Coal Consumption (MT)	Ash Content in Coal ( %)
April'2023	444757	35.56
May'2023	351919	33.97
June'2023	358024	34.45
July'2023	361347.5	32.17
August'2023	240257.3	32.10
Septemeber'2023	226061.98	32.55
<u>Average (%)</u>	---	<b>33.46</b>

MT- Metric Tone

\* Mahan Energen Limited (MEL) is based on Pit head Thermal Power Plant .

### Ash Generation and Utilization Details (April'2023-September'2023)

Month	Total Ash Generation (MT)	Ash/Pond Ash Utilized (MT)		Total Ash Utilized (MT)	Ash Utilized (%)
		Cement (MT)	Low lying area (Inside the plant premises for area development/ Construction)		
Apr-23	158143	77018	114801	191819	121.29
May-23	119547	43126	115748	158875	132.90
Jun-23	123335	50525	101015	151540	122.87
Jul-23	116239	9440	108882	118322	101.79
Aug-23	77132	31	87724	087755	113.77
Sep-23	73590	0	73521	073520	99.90
<b>Total</b>	<b>667986</b>	<b>180140</b>	<b>601691</b>	<b>781831</b>	<b>117.04</b>



# Madhya Pradesh CSR

## Half Yearly Report

### 2023-24

Singrauli



Adani Foundation  
Mahan Energen Limited  
Village- Bandhaura, Post- Karsualal, Dist.-Singrauli-486886  
[www.adanifoundation.com](http://www.adanifoundation.com)



# Preface

It is with immense pleasure and pride that I present the half-yearly report of the Adani Foundation's CSR activities in Singrauli district. At Adani Foundation, we firmly believe in the power of responsible corporate citizenship to transform lives and uplift communities. Singrauli, with its rich cultural heritage and vibrant communities, has been a focal point of our efforts to make a meaningful and sustainable impact. Over the past six months, our CSR initiatives in Singrauli have gained momentum, thanks to the relentless dedication of our team, the support of our partners, and the active participation of the local community. Through our various projects and programs, we have strived to address pressing challenges, promote education, enhance healthcare facilities, and foster economic empowerment.

This report serves as a testament to the progress we have achieved, the hurdles we have overcome, and the lives we have touched. It highlights the stories of resilience, hope, and positive change that have emerged from our initiatives. We have endeavored to create a holistic approach, focusing not only on immediate needs but also on building a sustainable future for the residents of Singrauli.

We are deeply grateful for the trust and collaboration extended to us by the people of Singrauli, the local authorities, and our esteemed partners.

As we move forward, we remain committed to our mission of empowering communities, nurturing talent, and creating pathways to prosperity. The challenges ahead are significant, but so is our determination to overcome them. With your continued support, we are confident that we can make a lasting difference in the lives of the people of Singrauli.

I extend my heartfelt gratitude to everyone who has contributed to our initiatives in Singrauli. Your support fuels our passion and propels us toward achieving greater milestones in the future.

Manoj Prabhakar  
Program Manager  
Adani Foundation Singrauli

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# CSR Singrauli

## DEMOGRAPHIC DETAILS

Tehsil - 3

Development Block -3

Gram Panchayat - 328

Revenue Village - 814

Household - 243925

Population - 1510000

Scheduled Tribes (ST) - 32.59 %

Scheduled Caste (SC) - 12.79%

### **Thermal Plant/ Project Core Village:-**

Bandhaura , Nagwa, Khairahi & Karsualal

### **Thermal Plant/ Project Peripheral Villages**

Semua, Suhira, Amilia, Railla, Chaura, Malga  
Ghuni, Karsuaraja

### **Coal Transport Area Village:-**

Jamgadi, Khanua Khas, Gajra Bahra, Bhalia Tola  
Phatpani, Gorbani, Suliyari, Jhalri

# Adani Foundation's outreach in 2 blocks name Devsar & Waidhan. Total 20  
villages of 17 Gram Panchayats; 5432 households; Population; 26957





# Community Health

MEL, Singrauli Health Care Unit regularly running Hospital in Nagwa Village , Health care Unit provided Health Care Services to all age group at R&R Colony and other peripheral village. Also organized specialized health camp .

R&R  
Hospital  
OPD

Total Male Treated -3247

Total Female Treated -3532

Total Child Treated -3313

Total -25 Specialized Health  
Camp Done

Male  
587

Female  
672

Child  
813





# Education

The adani Foundation's provide Free education to all R&R family village Nagwa, children encourage underprivileged students with promising academic records to complete school and pursue higher education. Children, especially girls, being raised by single mothers and women headed families find special mention within this framework. So far, This academic year 2023-24, 12,00 students have benefited, with this program. In certain cases, the Foundation also facilitates sponsorships for deserving students pursuing higher education.

Free Education

Free School  
Dress material

1200  
Students  
from R&R  
Family

Free Book &  
Stationary

1 Nos Teachers  
Skill  
Development  
training





# Community Health



MEL, Singrauli R&R Hospital Provide Ambulance facility to critical patients during Emergency case.



**Total 356 Critical patients getting benefited by Ambulance service**

**309 beneficiary taking benefit of IPD service of R&R Hospital**

**947 beneficiary taking benefit of R&R Hospital pathology service**

**Coal Transporting Area-Rural Medical Health Camp**

**2941 Patient diagnosed in 93 Health Camp**

Male  
1008

Female  
1355

Child  
578



**Government Scheme Linkage – Sanjivani Program Adani foundation R&R Hospital Team provide full body Blood check-up to 328 Villagers, which cost in Market approx. Rs. 4.92 Lakh**



# Utthan

adani Foundation's signed MOU with District education department, Singrauli for Project Utthan on 30<sup>th</sup> May'23 and project Utthan Launch on 23<sup>rd</sup> June'23 in Govt. Higher Secondary School, Karsuaraja Village. Under Project Utthan adani foundation adopted 21 Govt. School in Power Plan Area.

- 2500 Students from 21 Govt. School will be benefited
- 13 Utthan Sahayak Appointed
- Base Line assessment done
- 13 Utthan Sahayk Getting Training of Teaching method
- Total 1594 Progressive learner covered FY 23-23 in FLN





# Sustainable Livelihood Development Program

## Skill Development Training Program

Adani Foundation, in its relentless pursuit of empowering communities, proudly conducted batches of a comprehensive sewing training program and Electric motor winding training program. This initiative aimed at enhancing the skill and independence of women & youth from diverse background. By empowering these women & youth, the foundation continues its mission to make a positive impact on communities and promote sustainable livelihood.

## Annapurna Program

Under the Adani Annapurna program, the Adani Foundation actively promotes organic farming practices, striving to reduce fertilizer costs and enhance the overall health and well-being of villagers. By advocating sustainable agricultural methods, the Foundation aims to create a healthier environment, empower local communities, and foster a future rooted in ecological harmony.



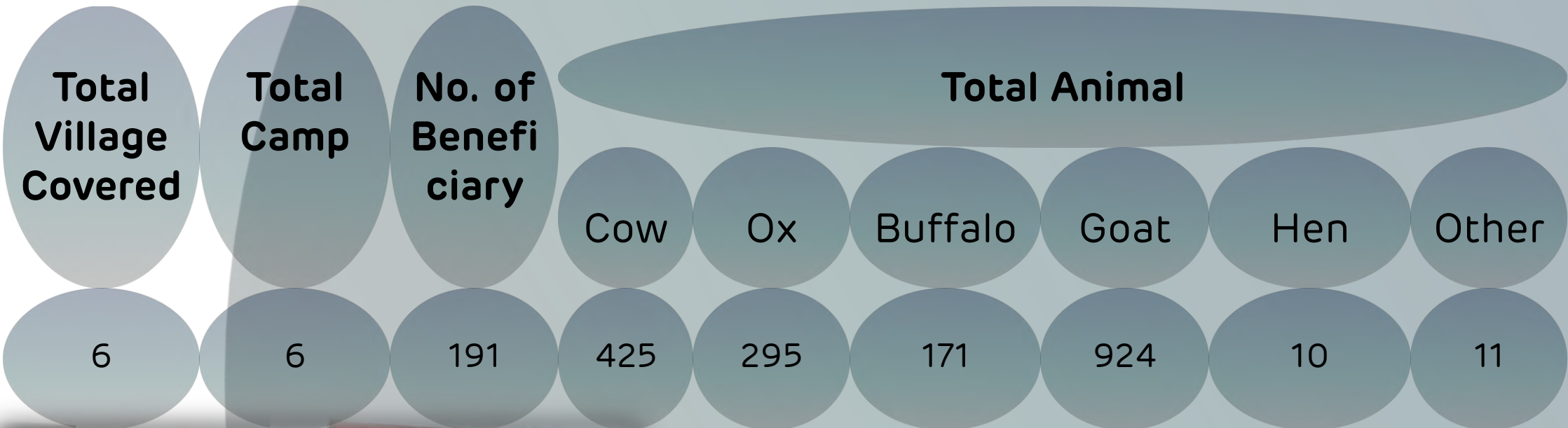
Program name	No. of Beneficiary	Remark
Sewing Training	65	Women & Youth Generating their livelihood after Training
Electric motor winding Training	30	After
Annapurna kit distribution	80	Provide Quality seeds to women farmer
Vermi compost Production	38	4025 Kg of organic manure was produced
organic pesticide	35	500 Liters pesticide produced
Vegetable Cultivation	80	Vegetables worth Rs 3 lakh were produced



# Sustainable Livelihood Development Program

## Adani Kamdhenu Program

Adani Foundation recently made history in village areas by organizing the first-ever series of Animal Health Camps. In a groundbreaking initiative, six camps were conducted, addressing the vital need for animal welfare in rural communities. These camps, a testament to the Foundation's commitment, provided essential veterinary care and expertise, ensuring the well-being of livestock. By focusing on animal health, the Foundation not only uplifted rural economies but also strengthened the bond between communities and their animals, fostering a healthier, more sustainable future for all.



## Bio Gas Plant

Adani Foundation proudly constructed 5 bio-gas plants in 4 villages which Name is Nagwa, Raila, Karsuaraja and Karsualal. ushering in a new era of sustainable energy. These eco-friendly initiatives not only promote clean energy but also empower rural communities, contributing significantly to environmental conservation and improved living standards.





# Vruksh Se Vikash

In alignment with our Chairman's visionary goal of planting 1 trillion trees by 2030, Adani Foundation took a significant step forward by planting 3500 saplings. This initiative exemplifies our dedication to realizing this ambitious vision, fostering a greener planet and sustainable future for generations to come.

S.No.	Name of Tree	Total Tree Plated	Remark
1	Mango	500	Plantation in FY 2023-24 is 3500 till Sept'23 in 8 Village – Nagwa,Khairahi, Karsualal, Karsuaraja, Bandhaura, Raila, Amiliya, Khanua
2	Custard Apple	250	
3	Guava	500	
4	Jack Fruit	350	
5	Anwala	350	
6	Pipal	100	
7	Lemon	300	
8	Neem	200	
9	Moringa	500	
10	Sagwan	250	





# Community Infrastructure



3 pond deepening work has been Completed and increase water storage



Drainage clearing of R & R colony Nagwa with 12 km length has been completed .



Completed painting work for 2 schools at Khairahi village



Adani Foundation Renovate Raila Gram Panchayat Bhawan





# Project status dashboard

(Approval and implementation status)

Sr No	Thematic Area	No. of Activities	NFA	PR	PO	Work Status				
						Before Time	As planned	Work started but delayed	Not Started	Cancelled
1	Education	4	4	4	4	0	4	0	0	0
2	Health	5	5	5		0	5	0	0	0
3	SLD	5	5	5	5	0	5	0	0	0
4	CID	2	2	2	1	0	1	0	1	0
5	Admin	12	12	12	12	0	12	0	0	0
	Total	28	28	28	27	0	27	0	1	0



# Fund utilization status

SI No	Site	Budget 2023-24	Expenditure (Up to 30 <sup>th</sup> Sep 23)	%
1	Education	173.69	78.19	45%
2	Health	77.41	20.17	26%
3	SLD	35.83	11.32	32%
4	CID	31.5	5.21	17%
5	Admin	21.76	11.17	51%
		<b>340.19</b>	<b>126.06</b>	<b>34%</b>



# Event

## Organized Science Exhibition By R&R SSM School



One Day Science Exhibition organized at Community Centre Nagwa total 70 Students participated in this exhibition and approx. 1000 Students and 100 parents visited this science exhibition.

## Pravesh Utsav



Organize Pravesh Utsav for New Admission academic year 2023-24, total 31 New students participated in this program.

## School Dress & Stationary Material Distribution



Provide School Dress material to SSM School student from class Nursery Standard to 12<sup>th</sup> Standard. Total 1200 Students benefits from this program.



# Event

## livelihood center for SHG products.



project affected village SHGs are making different products like cleaning products, dhoopbatti, vermi compost, sawbrani cups, etc. haven't any platform for selling the products without mediator/retailor/distributor chain.

## Slow Cycle Race competition on environment day Pakhwada



Organize Slow Cycle Race competition on environment day Pakhwada at Karsuaraja Village Approx. 100 youth participated in the competition and awarded top 5 winners .

## International Day against Drug Abuse and Illicit Trafficking



Adani Foundation organized sensitization program with support of MP SACS, Health Department on Drug abuse and Illicit Trafficking on **International Day against Drug Abuse and Illicit Trafficking**. Total 60 youth, women's and other village member were presented during session



# Event

## World Environment Day Celebration



Organize Environment Awareness Program along with Tree plant distribution and plantation . Total approx. 150 SSM School Students participated in this program

## National Reading Day Celebration



To make this day engaging, and memorable for Students and teachers we organized Book reading , Story Telling and news Paper reading program . in this program total 100 Students plus 40 Teachers from SSM School Participated .

## International Yoga Day Celebration



Celebration of International Yoga Day at Nagwa Community Center with SSM School Students, Teachers, R&R Hospital Staff and Villagers . Total 100 Students, 25 Teachers, 10 R&R Hospital Staff, 30 Villagers Participated in this program. AF Team Provide T-Shirt to all participants .



# Event

## Utthan Program Launch Ceremony



Adani Foundation organized Utthan Launch Program at Karsuaraja Higher Secondary School . In this program SDM Mada Tehsil Shri. B.B. Pandey DPC Shri. Ram Lakhan Shukla and other District Education Department Officers, 21 Head master & 2 Principal of Govt. School and 6 Sarpanch Participated in this Program .

## Adani Samaroh



Under the Women Leadership Programme, Adani Foundation hosted the Sawan Mahotsav in which the members of Usha Kiran Women Group celebrated the Sawan Mahotsav. In this program, 40 members of Usha Kiran Mahila Group presented a cultural program in which about 200 women and 50 men of the village participated.

## Birthday Celebration of Chairperson Ma'am - AF



The birthday of Adani Foundation Chairperson Dr. Preeti G. Adani was celebrated by the members of the Usha Kiran Women's Group, in which 40 women members of the group, the members of the R&R Colony Hospital celebrated the birthday by cutting the cake and many congratulations were given.



# Event

## Sports Tournament



For Promotion of Sports and Culture Adani Foundation Organized Football and Cricket Tournament at Nearby Coal Mines area villages of Phatpani & Bhaliyatola in which approx. 8 teams participated, and all the youngsters are happy with our such initiatives, this event help us to create a positive environment among community.

## Independence day Celebration



On this auspicious day, various types of cultural presentations were given by the school students, seeing which a feeling of pride and happiness appeared on the faces of the villagers. 1200 school students and 1000 villagers participated in this program and boosted the morale of the children.

## Inter-School Sports Competition



Organized 2 Days Inter-school Sports Competition, 750 students from 15 schools participated in the inter-school sports competition.



# Event

## National Sports Day Celebration



Celebrate National Sports Day with Utthan School, SSM School and 2 Private School Students . 250 Nos. Students and winning school awarded by adani foundation .

## Teachers Day Celebration



Celebrating Teachers Day with SSM School Teachers and Staff.  
We Provided Gifts for all 46 staff.

## Swasthya Mela

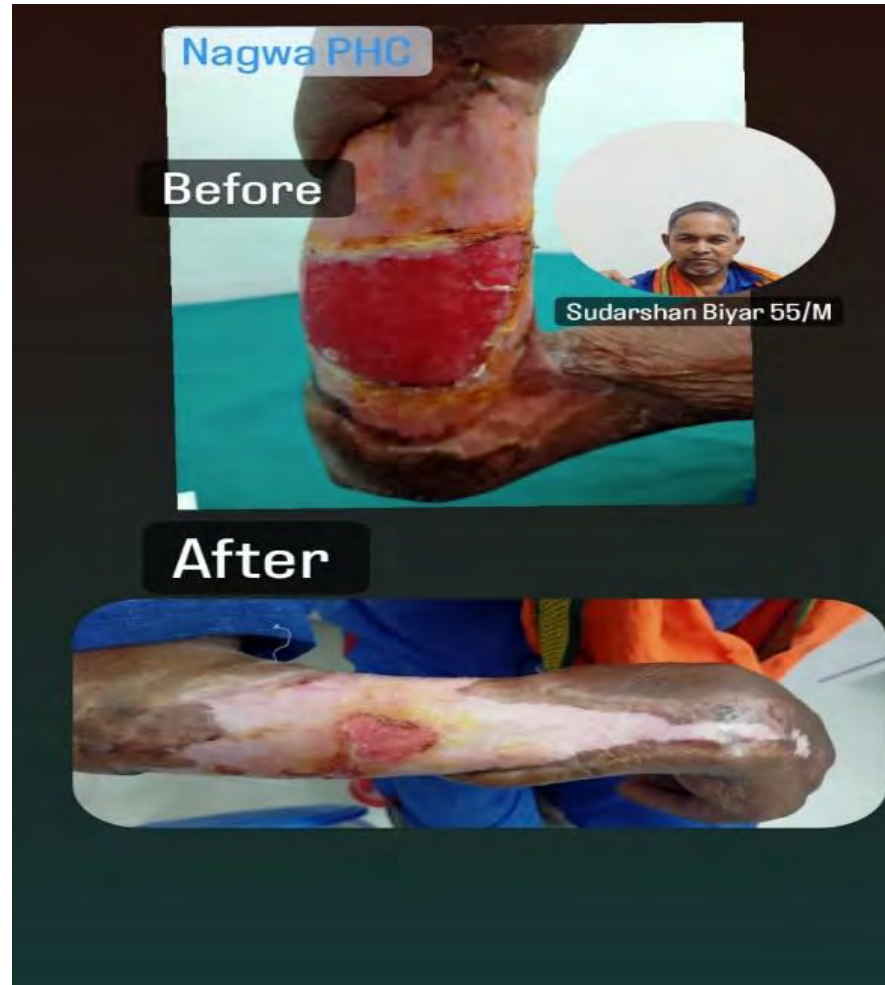


Adani Foundation Organized Swasthya Mela With Health of Health Department . AF team covered 2 Location Raila & Chaura Village under Swasthya Mela .



# Success Story

## Overcoming Adversity and Rediscovering Health



Sudarshan Biar, a resident of Nagwa village, faced a challenging journey on his way to recovery. His remarkable story is a testament to the power of Dr. Vishwas Singh's resilience, determination and compassionate care at the rehabilitation hospital.

Sudarshan's battle began with the diagnosis of diabetes, a condition that requires constant vigilance. However, fate dealt him a blow when an unfortunate work-related injury turned into a debilitating wound. Sudarshan's determination took him to several hospitals, including a brief stint at Sanjay Gandhi Hospital. But the burden of financial constraints forced him to discontinue his treatment, causing his condition to rapidly deteriorate.

As his injury worsened, the function of his hand soon became endangered. In the darkest time of his life, Sudarshan reached out to Dr. Vishwas Singh, who was a ray of hope in the stormy sea of troubles. With compassion and expertise, Dr. Singh took Sudarshan under his wing and began a treatment plan that changed Sudarshan's life forever.

Dr. Singh's approach was multidimensional. He started by addressing the root cause, effectively managing Sudarshan's diabetes. Regular checkups and a strict control regimen helped stabilize his

blood sugar levels. Along with this, Dr. Singh performed careful dressing and care of the wound, which ensured that the infection was controlled and gradually eliminated.

21

This journey was not without challenges. Despite the pain and uncertainty, Sudarshan's commitment to his recovery was unwavering. He diligently followed Dr. Singh's guidance, made lifestyle adjustments, and adhered to prescribed medications. It was a difficult process, but Sudarshan never lost sight of his goal – to regain his health and the use of his hand.

Slowly but steadily, the disease began to subside. Sudarshan's wound started healing and his diabetes came under control. His persistence paid off and he regained full use of his hand. This transformation was nothing short of a miracle, a testament to Sudarshan's resilience and Dr Singh's unwavering commitment to his patient's well-being.

Today, Sudarshan Briar stands as a symbol of hope and triumph over adversity. Her success story serves as a reminder that with the right support, determination, and access to compassionate healthcare, individuals can overcome even the toughest challenges life throws at them. Sudarshan's journey from despair to health is a shining example of the indomitable human spirit and the healing power of medical expertise and empathy. For which Sudarshan thanked the health services of Adani Foundation.



# Success Story

## Sudhari Vishwakarma's Road to Recovery



Sudhari Vishwakarma, a displaced resident of Khairahi, found herself facing a medical emergency when she experienced sudden severe leg pain. However, thanks to the quick thinking and actions of her husband, Shankhlal Vishwakarma, and the assistance provided by Adani Foundation, Sudhri's health took a turn for the better.

Shankhlal immediately contacted the ambulance services of Adani Foundation to seek help for Sudhri's condition. Recognizing the urgency of the situation, the foundation promptly dispatched Babulal, one of their skilled ambulance staff members, to provide immediate medical aid. Babulal arrived swiftly and accompanied Sudhri to Mishra Polyclinic Waidhan Hospital, an good healthcare facility.

At the hospital, Sudhri received the necessary medical attention and was prescribed anti inflammatory medication to alleviate her leg pain. The medical staff closely monitored her progress and ensured that she received appropriate care. After the medication started taking effect, Sudhri's condition improved significantly.

Thanks to the coordinated efforts of Shankhlal, Adani Foundation's ambulance services, and the healthcare professionals at Mishra Polyclinic Waidhan Hospital, Sudhri's health steadily improved. The timely response and effective treatment provided to her played a crucial role in her recovery journey. This success story highlights the importance of swift action during medical emergencies and the impact community organizations like Adani Foundation can have in providing crucial healthcare services to those in need. Sudhri's experience serves as an inspiring example of how a supportive network and efficient medical intervention can make a significant difference in someone's life, ultimately leading to improved health and well-being



# Success Story

## From Smoke to Sustainability: Shrimati Yadav's Biogas Journey



Shrimati Yadav, a resilient resident of a remote village nagwa in project effected area, embarked on a remarkable journey towards sustainable living, thanks to the generous support of the Adani Foundation. Her inspiring success story underscores the transformative power of financial aid and how it can change lives for the better.

Living in a region with limited access to clean cooking fuel, Shrimati Yadav faced daily challenges with traditional cooking methods that relied on firewood, cow dung and costly LPG. These methods not only consumed her valuable time but also exposed her family to indoor air pollution, jeopardizing their health and well-being. The situation was daunting, but Shrimati Yadav was determined to make a change.

Her ray of hope came in the form of the Adani Foundation, which recognized the potential for positive change in her life and community. With their financial support and expertise in sustainable technologies, Shrimati Yadav was able to realize her dream of installing a biogas plant on her family's farm.

Under the guidance of the Adani Foundation, Shrimati Yadav acquired the necessary knowledge and resources to set up the biogas digester. Organic waste from her farm, including cow dung and kitchen scraps, was efficiently processed by the biogas plant, providing her family with a consistent and clean source of cooking fuel.

The impact was immediate and transformative. Shrimati Yadav's family no longer had to endure the laborious task of collecting firewood, freeing up time for more productive activities. Moreover, their health improved as they were no longer exposed to harmful indoor smoke. The biogas plant also produced nutrient-rich slurry, which enhanced agricultural yields, further boosting the family's economic well-being.

Filled with gratitude, Shrimati Yadav expressed her heartfelt thanks to the Adani Foundation for their unwavering support and generosity. Their assistance not only changed her family's cooking style but also improved their overall quality of life. She shared her story with her community, inspiring others to embrace sustainable living practices.

Shrimati Yadav's journey from dependence on traditional cooking methods to self-reliance through biogas, with the invaluable help of the Adani Foundation, serves as a shining example of how financial assistance can create lasting change. Her gratitude and success story are a testament to the positive impact that philanthropic organizations can have on the lives of individuals and communities, even in the most remote and underserved areas.



# Success Story

## Adani- Sanjeevani-Rural Lab Test



In the heart of rural India, where access to quality healthcare is often a challenge, a ray of hope emerged through the collaboration of the Adani Foundation and the government's Sanjeevani program. Their joint effort aimed to provide free complete blood tests to the villagers, but the initial lack of awareness hindered the scheme's impact. Undeterred, the Adani Foundation took it upon themselves to bridge this awareness gap. They organized free complete blood test camps in every village, spreading the word about this lifesaving opportunity. The villagers were soon enlightened about the benefits that awaited them, thanks to the selfless efforts of the foundation. As soon as it became known to the villagers that Adani Foundation is conducting free blood test camps, more and more villagers came forward to avail free blood tests under Sanjeevani Yojana. In the month of July alone, 215 people underwent these essential tests, giving priority to their health without worrying about financial constraints. Adani Foundation's commitment to this cause was evident when they provided free testing for a total of 328 tests costing Rs 4 lakh 92 thousand . Its dedication in bringing quality health care to the doorsteps of rural communities has earned her the heartfelt appreciation of the villagers. With each test performed, lives were impacted, diagnoses were made, and early detection became a reality. The scheme proved to be a game-changer, empowering villagers to take responsibility for their own health and well-being. With the tireless efforts of Adani Foundation and the support of the Sanjeevani programme, a success story has come to the fore. The villagers saw firsthand how compassion, collaboration and innovation can change lives. With new hope, the future looks bright for these rural communities thanks to the commendable work of Adani Foundation



# Success Story

## Sunita Rajak Story



In the quaint village of Bandhaura, 2004, I was born into a family of six, filled with love and joy. However, the absence of a son led my father down a troubled path, causing discord in our home. Despite the challenges, my resilient mother, Shrimti Parvati Rajak, sustained us by working diligently, ensuring my sister and I received an excellent upbringing.

In 2009, our lives took a turn when Essar Powder M.P. Limited arrived, prompting our family's relocate to Nand Vihar Colony Nagwa. By then, my father had remarried, leaving my mother to shoulder the responsibilities alone. Although she strived to provide for us and educate me, our household's condition remained dire.

Witnessing my mother's struggles, I longed for change. In 2023, a ray of hope emerged in the form of a sewing training center established by the Adani Foundation in Nandvihar Colony Nagwa. My sister and I seized the opportunity, completing a three-month sewing training course. Armed with newfound skills, I began my sewing venture at home, reaching out to neighboring villages.

Through perseverance and determination, my sewing shop gained popularity, transforming our lives. The Adani Foundation played a pivotal role, not only in providing training but also empowering me to be self-reliant. Today, I am proud to support my family, ensuring a comfortable life for my mother and myself.

I extend my heartfelt gratitude to the Adani Foundation, whose support brought happiness and self-sufficiency into our lives. My success story stands as a testament to the transformative power of education, determination, and the invaluable assistance provided by organizations like the Adani Foundation.



# Media Coverage

## अदाणी फाउंडेशन के सहयोग से प्रशिक्षण लेकर वारिशिंग पाउडर बनाने में महिलाएं हुईं दक्ष, बनेंगी आत्मनिर्भर



**विश्व स्वास्थ्य दिवस,सिंगरौली।** माछा तहसील अंतर्गत बंधीरा गांव स्थित महान इनर्जन लिमिटेड के आसपास के गांवों में अदाणी फाउंडेशन द्वारा महिलाओं के आजीवनिक संकल्प हेतु विशेष प्रयास किए जा रहे हैं। अदाणी फाउंडेशन द्वारा चलाये जा रहे महिला उद्यमिता विकास कार्यक्रम के तहत मंगलवा को न्यूनतम कैक - ग्रामीण स्वरोजगार प्रशिक्षण संस्थान के द्वारा कसुआलाल गांव में छह दिवसीय वारिशिंग पाउडर बनाने का प्रशिक्षण दिया गया। इस प्रशिक्षण शिविर में कुल 35 स्थानीय महिलाएं लाभान्वित हुईं और उन्हें प्रशिक्षण प्रमाण पत्र दिया गया। निःशुल्क प्रशिक्षण के दौरान महिलाओं को माप, भोजन एवं ड्रेस की मुक्ति ग्रामीण स्वरोजगार प्रशिक्षण संस्थान द्वारा उपलब्ध कराया गया।इस प्रशिक्षण शिविर में वारिशिंग पाउडर बनाने की संपूर्ण विधि, कच्चे माल की उपलब्धता, मूल की दर, उत्पाद के लिए संभावित बाजार एवं दस्तावेजीकरण जैसे विषयों के बारे में न्यूनतम कैक के बी विजय कुमार, बी रामकरन और अदाणी फाउंडेशन के मनोज प्रभाकर एवं उनकी टीम के द्वारा विस्तृत जानकारी दी गई। ट्रेनिंग

पाकर स्थानीय महिलाएं काफी खुश नजर आईं। प्रशिक्षित महिला तथा गृहस्थ का कहना है कि रहन श्रम में उनके स्मूथ को बैक से लाने प्राप्त हुआ है और वो लघु स्तर पर अपना पैसा लगाकर अदाणी फाउंडेशन के सहयोग से इस काम को शुरू करना चाहती हैं ताकि अपने परिवार के लिए आजीवनिक का स्थान जुटा सकें। इस कार्यक्रम में अदाणी फाउंडेशन के द्वारा संदेश दिया गया कि महिलाएं कैसे स्वयं का वारिशिंग पाउडर बनाकर मार्केट में बिक्री कर सकती हैं और छोटे स्तर के व्यापार शुरू करने के उपरांत धीरे-धीरे आगे बढ़ सकती हैं। प्रशिक्षण के दौरान इस कार्य को करने में लगने वाली पूंजी की व्यवस्था के सम्बन्ध में प्रधानमंत्री मुद्रा योजना की सम्पूर्ण जानकारी दी गयी एवं बताया गया कि ग्रामीण महिलाएं अलग-अलग व्यापार के लिए शिल्प, किराये एवं तरुण योजना का लाभ मुद्रा योजना के अंतर्गत ले सकती हैं। अदाणी फाउंडेशन के मुख्यक जय तक प्रशिक्षण प्राप्त महिलाओं की प्रतिदिन का आमदनी सुनिश्चित नहीं होगी तब तक किसी भी योजना

प्रशिक्षण को स्वतंत्र नहीं माना जायेगा और इसके लिए उनके द्वारा तैयार उत्पादों को उचित मूल्य पर बिक्री के लिए मार्केटिंग के संबंध में भी बताया जा रहा है। **ग्रामीण महिलाओं की स्वावलंबी बना रहा अदाणी फाउंडेशन:** आर्थिक रूप से कमजोर परिवारों, महिलाओं और बेरोजगारों को आत्मनिर्भर बनाने के उद्देश्य से अदाणी फाउंडेशन द्वारा कई योजनाओं की शुरुआत की गयी है। जिन ग्रामीण महिलाओं में शिक्षा का अभाव है एवं कृषि कार्य से जुड़ी है, ऐसी महिलाओं को खेतों को उपजाऊ बनाने के लिए वर्मी कंपोस्ट खाद बनाने की तकनीक और जैविक खाद बनाने के तरीके से अवगत कराया जा रहा है। स्थानीय बरुरतमंद महिलाओं को हुनरमंद बनाने और रोजगार के अवसर पैदा करने के उद्देश्य से सिंगरौली प्रशिक्षण केंद्र की स्थापना की गई है। अदाणी फाउंडेशन की टीम के मदद से ग्रामीण महिलाओं को मसालों का उत्पादन, धुपबत्ती, अगरबत्ती एवं संरक्षकों काप बनाने जैसे ट्रेनिंग दी जा रही है।

## अदाणी फाउंडेशन ने विश्व स्वास्थ्य दिवस पर लगाया स्वास्थ्य जागरूकता कैंप

**काल चिंतन कार्यालय वैदुन,सिंगरौली।** विश्व स्वास्थ्य दिवस के मौके पर शुक्रवार को माछा तहसील अंतर्गत महान इनर्जन लिमिटेड से प्रभावित गांव नगवा में विश्व स्वास्थ्य दिवस के मौके पर अदाणी फाउंडेशन द्वारा स्थानीय ग्रामीणों को निःशुल्क स्वास्थ्य शिविर के जरिए जागरूक किया गया। इस कैंप में 105 स्थानीय ग्रामीणों ने स्वास्थ्य परीक्षण करवाया, जिनमें अधिकतर महिलाएं और बच्चे थे। इस स्वास्थ्य शिविर में ग्रामीणों के जरूरी जांच के साथ रक्तचाप, हीमोग्लोबिन, ब्लड शुगर, मलेरिया और हृदय रोग की जांच भी की गयी।

इस मौके पर विशेषज्ञ डॉक्टर अभिषेक सिंह और डॉक्टर शिखा पांडेय की टीम के द्वारा उपस्थित ग्रामीणों को अपने स्वास्थ्य को बेहतर बनाने के बारे में बताया गया।

मेडिकल टीम ने ग्रामीणों को स्वस्थ दिनचर्या और स्वस्थ खान-पान के बारे में जानकारी दी। अदाणी फाउंडेशन के अधिकारी मनोज प्रभाकर के मुताबिक महान इनर्जन लिमिटेड से प्रभावित गांवों में अदाणी फाउंडेशन द्वारा पिछले छह महीनों के दौरान कई स्वास्थ्य शिविर का आयोजन किया जा चुका है।

नगवा गांव की सुनीता रजक कहती हैं कि, अदाणी फाउंडेशन के माध्यम से हर सप्ताह शहर से विशेषज्ञ डॉक्टर की टीम आती है और हेल्थ



कैंप लगाकर जांच की जाती है इससे समय पर ग्रामीणों का निःशुल्क चिकित्सा जांच हो जाती है और दवाईयां मिल पाती हैं। स्थानीय निवासी जरूरतमंद ग्रामीणों के

लिए समय-समय पर निःशुल्क स्वास्थ्य सेवा उपलब्ध कराये जाने के लिए अदाणी फाउंडेशन के प्रयासों की सराहना कर रहे हैं।

## अदाणी फाउंडेशन ने जैविक खेती पर दिया जोर, प्रशिक्षित महिला किसानों को बांटे किट

**नवभारत न्यूज सिंगरौली 29 मई।** माछा तहसील अंतर्गत महान इनर्जन लिमिटेड के पड़ोस के गांवों के 35 महिला किसानों को अदाणी फाउंडेशन द्वारा कृषि विज्ञान केंद्र वैदुन के माध्यम से जैविक तरीके से सब्जी उत्पादन विषय पर एक दिवसीय प्रशिक्षण प्रदान किया गया।

इस प्रशिक्षण का उद्देश्य पोषण वाटिका के निर्माण के लिए खेतों की तैयारी, रोपाई का तरीका, नर्सरी लगाने की विधि, फसलों में लगने वाली बीमारियां और उनके उपचार, जैविक दवा बनाना एवं उसका उपयोग करने के बारे में विस्तृत जानकारी देना है। इस सम्बन्ध में स्थानीय महिला किसानों को

कृषि विज्ञान केंद्र के प्रमुख डॉ.जय सिंह एवं उनकी टीम के द्वारा विस्तारपूर्वक पावर प्वाइंट प्रेजेंटेशन के माध्यम से

समझाया गया। प्रशिक्षण के उपरांत कृषि विज्ञान केंद्र द्वारा सभी महिला कृषकों को टमाटर एवं भिंडी के बीज वितरित किए गए। अदाणी फाउंडेशन ने जैविक सब्जी उत्पादन को बढ़ावा देने के लिए इस साल लगभग 100 वर्मी कंपोस्ट बेड बनाने का लक्ष्य रखा गया है। प्रशिक्षण के एक दिन उपरांत प्रशिक्षित महिलाओं के बीच



निःशुल्क किट वितरित की गयी। जिसमें सब्जियों की सर्वोत्तम किस्म के बीज, जैविक दवा और वर्मी कंपोस्ट खाद थे। 50 महिला कृषकों को वितरित इस किट में करेला, बरबटी, लौकी, भिंडी, धनिया, मिर्ची, टमाटर एवं बैंगन जैसे सब्जियों के बीज के साथ ब्रह्मास्त्र, नीमास्त्र, अग्नि अस्त्र जैसे जैविक खाद

व कीटनाशक और एक किलो वर्मी कंपोस्ट खाद का पैकेट दिया गया। अदाणी फाउंडेशन द्वारा ऑर्गेनिक खेती को बढ़ावा देने के लिए एक मुहिम चलाई जा रही है जिसके माध्यम से ग्रामीण इलाकों में वर्मी कंपोस्ट, ऑर्गेनिक कीटनाशक, लिक्विड फर्टिलाइजर, नीमास्त्र, जीवामृत जैसी ऑर्गेनिक पद्धति से उत्पादित सामग्री को सस्ते खर्च में गोबर, गौमूत्र एवं हरे पत्तों के सहायता से बनाया जा रहा है। प्रशिक्षण के दौरान अदाणी फाउंडेशन के अधिकारी मनोज प्रभाकर एवं उनकी टीम ने महिला किसानों को बताया कि आज हमारे समाज में तेजी से बढ़ रही बीमारियों के लिए गलत खान पान विशेष तौर पर जिम्मेदार है।

## अदाणी फाउंडेशन का प्रोजेक्ट उत्थान के लिए सिंगरौली जिले में शिक्षा विभाग के साथ अनुबंध



**सिंगरौली।** माछा तहसील अंतर्गत बंधीरा गांव स्थित महान इनर्जन लिमिटेड के आसपास के गांवों में गुणवत्तापूर्ण बुनियादी शिक्षा लिए प्रतिबद्ध अदाणी फाउंडेशन ने जिला शिक्षा केन्द्र सिंगरौली के साथ उत्थान परियोजना के लिए तीन वर्ष का अनुबंध किया है। इसके तहत आठ ग्राम पंचायतों के 21 शासकीय विद्यालयों में दोस बुनियादी शिक्षा दिए जाने पर कार्य किया जाएगा। अदाणी फाउंडेशन और जिला शिक्षा केन्द्र के इस साझा अनुबंध के तहत बेहतर शिक्षा के लिए संयुक्त पहल की घोषणा की गई है। इस अनुबंध के माध्यम से दोनों संगठन शिक्षा में सुधार करने के लिए मिलकर काम करेंगे। इस साझा पहल के माध्यम से स्थानीय शिक्षा क्षेत्र में महत्वपूर्ण

सुधार होगा और यह सिंगरौली जिले के छात्रों को उच्चतर शिक्षा के साथ-साथ विभिन्न आवासीय और गैर-आवासीय कार्यक्रमों का लाभ उठाने का अवसर भी प्रदान करेगा। अनुबंध के वक्त सिंगरौली जिला शिक्षा अधिकारी एसबी सिंह, जिला परियोजना अधिकारी जिला शिक्षा केन्द्र राम लखन शुक्ला एवं अदाणी फाउंडेशन के तरफ से मनोज प्रभाकर और अन्य अधिकारी मौजूद थे।अदाणी फाउंडेशन शिक्षा, स्वास्थ्य, कला और विभिन्न सामाजिक क्षेत्रों में सुधार के लिए पहल करता है। इस अनुबंध का मुख्य उद्देश्य आनेवाली पीढ़ी को बेहतर बुनियादी शिक्षा के माध्यम से उनका भविष्य उज्ज्वल करना है ताकि इस क्षेत्र का आर्थिक विकास के साथ सामाजिक विकास हो सके। नगवा, बंधीरा, खैराही, कसुआलाल, कसुआराजा, रैला, सुहीरा और अमिलिया पंचायतों के 21 शासकीय विद्यालयों में उत्थान परियोजना के शुरू होने से सैकड़ों छात्र-छात्राएं लाभान्वित होंगे।



# Media Coverage

## अदाणी फाउंडेशन द्वारा उत्थान कार्यक्रम का शुभारंभ

विन्ध्य चेतना,सिंगरौली। माडा तहसील अंतर्गत कर्सुआराजा गांव स्थित शासकीय माध्यमिक विद्यालय में अदाणी फाउंडेशन द्वारा शिक्षा के क्षेत्र में प्रोजेक्ट उत्थान कार्यक्रम का शुभारंभ किया गया। बंधीरा गांव स्थित महान इनर्जेन लिमिटेड के आसपास के गांवों में गुणवत्तापूर्ण बुनियादी शिक्षा लिए अदाणी फाउंडेशन प्रतिबद्ध है। इसी कड़ी में शुक्रवार को कर्सुआराजा गांव स्थित शासकीय उच्चतर माध्यमिक विद्यालय में कार्यक्रम की शुरुआत हुई। इस मौके पर माडा तहसील के उपखण्ड अधिकारी श्री बी पी पाण्डेय, जिला परियोजना समन्वयक श्री राम लखन शुक्ल एवं जिला शिक्षा केंद्र के अन्य अधिकारी श्री संदीप दुबे, श्री मिथई लाल पनिका एवं श्रीमती सरिता दुबे उपस्थित रहे। जबकि आसपास के 21 शासकीय विद्यालयों के प्रधानाध्यापक, जनप्रतिनिधि के तौर पर आठ पंचायतों के सरपंच और काफी संख्या में ग्रामीणों की उपस्थिति ने इस कार्यक्रम को बेहद सफल बनाया। अदाणी फाउंडेशन के तरफ से मनोज प्रभाकर और जितन उपाध्याय ने कार्यक्रम का संचालन किया। उपखण्ड अधिकारी श्री बी पी पाण्डेय ने सम्बोधित करते हुए कहा कि अदाणी फाउंडेशन का यह प्रोजेक्ट प्रशंसनीय है। जिला परियोजना समन्वयक श्री राम लखन शुक्ल ने इसका फायदा बताते हुए भरोसा दिलाया कि शिक्षा विभाग की ओर से अदाणी फाउंडेशन के इस कार्यक्रम के संचालन में पूरी मदद की जाएगी। अदाणी फाउंडेशन ने जिला शिक्षा केन्द्र, सिंगरौली के साथ उत्थान परियोजना के लिए आगामी तीन वर्षों (2023-2026) के लिए प्राथमिक एवं माध्यमिक विद्यालयों में मूलभूत सक्षमता और अंकज्ञान अवधारणा (राष्ट्रीय शिक्षा नीति 2020) को प्रोत्साहन देने के लिए अनुबंध किया गया है। इसके तहत आठ ग्राम पंचायतों के 21 शासकीय विद्यालयों में ठोस बुनियादी शिक्षा दिए जाने



पर कार्य किया जाएगा। अदाणी फाउंडेशन और जिला शिक्षा केन्द्र के इस साझा अनुबंध के तहत बेहतर शिक्षा के लिए संयुक्त पहल की घोषणा की गई है। इस अनुबंध के माध्यम से दोनों संगठन शिक्षा में सुधार करने के लिए मिलकर काम करेंगे। इस साझा पहल के माध्यम से स्थानीय शिक्षा क्षेत्र में महत्वपूर्ण सुधार होगा और यह सिंगरौली जिले के छात्रों को उच्चतर शिक्षा के साथ-साथ विभिन्न आवासीय और गैर-आवासीय कार्यक्रमों का लाभ उठाने का अवसर भी प्रदान करेगा। अदाणी फाउंडेशन शिक्षा, स्वास्थ्य, कला और विभिन्न सामाजिक क्षेत्रों में सुधार के लिए पहल करता है। प्रोजेक्ट उत्थान का मुख्य उद्देश्य आनेवाली पीढ़ी को बेहतर बुनियादी शिक्षा के माध्यम से उनका भविष्य उज्ज्वल करना है ताकि इस क्षेत्र का आर्थिक विकास के साथ

## अदाणी फाउंडेशन का प्रोजेक्ट उत्थान के लिए सिंगरौली जिले में शिक्षा विभाग के साथ अनुबंध



सिंगरौली। माडा तहसील अंतर्गत बंधीरा गांव स्थित महान इनर्जेन लिमिटेड के आसपास के गांवों में गुणवत्तापूर्ण बुनियादी शिक्षा लिए प्रतिबद्ध अदाणी फाउंडेशन ने जिला शिक्षा केन्द्र सिंगरौली के साथ उत्थान परियोजना के लिए तीन वर्ष का अनुबंध किया है। इसके तहत आठ ग्राम पंचायतों के 21 शासकीय विद्यालयों में ठोस बुनियादी शिक्षा दिए जाने पर कार्य किया जाएगा। अदाणी फाउंडेशन और जिला शिक्षा केन्द्र के इस साझा अनुबंध के तहत बेहतर शिक्षा के लिए संयुक्त पहल की घोषणा की गई है। इस अनुबंध के माध्यम से दोनों संगठन शिक्षा में सुधार करने के लिए मिलकर काम करेंगे। इस साझा पहल के माध्यम से स्थानीय शिक्षा क्षेत्र में महत्वपूर्ण

सुधार होगा और यह सिंगरौली जिले के छात्रों को उच्चतर शिक्षा के साथ-साथ विभिन्न आवासीय और गैर-आवासीय कार्यक्रमों का लाभ उठाने का अवसर भी प्रदान करेगा। अनुबंध के वक्त सिंगरौली जिला शिक्षा अधिकारी एसबी सिंह, जिला परियोजना अधिकारी जिला शिक्षा केन्द्र राम लखन शुक्ल एवं अदाणी फाउंडेशन के तरफ से मनोज प्रभाकर और अन्य अधिकारी मौजूद थे। अदाणी फाउंडेशन शिक्षा, स्वास्थ्य, कला और विभिन्न सामाजिक क्षेत्रों में सुधार के लिए पहल करता है। इस अनुबंध का मुख्य उद्देश्य आनेवाली पीढ़ी को बेहतर बुनियादी शिक्षा के माध्यम से उनका भविष्य उज्ज्वल करना है ताकि इस क्षेत्र का आर्थिक विकास हो सके। नगवा, बंधीरा, खैराही, कर्सुआलाल, कर्सुआराजा, रैला, सुहोरा और अमिलिया पंचायतों के 21 शासकीय विद्यालयों में उत्थान परियोजना के शुरू होने से सैकड़ों छात्र-छात्राएं लाभान्वित होंगे।

## 200 पशुओं का निःशुल्क टीकाकरण कर दी गयी दवाइयां

अदाणी फाउंडेशन द्वारा कामधेनु कार्यक्रम के तहत पशु चिकित्सा एवं जागरूकता शिविर का आयोजन



जागरण, वैठन। माडा तहसील अंतर्गत महान इनर्जेन लिमिटेड के पड़ोस के गांवों में पशुओं की चिकित्सा और देखभाल के मद्देनजर अदाणी फाउंडेशन द्वारा कामधेनु कार्यक्रम की शुरुआत की गयी है। बेहतर प्रबंधन से पशुधन को अधिक लाभकारी बनाया जा सकता है। आज ग्राम पंचायत खैराही में आयोजित निःशुल्क पशु चिकित्सा शिविर में पशुपालन विभाग सिंगरौली के सहयोग से लगभग 200 पशुओं का निःशुल्क टीकाकरण कर आवश्यक दवाइयां दी गयीं। इस शिविर में पशुपालन विभाग के चिकित्सा अधिकारी डॉ. रविंद्र ऋचसवाल एवं उनके छात्र सदस्यों ने टीम मौजूद थे। इस पशु चिकित्सा शिविर में आसपास के गांव के पशुपालक कार्य

संख्या में मुख्य रूप से बकरी गाय बैल और भैंस लेकर पहुंचे जहां पशु चिकित्सा विभाग की टीम द्वारा जांच के उपरान्त निःशुल्क दवाइयों के साथ आवश्यक सलाह दिए गए। उन्होंने पशुपालकों की सुझाव दिया कि पशुओं का समय-समय पर उनके खाने-पीने रहन-सहन का पूरा ध्यान रखना चाहिए। अगर हम पशुओं की पूरी तरह से देखभाल करेंगे तब समय पर दवाइयों पशु आहार देने रहेंगे तो उनके रोगग्रस्त होने के खतरा को टाला जा सकता है साथ ही दुध का उत्पादन बढ़ेगा और पशुपालकों की आमदनी में इजाफा होगा। अदाणी कामधेनु कार्यक्रम के उद्घाटन समारोह में अदाणी फाउंडेशन के मनोज प्रभाकर एवं ग्राम पंचायत खैराही के

सरपंच मुस्ताक अलम को उपस्थिति ने कार्यक्रम को सफल बनाया। अदाणी कामधेनु कार्यक्रम का मुख्य उद्देश्य पशु चिकित्सा विभाग की टीम के साथ मिलकर निःशुल्क पशु स्वास्थ्य शिविर लगाने एवं ग्रामीण स्तर पर जो पशुओं के सम्पूर्ण स्वास्थ्य की जांच के उपरान्त उपचार प्रदान करना है।

इसके साथ ही पशु टीकाकरण शुभ उद्घाटन एवं पशु प्रबंधन के प्रति पशुपालकों को जागरूक बनाकर उनके धामताओं का विकास करना है जिससे दुग्ध उत्पादन में वृद्धि के साथ कृषकों और पशुपालकों को लाभ में भी बढ़ोतरी संभव हो सके। इस मौके पर उपस्थित ग्राम पंचायत खैराही के सरपंच मुस्ताक अलम ने कहा कि वर्तमान के दिनों में पशुओं में सभी संक्रमित बीमारियों का खतरा बढ़ जाता है और ऐसे में अदाणी फाउंडेशन का यह पहल कार्य सराहनीय है। वर्तमान के भीसम में आहत बढ़ जाती है जिससे जीवाणुओं की फसल के लिए उपयुक्त वातावरण मिल जाता है। पशुओं में गलाबोट, सेप्टीमोमिया लगाव बुखार ब्लैक ड्राईर और खुरफा व मुंहपका रोग फूट पड़े मात्र डिजॉज जैसी बीमारियों का खतरा बढ़ जाता है।

## योग दिवस के अवसर पर अदाणी फाउंडेशन द्वारा आयोजित कार्यक्रमों में पर बच्चों ने बढ़-चढ़ कर लिया हिस्सा

काल चिंतन कार्यालय वैठन,सिंगरौली। अंतर्राष्ट्रीय योग दिवस के मौके पर अदाणी फाउंडेशन के तरफ से सरई तहसील अन्तर्गत बासी बेरदह और खनुआ गांव स्थित शासकीय विद्यालयों में और माडा तहसील अंतर्गत नगवा गांव में कई कार्यक्रम आयोजित किये गए। स्टूडेंट्स मिनेरल रिसोर्सेज प्राइवेट लिमिटेड और महान इनर्जेन लिमिटेड के सहयोग से आयोजित इन कार्यक्रमों में 200 से ज्यादा छात्र-छात्राओं और 30 शिक्षकों ने हिस्सा लिया। योग शिविर का मुख्य उद्देश्य ज्यादा से ज्यादा लोगों को योग से जोड़ना और योग के माध्यम से उनको शारीरिक रूप से स्वस्थ करना है। इस मौके पर अदाणी समूह द्वारा संचालित विद्यालय सरस्वती शिशु मंदिर के शिक्षक श्री नरेंद्र गुप्ता एवं दूसरे शिक्षकों ने अदाणी शांतिग्राम कालोनी एवं अदाणी पुनर्वास कॉलोनी, नगवा में अलग-अलग समय पर योग प्रशिक्षण का कार्यक्रम आयोजित कर अपनी महत्वपूर्ण भूमिका निभाई। योग दिवस के कार्यक्रम के सफल आयोजन में अदाणी प्रबन्धन के मनोज



प्रभाकर, राकेश कुमार, देवाशीश दास, विकास, कृष्णा कुमार, ऋषभ पांडे, विमल कुमार, सनत गुप्ता, कमलेश, सरिता, सत्यवती एवं सरस्वती शिशु मंदिर विद्यालय नगवा के सभी शिक्षक एवं शिक्षिकाओं का महत्वपूर्ण योगदान रहा। योग दिवस मनाने का मकसद स्पष्टतौर पर सेहत से जुड़े इसके फायदों को उजागर करना और सभी को अपनी सेहत देखते हुए योग करने के लिए प्रेरित करना है। योगा सेहत को दुरुस्त रखती है और रोगों के खतरे को कम करती है। सभी उम्र के लोग योग कर

सकते हैं। योग करने पर तनाव से मुक्ति मिलती है और नियमित रूप से योगा की जाए तो मानसिक और शारीरिक तौर पर भी आराम महसूस होता है। आमतौर पर हड्डियों और मांसपेशियों के दर्द को दूर करने के लिए लोग योगा करते हैं। दिल की सेहत अच्छे रखने के लिए भी योगा की जाती है। अदाणी फाउंडेशन द्वारा सिंगरौली जिला के सरई और माडा तहसील के सुदूर गांवों में बेहतर स्वास्थ्य के लिए समय-समय पर जागरूकता शिविर का आयोजन किया जाता है। पिछले महीने ही मिशन लाइफ और पर्यावरण के अनुकूल

जीवन शैली के विषयों पर ग्रामीण महिलाओं को जागरूक किया गया। इसके अलावा कुपोषण को दूर करने के लिए अदाणी फाउंडेशन द्वारा अक्टूबर और नवम्बर 2022 में पोषण माह का आयोजन किया गया था। अदाणी फाउंडेशन द्वारा स्टूडेंट्स मिनेरल रिसोर्सेज प्राइवेट लिमिटेड और महान इनर्जेन लिमिटेड के सहयोग से प्रोजेक्ट के आसपास के गांवों में लगातार निःशुल्क स्वास्थ्य शिविर का आयोजन किया जाता है ताकि काफी संख्या में स्थानीय किशोरियां, महिलाएं, बच्चे और आमलोग लाभान्वित हो सके।

## पौधारोपण को बढ़ावा दे रहा अदाणी फाउंडेशन, शुरू हुआ वृक्ष से विकास कार्यक्रम

झीरावती सिंगरौली। माडा तहसील अंतर्गत बंधीरा स्थित महान इनर्जेन लिमिटेड के उद्देश्य के गांवों में अदाणी फाउंडेशन द्वारा कलाए जा रहे कार्यक्रम ५ वृक्ष से विकास % के तहत शनिवार को महिला स्वयं सहायता समूहों के बीच फलदार एवं छायादार पौधों का वितरण किया गया। कर्सुआलाल गांव में आयोजित एक कार्यक्रम में स्थानीय सरपंच श्री अंजनी कुमार प्रजापति की उपस्थिति में 300 पौधों का वितरण कर कार्यक्रम का शुभारंभ किया गया। अदाणी ग्रुप ने साल 2030 तक 100 मिलियन यानी 10 करोड़ पौधे लगाने का संकल्प लिया है, जिसमें सिंगरौली जिले पर भी विशेष ध्यान दिया जाएगा। लगाए गए फलदार पौधों में ज्यादातर आम, अमरुद, कटहल और जामुन के पेड़ हैं। अदाणी फाउंडेशन द्वारा आयोजित पौधारोपण और पर्यावरण संरक्षण के इस कार्यक्रम के दौरान ना सिर्फ पौधे वितरित किये गए बल्कि पौधे को जीवित एवं सुरक्षित रखने



के उपायों के बारे में भी लोगों को प्रशिक्षित किया गया। आगामी 15 दिनों तक बंधीरा स्थित महान इनर्जेन लिमिटेड के आसपास के गांवों में यह कार्यक्रम चलाया जाएगा और ज्यादा से ज्यादा पौधारोपण एवं संरक्षण पर जोर दिया जाएगा। इस अभियान से मुख्य तौर पर

तेजी से फैल रहे उद्योगों और बढ़ती आबादी के कारण प्रदूषण का स्तर इन दिनों बहुत अधिक बढ़ रहा है। इससे लड़ने का एकमात्र तरीका अधिक से अधिक पेड़ लगाना है। अगर हम सचमुच स्वस्थ रहना चाहते हैं और बेहतर जीवनयापन करना चाहते हैं तो ज्यादा से ज्यादा पौधे लगाए जाने चाहिए। ऑक्सीजन लेने और कार्बन डाइऑक्साइड को छोड़ने के साथ पेड़-पौधे पर्यावरण से अन्य हानिकारक गैसों को अवशोषित करते हैं जिससे वातावरण में वायु शुद्ध बनी रहती है। अदाणी फाउंडेशन द्वारा सामुदायिक स्थलों पर पौधारोपण पर जोर देने का मकसद जहाँ समाज के विभिन्न समुदायों के बीच पर्यावरण के प्रति जागरूकता लाना है, वहीं विभिन्न विद्यालयों में पौधारोपण का उद्देश्य स्कूली बच्चों को पर्यावरण और विकास से सम्बन्धित क्षेत्रों में निर्णय लेने में भागीदार बनाना है। स्थानीय पक्षों ने अदाणी फाउंडेशन के पौधारोपण कार्यक्रम में अपना योगदान देते हुए इसका

जोरदार स्वागत किया है। पिछले कुछ महीने में अदाणी ग्रुप की पर्यावरण एवं सोएसआर टीम के द्वारा ग्रामीण क्षेत्रों में जनजागरूकता के ऐसे कई आयोजन किये गए हैं, जिससे लोग पर्यावरण के अनुकूल व्यवहार करने के लिए प्रेरित हो सके। 20 मई को आयोजित एक शिविर में प्राकृतिक संसाधनों के सावधानीपूर्वक उपयोग के लिए प्रोत्साहित किया गया। इस शिविर में ५ मिशन लाइफ % और पर्यावरण के अनुकूल जीवन शैली के विषयों पर ग्रामीण महिलाओं को जागरूक किया गया। क्षेत्र में जैसे विविधता संरक्षण के महत्व और प्लास्टिक प्रदूषण के विनाशकारी परिणामों के बारे में जागरूकता को बढ़ावा देने और एक स्थायी जीवनशैली अपनाने के लिए प्रेरित करने के उद्देश्य से इस तरह के कार्यक्रम पूरे वर्ष स्थानीय विद्यालयों, पंचायतों संस्थानों, स्थानीय स्वास्थ्य केंद्रों एवं ग्रामीण बाजारों जैसे सार्वजनिक स्थानों पर आयोजित किए जाएंगे।



# Media Coverage

## अदाणी फाउंडेशन द्वारा कामधेनु कार्यक्रम के तहत पशु चिकित्सा एवं जागरूकता शिविर का आयोजन

ओम प्रकाश तिवारी, ब्यूरो चीफ।

दण्डवत् न्यूज सिंगरौली। माडा तहसील अंतर्गत महान इनर्जन लिमिटेड के पड़ोस के गांवों में पशुओं की चिकित्सा और देखभाल के मद्देनजर अदाणी फाउंडेशन द्वारा कामधेनु कार्यक्रम की शुरुवात की गयी है। बेहतर प्रबंधन से पशुधन को अधिक लाभकारी बनाया जा सकता है। शुरुवार को ग्राम पंचायत खैराही में आयोजित निःशुल्क पशु चिकित्सा शिविर में पशुपालन विभाग, सिंगरौली के सहयोग से लगभग 200 पशुओं का निःशुल्क टीकाकरण का आवश्यक दवाईयां दी गयी। इस शिविर में पशुपालन विभाग के चिकित्सा अधिकारी डॉ रविंद्र जायसवाल एवं उनके छह सदस्यीय टीम मौजूद थे। इस पशु चिकित्सा शिविर में आसपास के गांव के पशुपालक काफी संख्या में मुख्य रूप से बकरी, गाय, बैल और भैंस लेकर पहुंचे, जहां पशु चिकित्सा विभाग की टीम द्वारा जांच के उपरान्त निःशुल्क दवाई के साथ आवश्यक सलाह दिए गए। उन्होंने पशुपालकों को सुझाव दिया कि पशुओं का समय-समय पर उनके खाने-पीने, रहन-सहन का पूरा ध्यान रखना चाहिए।



अगर हम पशुओं की पूरी तरह से देखभाल करेंगे तथा समय पर दवाई, पशु आहार देंगे रहेंगे तो उनके रोगग्रस्त होने के खतरा को टाला जा सकता है साथ ही दुध का उत्पादन बढ़ेगा और पशुपालकों की आमदनी में इजाफा होगा। अदाणी कामधेनु कार्यक्रम के उद्घाटन समारोह में अदाणी फाउंडेशन के मनोज प्रभाकर एवं ग्राम पंचायत खैराही के सरपंच मुस्ताक अहमद को उपस्थिति ने कार्यक्रम को सफल बनाया। अदाणी कामधेनु कार्यक्रम का मुख्य उद्देश्य पशु चिकित्सा विभाग की टीम के साथ मिलकर निःशुल्क पशु स्वास्थ्य शिविर लगाने एवं ग्रामीण स्तर पर ही पशुओं के सम्पूर्ण स्वास्थ्य की जांच

के उपरान्त उपचार प्रदान करना है। इसके साथ ही पशु टीकाकरण, दुध उत्पादन एवं पशु प्रबंधन के प्रति पशुपालकों को जागरूक बनाकर उनकी क्षमताओं का विकास करना है, जिससे दुध उत्पादन में वृद्धि के साथ कृषकों और पशुपालकों की आय में भी बौद्धिक संभव हो सके। इस मौके पर उपस्थित ग्राम पंचायत खैराही के सरपंच मुस्ताक अहमद ने कहा कि, 'बरसात के दिनों में पशुओं में सभी संक्रमित बीमारियों का खतरा बढ़ जाता है और ऐसे में

अदाणी फाउंडेशन का यह पहल काफी सराहनीय है।' बरसात के मौसम में आदता बढ़ जाती है जिससे बीमारियों को फैलने के लिए उपयुक्त वातावरण मिल जाता है। वहीं पशुओं में गलाबोट (सेप्टीसीमिया), लंगटा बुखार (ब्लैक क्वार्टर) और खुरपका व मुंहपका रोग (फूट एंड माउथ डिजीज) जैसी बीमारियों का खतरा बढ़ जाता है। अदाणी फाउंडेशन द्वारा इस क्षेत्र पशुपालकों के लिए कई निःशुल्क पशु चिकित्सा और टीकाकरण शिविर का आयोजन किया जा चुका है और अब अदाणी कामधेनु कार्यक्रम के माध्यम से आगे भी आसपास गांवों में ऐसे शिविर लगाए जायेंगे।



## फुटबॉल में फाटपानी, क्रिकेट में सरई की टीम बनी चैंपियन

महेश न्यूज सिंगरौली (देहना)

सरई तहसील अंतर्गत बर्दिया डोल गांव में अदाणी फाउंडेशन के सहयोग से गुरुवार को फुटबॉल प्रतियोगिता का आयोजन किया गया। इस प्रतियोगिता में कुल चार गांव फाटपानी, नगावा, पेड़खुड़ी और पेंडोपाट के कुल 44 खिलाड़ियों ने हिस्सा लिया। फाइनल मैच में फाटपानी की टीम ने पेड़खुड़ी की टीम को बेहद रोमांचक मुकाबले में पेनाल्टी शूटआउट के जरिए 2-0 से शिकस्त दी। अदाणी फाउंडेशन

को मदद से क्रिकेट टूर्नामेंट का भी आयोजन किया गया। जिसमें सरई, गजरा बहरा, जमगाढ़ी और भलेवा टोला गांव के खिलाड़ियों ने हिस्सा लिया। फाइनल मुकाबले में सरई की टीम ने जमगाढ़ी की टीम को परास्त कर विजयी टूर्नामेंट पर क़ब्ज़ा जमाया। अदाणी फाउंडेशन के तरफ से विजेता और उपविजेता टीमों को ट्रॉफी देकर सम्मानित किया गया। इसके साथ ही फुटबॉल और क्रिकेट किट प्रदान कर उनका उत्साहवर्धन किया गया। इस मौके पर खनुआ खास के पंचायत सचिव बिरकम

शर्मा ने फुटबॉल टूर्नामेंट के विजेताओं को ट्रॉफी प्रदान की। फुटबॉल प्रतियोगिता के आयोजन में फाटपानी गांव के धर्मराज एवं स्थानीय ग्रामीणों का प्रमुख योगदान रहा। क्रिकेट टूर्नामेंट के आयोजन को भलेवा टोला के मोहंन, कृष्णा, पुष्पराज शर्मा एवं लल्लूराम शर्मा ने सहयोग के द्वारा बेहद सफल बनाया। ज्ञात हो कि अदाणी फाउंडेशन की टीम के द्वारा लगातार ग्रामीण क्षेत्रों में भ्रमण कर युवाओं, बच्चों एवं महिलाओं को विकास कार्यों से जोड़ा जा रहा है।

अदाणी फाउंडेशन ने किया खेल प्रतियोगिताओं का आयोजन

## पर्यावरण के प्रति जागरूक जीवन शैली अपनाने के लिए अदाणी फाउंडेशन ने शुरू की मुहिम

गुड मॉर्निंग, सिंगरौली। जिले के माडा तहसील अंतर्गत महान इनर्जन लिमिटेड के पड़ोस के गांवों के लिए नगला स्थित पुनर्वास कौलोनी में मिशन लाइफ पर जागरूकता शिविर का आयोजन किया गया। अदाणी फाउंडेशन द्वारा संचालित मिशन लाइफ प्रोजेक्ट के अंतर्गत इस शिविर में काफी संख्या में स्थानीय महिलाएं उपस्थित हुईं। इस दौरान मिशन लाइफ और पर्यावरण के अनुकूल जीवन शैली के विषयों पर ग्रामीण महिलाओं को जागरूक किया गया।

अदाणी फाउंडेशन द्वारा आयोजित इस शिविर में प्राकृतिक संसाधनों के सार्वजनिक उपयोग के लिए प्रोत्साहित किया गया। अदाणी फाउंडेशन के अधिकारी मनोज प्रभाकर एवं उनके सहयोगी विकास राय, श्यामा कृष्णन शाह, कमलेश



कुमारी की उपस्थिति में इस जागरूकता कार्यक्रम को सफलतापूर्वक संचालित किया गया। शिविर में

बताया गया कि कैसे लोग अपने जीवन शैली में छोटे सा बदलाव कर पर्यावरण को सुरक्षित रख सकते हैं। शिविर के दौरान जिन खास बिंदुओं पर चर्चा की गयी वो है - कर्जा बचाओ, जल संचय एवं उसका बचाव, सिंगल यूज प्लास्टिक का उपयोग न करें, बेहतर खानपान एवं उससे होनेवाले वाले लाभ, घरों एवं कार्य क्षेत्रों में बेकार एवं अपशिष्ट पदार्थों का सुरक्षित निपटान कैसे करें, स्वस्थ जीवन शैली कैसे बनाएं एवं बहुत इलेक्ट्रॉनिक उपयोग एवं उसके अपशिष्ट को कैसे कम करें इत्यादि। उपस्थित ग्रामीणों से पर्यावरण जागरूकता से संबंधित कई सवाल भी पूछे गए एवं सकारात्मक जवाब देने वाले ग्रामीण महिलाओं को जूट का बैग देकर सम्मानित किया गया। अदाणी फाउंडेशन के सहयोगी विकास राय, श्यामा कृष्णन शाह, कमलेश

कुमारी की उपस्थिति में इस जागरूकता कार्यक्रम को सफलतापूर्वक संचालित किया गया। शिविर में बताया गया कि कैसे लोग अपने जीवन शैली में छोटे सा बदलाव कर पर्यावरण को सुरक्षित रख सकते हैं। शिविर के दौरान जिन खास बिंदुओं पर चर्चा की गयी वो है - कर्जा बचाओ, जल संचय एवं उसका बचाव, सिंगल यूज प्लास्टिक का उपयोग न करें, बेहतर खानपान एवं उससे होनेवाले वाले लाभ, घरों एवं कार्य क्षेत्रों में बेकार एवं अपशिष्ट पदार्थों का सुरक्षित निपटान कैसे करें, स्वस्थ जीवन शैली कैसे बनाएं एवं बहुत इलेक्ट्रॉनिक उपयोग एवं उसके अपशिष्ट को कैसे कम करें इत्यादि। उपस्थित ग्रामीणों से पर्यावरण जागरूकता से संबंधित कई सवाल भी पूछे गए एवं सकारात्मक जवाब देने वाले ग्रामीण महिलाओं को जूट का बैग देकर सम्मानित किया गया। अदाणी फाउंडेशन के सहयोगी विकास राय, श्यामा कृष्णन शाह, कमलेश

## स्वास्थ्य शिविर में 80 महिलाओं का उपचार

अदाणी फाउंडेशन ने किया निःशुल्क महिला स्वास्थ्य शिविर का आयोजन

नवभारत न्यूज सिंगरौली 25 अगस्त । माडा तहसील अंतर्गत बंधोरा स्थित महान इनर्जन लिमिटेड के पड़ोस के गांवों की स्थानीय महिलाओं और किशोरियों की नियमित स्वास्थ्य जांच के उद्देश्य से नगवा गांव स्थित पुनर्वास कॉलोनी में अदाणी फाउंडेशन द्वारा संचालित स्वास्थ्य केंद्र में गुरुवार को चिकित्सा शिविर का शुभारंभ किया गया। इस विशेष स्वास्थ्य जांच शिविर में आसपास के गांवों की कुल 80 महिलाओं ने स्त्री रोग से संबंधित बीमारियों के लिए चिकित्सकीय परामर्श लिया। समाज में फैली मासिक धर्म सम्बन्धी गलत अवधारणाओं को दूर करने के साथ ही महिलाओं को दौरान डॉक्टर ऐशानी के नेतृत्व और किशोरियों को माहवारी प्रबंधन सम्बन्धी सही जानकारी देने के उद्देश्य से अब हर महीने के 20 तारीख को अदाणी फाउंडेशन



के द्वारा निःशुल्क महिला स्वास्थ्य शिविर का आयोजन किया जायेगा जिसमें विशेषज्ञ चिकित्सकों की टीम अपनी सेवाएं देंगी। इस दौरान डॉक्टर ऐशानी के नेतृत्व और किशोरियों को माहवारी प्रबंधन सम्बन्धी सही जानकारी देने के उद्देश्य से अब हर महीने के 20 तारीख को अदाणी फाउंडेशन

मलेरिया की जांच भी की गई और ग्रामीणों को स्वस्थ दिनचर्या खान, पान के बारे में जानकारी दी गई। आसपास के गांवों से पहुंचे मरीजों के अलावा गर्भवती महिलाओं की स्वास्थ्य परीक्षण कर उनका हीमोग्लोबिन जांच किया गया और आवश्यक दवाइयां दी

गयी। इस मौके पर डॉक्टर ऐशानी और उनके सहयोगी ज्योति कुमारी के द्वारा मासिक धर्म से सम्बन्धित समस्याओं और माहवारी स्वास्थ्य से सम्बन्धित विस्तृत जानकारी दी गई और सैनिटरी पैड के इस्तेमाल के फायदे से अवगत कराया गया। स्वच्छता और सफाई महिलाओं की निजता गरिमा और आत्मसम्मान से जुड़ा हुआ महत्वपूर्ण मुद्दा है और इस अभियान को सफल बनाने में महिलाओं की भागीदारी अनिवार्य है। कार्यक्रम में उपस्थित स्थानीय महिलाएं सुमित्रा साकेत, मुन्नी नाई, ममता शर्मा, इंद्रकली शर्मा, सुषमा विश्वकर्मा, ज्योति कुमारी, कमलेश साकेत एवं सत्यकुमारी के द्वारा इस तरह के स्वास्थ्य शिविर के आयोजन के लिए अदाणी फाउंडेशन की सराहना की गई।