

27/06/2024

To

**The Director**

**Ministry of Environment and Forest**

**Regional Office (Southern Zone)**

**Kendriya Sadan, 4<sup>th</sup> Floor, 17<sup>th</sup> Main Road, II Block, Koramangala**

**Bangaluru – 560 034.**

Respected Sir/Madam,

**Subject: Submission of Half Yearly Compliance Report for the period of October 2023 to March 2024.**

- Ref.**
1. Environment Clearance [File No.: J-11011/106/2008-IA II(I)] granted to M/s. NICOMET Industries Limited.
  2. Transfer of Environment Clearance titled “Expansion of Cobalt, Copper, Nickel and Sodium Sulphate Unit at Plot No. L-15, L-19 & L- 20 Cuncolim Industrial Estate, Cuncolim, Goa to M/s. NICOMET Industries Ltd.” from M/s. NICOMET Industries Ltd. to M/s MALCO Energy Limited.
  3. Amendment of Environment Clearance titled “Expansion of Cobalt, Copper, Nickel and Sodium Sulphate Unit by M/s Malco Energy Limited, located at Plot No. L-15, L-19 & L- 20 Cuncolim Industrial Estate, Cuncolim, Goa –Amendment in Environmental Clearance” [ Proposal No.: IA/GA/INDI/452494/2023 dated 25.12.2023] granted to Malco Energy Limited

**MALCO Energy Limited**

Works: L-15, L-19, L-20, M-11, Landfill Site, Cuncolim Industrial Estate, Cuncolim, South Goa – 403703, India  
Website: [www.vedantalimited.com](http://www.vedantalimited.com)

Registered Office: SIPCOT Industrial Complex, Madurai Bypass Road, Thoothukudi (Tamil Nadu) - 628 002  
T +91-461 424 2591 F +91-461 424 2829 | Website: [www.vedantalimited.com](http://www.vedantalimited.com)  
CIN: U31300TN2001PLC069645

This has reference to the captioned subject and cited Environmental Clearance. Kindly acknowledge the enclosed Six-monthly compliance report to Environment clearance [File No.: J-11011/106/2008-IA II(I)] dated 28.10.2009, Environment Clearance Transfer letter dated 31<sup>st</sup> Oct 2022 and Environment Clearance amendment letter dated 4<sup>th</sup> March 2024 for the period of October 2023 to March 2024 of M/s Malco Energy Limited.

Thanking You,

For MALCO ENERGY LIMITED (MEL)



SUMIT GUPTA

Authorized Signatory

**MALCO Energy Limited**

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CIN: U31300TN2001PLC069645

**Compliance Report to Environment Clearance issued by Ministry of Environment and Forest for  
Malco Energy Limited**

Environment Clearance No. J-11011/106/2008-IA, II (I) Dated 28.10.2009

Environment Clearance Transfer File. No. J-11011/106/2008-IA-II (I) Dated: 31st October 2022

Environment Clearance Amendment File No. IA/GA/INDI/452494/2023 Dated 04<sup>th</sup> March 2024

Period October 2023 to March 2024

**1) Specific Conditions**

Sr. No	Specific Condition	Compliance Status
i)	Environment clearance is subject to the final order of the Hon'ble Supreme Court of India in the matter of Goa foundation Vs Union of India in writ petition (Civil) No 460 of 2004 as may be applicable to this project	<b>Agreed.</b>
ii)	Ambient air monitoring and Stack Monitoring facilities for all the stacks and sufficient air pollution control devices shall be provided to keep the emission levels below 50 mg/Nm <sup>3</sup> . Volatile organic compounds (VOCs) and acid mist shall be monitored along with other parameters like SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> . SO <sub>2</sub> emissions from process shall also be controlled by connecting the vents of the reactor to the common header and scrubber. The reports for ambient air, stack and fugitive emission shall be submitted to the ministry's regional office at Bangalore, Goa Pollution Control Board & CPCB.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>• CPCB has exempted the unit from the condition to carry out online effluent and emission monitoring system, copy of letter is attached herewith as <b>Annexure_1a</b>.</li> <li>• The unit is engaged in production of Nickel and Cobalt Metal through hydrometallurgy. Therefore, the operations do not involve any furnace/smelter or fuels that result in emission of gas/dust into atmosphere.</li> <li>• The unit has stacks for the Boiler (Fuel: bio-fuel briquettes/LSHS) and for DG sets (fuel: LSHS).</li> <li>• AAQ monitoring is carried out through MoEF accredited laboratory as specified by GSPCB &amp; the reports are furnished to GSPCB regularly. AAQ Report is attached as <b>Annexure_1b</b>.</li> <li>• During the reporting period, boiler was in operation and DG set was not in operation.</li> </ul>

		<p>The boiler stack monitoring was carried out by MoEF accredited laboratory &amp; report is submitted to the GSPCB as per our consent condition and MoEF through half yearly reports. Report is attached as <b>Annexure-1b</b>.</p>
iii)	<p>Bag filters shall be provided to process units. In copper cell house, all the cells shall be covered and SO<sub>2</sub> emissions from process shall be controlled by connecting the vents of the reactor to the common header to control acid mist emission. The mist emissions from the vent shall be collected and pass-through the scrubber. The scrubbed solution shall be properly treated and recycled to the scrubber. The scrubbed solution shall be properly treated and recycled to the process. Periodic monitoring of vents from condensers shall be carried out and shall be within the permissible limit as per E (P) Act, 1986.</p>	<p><b>Not Applicable.</b></p> <ul style="list-style-type: none"> <li>Stacks are equipped with cyclone separator. CPCB has exempted the unit from the condition to carry out online effluent and emission monitoring system, refer <b>Annexure_1a</b>.</li> <li>The raw material (Nickel Cobalt Mixed Hydroxide material) is imported in sealed jumbo bags of 1 MT capacity and charged directly into the reactor. There is no open handling of the solid material and hence there is no dust/fumes emission in the process for the installation of bag filter in the process plant.</li> <li>Further, the Copper production has been stopped and Copper cell house is not in operation.</li> </ul>
iv)	<p>Arrangements for the control and monitoring of the odorous chemicals shall be made</p>	<p><b>Not Applicable</b></p> <ul style="list-style-type: none"> <li>The unit do not use any odorous chemicals in the process.</li> </ul>
v)	<p>Ambient air monitoring and Stack Monitoring facilities for all the stacks and sufficient air pollution control devices shall be provided to keep the emission levels below 50 mg/Nm<sup>3</sup>. The reports for ambient air, stack and fugitive emission shall be submitted to the ministry's regional office at Bangalore, Goa Pollution Control Board &amp; CPCB.</p>	<p><b>Being Complied.</b></p> <ul style="list-style-type: none"> <li>Compliance status is mentioned in #(ii).</li> </ul>

vi)	<p>Dust extraction system and dust suppression system like water sprinkling shall be adopted in material handling section to control fugitive emissions. Bag filters shall be provided at ore handling and storage section. Fugitive emissions from concentrate shed, concentrate unloading area shall be controlled by water sprinklers.</p>	<ul style="list-style-type: none"> <li>Dust extraction system is Not Applicable, as there is no dust generation during any of the unit process. The raw material is brought in sealed jumbo bags of 1 MT capacity and charged directly into the reactor. There is no open handling of the solid material. Raw material is stored in covered shed. Hence, there is no dust/fumes emission from the process to provide a dust extraction system.</li> <li>For dust suppression system, water sprinkling is carried out for vehicular dust emission in &amp; around the premises.</li> </ul>
vii)	<p>Secondary fugitive emissions from Blast furnace shall be controlled within the latest permissible limits issued by the ministry and regularly monitored. Guidelines /Code of Practice issued in this regard by the CPCB shall also be followed. Data on fugitive emissions shall be recorded and maintained.</p>	<p><b>Not Applicable</b></p> <ul style="list-style-type: none"> <li>Received amended EC dated 04.03.2024</li> <li>The unit do not have blast furnace and hence no secondary fugitive emission.</li> <li>AAQM monitoring is carried out by MoEF accredited laboratory every month.</li> </ul>
viii)	<p>Vehicular pollution due to transportation of raw material and finished product shall be controlled. Proper arrangements shall also be made to control dust emissions during loading and unloading of the raw material and finished product.</p>	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>The unit adopts the practice of water sprinkling to suppress the vehicular dust in &amp; around the premises during handling of raw material &amp; finished products.</li> </ul>
ix)	<p>Total water requirement from Goa Industrial Development Corporation (GIDC) water supply shall not exceed 300 m<sup>3</sup> /day.</p> <p>No ground water shall be used during expansion of the project.</p> <p>All the effluent shall be treated (forced evaporation) and treated wastewater (condensate) shall be reused in the manufacturing process.</p> <p>Domestic effluent shall be treated in septic tank followed by soak pit and used for green belt development.</p>	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>Received Amended EC dated 04.03.2024</li> <li>The unit consumes water from GIDC for the manufacturing process and the consumption do not exceed the stipulated quantity.</li> <li>No ground water is used.</li> <li>The unit has been adopting the practice of process water treatment in triple effect evaporator to produce anhydrous sodium sulphate crystal, which is sold as by-</li> </ul>

		<p>product. The condensate generated is reused.</p> <ul style="list-style-type: none"> <li>We have installed a Sewage Treatment Plant (STP) for treating the domestic effluent and the treated water is being reused for the green belt.</li> </ul>
x)	<p>All the wastewater including process washings, boiler blow down and DM plant regeneration etc. shall be treated in the Effluent Treatment plant (ETP) and treated wastewater (condensate) shall be reused in the manufacturing process. All sodium sulphate solution shall be treated in triple effect evaporation plant to separate out sodium anhydrous crystals. Condensate shall be recycled back in the process. The cobalt residue shall be treated in Residue treatment Facility (RTF) to extract cobalt and copper metal to minimum level. 'Zero' discharged shall be adopted and no wastewater shall be discharged outside the premises.</p>	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>The unit is a "Zero Liquid Discharge" facility.</li> <li>All the wastewater including process washings, boiler blow down and DM plant regeneration, condensate etc are reused in the manufacturing process and is treated in triple effect evaporator to produce anhydrous sodium sulphate crystal which is saleable product.</li> <li>The process residue undergoes physical and chemical treatment to extract Nickel, Cobalt etc and then stabilised, neutralised, and disposed in secure landfill.</li> <li>No treated process effluent is discharged outside the premises.</li> </ul>
xi)	<p>The leachate residue shall be converted into slurry and then transferred to reactors for acid washing in series of reactors to ensure complete dissolution acid soluble as well as water soluble metals. Re-pulped slurry shall be transferred to series of thickness for solid liquid separation. Overflow containing recovered metal shall be treated with lime to precipitate metals and underflow slurry shall be recycled to the exiting leaching process.</p>	<p><b>Being Complied</b></p>
xii)	<p>Regular monitoring of influent and effluent water for all the relevant parameters including trace metals (Cu, Cd, Zn, Mn and Ni) shall be ensured and treated wastewater shall meet the norms prescribed by the Goa State Pollution Control Board or described under the E(P) Act whichever are more stringent, and reports shall be submitted six monthly to the Ministry Regional Office at Bangalore, Goa SPCB and CPCB.</p>	<p><b>Not Applicable</b></p> <ul style="list-style-type: none"> <li>The unit is a "Zero Liquid Discharge" facility.</li> <li>As submitted above, the process water is evaporated and converted into sodium sulphate crystals and sold as by-product.</li> </ul>

xiii)	<p>The Waste cake generated during the treatment of cobalt raw material in leaching plant shall be stockpiled in specific area and treated in residue treatment facility (RTF) to extract cobalt and copper metal to minimal level. The waste cake from the filter press shall be treated with lime in a mixer to stabilize the residual trace metals and after extraction of metals shall be disposed off to secured captive landfill /authorized recyclers/reprocesses.</p>	<p><b>Being Complied</b></p>
xiv)	<p>Hazardous wastes like process sludge shall be disposed at its captive hazardous waste secured landfill facility (SLF). Proper secured landfill shall be constructed as per the CPCB guidelines or proper arrangement shall be made for the proper disposal of hazardous waste in authorized TSDF in advance before the current facilities are exhausted. All the other solid wastes shall be disposed off in the environment friendly manner or provided to authorize recyclers only.</p>	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>• The stabilized process residue is disposed in Secure Landfill Facility.</li> <li>• All other solid wastes are disposed-off with authorized recyclers.</li> </ul>
xv)	<p>Membership to authorized TSDF shall be obtained, and a copy of valid authorization shall be submitted to the Ministry.</p>	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>• The unit has obtained membership with authorised TSDF in Goa. A copy of membership is attached herewith as <b>Annexure_1c</b>.</li> </ul>
xvi)	<p>As proposed, green belt shall be developed in 44% area in and around the plant as per CPCB guidelines in consultation with Divisional Forest Officer (DFO).</p>	<p><b>Compliance in Progress</b></p> <ul style="list-style-type: none"> <li>• Out of total plant area: 34,434 sq. mts, green belt has been developed in 6031 sq. mts. area in and around the plant premises.</li> <li>• Further development is in progress and will be completed by December 2024.</li> </ul>

xvii)	All the recommendations made in the charter on corporate Responsibility for Environment Protection (CREP) shall be strictly implemented.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>The recommendations are implemented and monitored. Details are provided in <b>Annexure_1d</b>.</li> </ul>
xviii)	The company shall provide housing for construction labour within the site with all necessary infrastructure and facilities such as cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc. The housing may be in the form of temporary structures to be removed after the completion of the project.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>The expansion project was completed by earlier owner in the year 2010 and no further construction is happening within the premise and hence no labour is staying in the company premises.</li> <li>No temporary structures in the premises of the unit.</li> </ul>

## 2) General Conditions

Sr. No	General Condition	Compliance Status
i)	The project authorities must strictly adhere to the stipulations made by the Goa Pollution Control Board (GPCB) and the State Government.	<b>Noted &amp; Being Complied</b>
ii)	No further expansion or modifications in the plant shall be carried out without prior approval of the Ministry of Environment and Forests.	<b>Agreed</b>
iii)	The gaseous emissions from various process units shall conform to the load/mass-based standards notified by this Ministry on 19th May 1993 and standards prescribed from time to time. The Goa Pollution Control Board may specify more stringent standards for the relevant parameters keeping in view the nature of the industry and its size and location. At no time, the emission level shall go beyond the prescribed standards. Interlocking facilities shall be provided so that process can be automatically stopped in case emission level exceeds the limit.	<b>Being Complied.</b> <ul style="list-style-type: none"> <li>The CEMS is not applicable as per order no B-33014/7/2016/PCI-II/7530 dated 19.01.2016 from CPCB. (Refer annexure_1a). As such interlocking facilities not applicable.</li> </ul>



iv)	<p>At least four ambient air quality monitoring stations shall be established in the downward direction as well as where maximum ground level concentration of SPM, SO<sub>2</sub> and NO<sub>2</sub> are anticipated in consultation with the Goa Pollution Control Board. Data on ambient air quality and stack emission shall be regularly submitted to this Ministry including its Regional Office at Bangalore and Goa Pollution Control Board, CPCB once in six months.</p>	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>• AAQ monitoring is being carried out in consultation with and as per CTO conditions of GSPCB.</li> </ul>
v)	<p>In-plant control measures for checking fugitive emissions from all the vulnerable sources shall be provided. Further, specific measures like water sprinkling around the coal stockpiles and asphaltting or concreting of the roads shall be done to control fugitive emissions.</p>	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>• There is no fugitive emission in the plant. Coal is not used in the process.</li> <li>• Water sprinkling done to control dust emission during vehicular movement.</li> </ul>
vi)	<p>Industrial wastewater shall be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May 1993 and 31st December 1993 or as amended from time to time. The treated wastewater shall be utilized for plantation purpose.</p>	<p><b>Not Applicable</b></p> <ul style="list-style-type: none"> <li>• The unit is a "Zero Liquid Discharge" facility.</li> <li>• As submitted above, the process water is evaporated and converted into sodium sulphate crystals and sold as by-product.</li> <li>• The treated wastewater from STP is used for green belt development.</li> </ul>
vii)	<p>The overall noise levels in and around the plant area shall be kept well within the standards (85 dBA) by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation. The ambient noise levels shall conform to the standards prescribed under EPA Rules, 1989 viz. 75 dBA (daytime) and 70 dBA (night time).</p>	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>• Noise control measures are provided &amp; periodical monitoring is carried out and is found that noise levels are within limits.</li> <li>• Noise monitoring is carried out through MoEF accredited laboratory as specified by GSPCB &amp; the reports are furnished to GSPCB regularly. AAQ Report is attached as (Annexure 1e).</li> </ul>

viii)	Occupational health surveillance of the workers shall be done on a regular basis and records maintained as per the Factories Act.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>• Reports of few employees has been attached in (<b>Annexure_1f</b>).</li> </ul>
ix)	The Company shall develop rainwater harvesting structures to harvest the rainwater for utilization in the lean season besides recharging the ground water table.	<b>Compliance in Progress</b> <ul style="list-style-type: none"> <li>• The unit has been developing a rainwater harvesting structure in consultation with experts and expected to complete by November 2024.</li> </ul>
x)	The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA / EMP report. Further, the company must undertake socio-economic development activities in the surrounding villages like community development programmes, educational programmes, drinking water supply and health care etc. Suggestions made during the public hearing shall be implemented.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>• Environment measures and safeguards have been implemented to prevent pollution.</li> <li>• CSR activities like Nand Ghar is implemented in plant area to support childcare &amp; women development through modern technology, improved education, sanitation &amp; hygiene.</li> <li>• Public hearing for the project was exempted.</li> </ul>
xi)	As proposed, Rs. 1.50 Crores earmarked towards the capital cost and recurring cost/annum towards the environmental pollution control measures shall be judiciously utilized to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. The funds so provided shall not be diverted for any other purpose.	<b>Being Complied</b> <ul style="list-style-type: none"> <li>• Environmental protective measures are implemented. These includes covered sheds, stacks, ETP, STP etc. Photos showing various environment protective measures carried out after taking over of assets is attached as (<b>Annexure_1g</b>).</li> <li>• The unit has earmarked dedicated environment budget for managing the recurring expenditures.</li> </ul>
xii)	A copy of clearance letter shall be sent by the proponent to be concerned Panchayat, Zila Parishad / Municipal Corporation, Urban Local Body, and the local NGO, if any, from whom suggestions / representations, if any,	<b>Being Complied</b> <ul style="list-style-type: none"> <li>• The EC letter is put up on company web site.</li> </ul>

	were received while processing the proposal. The clearance letter shall also be put on the web site of the company by the proponent.	
xiii)	The project proponent shall upload the status of compliance of the stipulated environment clearance conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the Regional Office of the MOEF at Bangalore, the respective Zonal Office of CPCB and the Goa SPCB. The criteria pollutant levels namely, SPM, RSPM, SO <sub>2</sub> , NO <sub>x</sub> (ambient levels as well as stack emissions) or critical sectoral parameters, indicated for the projects shall be monitored and displayed at a convenient location near the main gate of the company in the public domain.	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>Compliance status is sent to regional Office of MoEF and GSPCB &amp; and updated on website periodically.</li> </ul> <p><b>Being complied</b></p> <ul style="list-style-type: none"> <li>Digital display board stating pollutant level at main Gate is installed.</li> </ul>
xiv)	The project proponent shall also submit six monthly reports on the status of the compliance of the stipulated environmental conditions including results of monitored data (both in hard copies as well as by e-mail) to the Regional Office of MOEF the respective Zonal Office of CPCB and the SPCB. The Regional Office of this Ministry at Bangalore / CPCB / Goa SPCB shall monitor the stipulated conditions.	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>The unit has submitted six monthly reports on the status of the compliance of the stipulated environmental conditions to Regional Office of MOEF the Zonal Office of CPCB at Bangalore and the GSPCB.</li> </ul>
xv)	The environmental statement for each financial year ending 31st March in Form-V as is mandated to be submitted by the project proponent to the concerned State Pollution Control Board as prescribed under the Environment (Protection) Rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of environmental conditions and shall also be sent to the Regional Office of the MOEF at Bangalore by e-mail.	<p><b>Being Complied</b></p> <ul style="list-style-type: none"> <li>The environment statement (Form-V) for the financial year is submitted to GSPCB on 19<sup>th</sup> August 2023 and same is displayed on website. <a href="https://www.sterlitecopper.com/sustainability/environment-compliance/">https://www.sterlitecopper.com/sustainability/environment-compliance/</a></li> <li>Copy of Form-V is sent to Regional Office of the MoEF is attached as <b>(Annexure 1h)</b>.</li> </ul>

xvi)	<p>The Project Proponent shall inform the public that the project has been accorded environmental clearance by the Ministry and copies of the clearance letter are available with the Goa SPCB and may also be seen at Website of the Ministry of Environment and Forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a>. This shall be advertised within seven days from the date of issue of the clearance letter, at least in two local newspapers that are widely circulated in the region of which one shall be in the vernacular language of the locality concerned and a copy of the same should be forwarded to the regional office.</p>	<p><b>Complied by earlier owner.</b></p>
xvii)	<p>Project authorities shall inform the Regional Office at Bangalore as well as the Ministry, the date of financial closure and final approval of the project by the concerned authorities and the date of commencing the land development work.</p>	<p><b>Complied by earlier owner.</b></p>

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केन्द्रीय प्रदूषण नियंत्रण बोर्ड  
CENTRAL POLLUTION CONTROL BOARD  
(पर्यावरण एवं वन मंत्रालय, भारत सरकार)  
(MINISTRY OF ENVIRONMENT & FORESTS, GOVT. OF INDIA)

**SPEED POST**

B-33014/7/2016/PCI-II/

To

January 19, 2016

Nicomet Industries Ltd.  
L-15/19/20, Cuncolim, Industrial Estate  
Cuncolim, Goa-403703

**Sub.: Withdrawal of Notice under Section 5 of the Environment (Protection) Act, 1986 regarding installation of on-line effluent and emission monitoring system**

*Ref.: Notice under Section 5 of the Environment (Protection) Act, 1986 dated July 23, 2015 regarding installation of on-line effluent and emission monitoring system*

WHEREAS, integrated steel plants and sponge iron units are identified as one of the 17 categories of highly polluting industries which have been discharging environmental pollutants directly or indirectly into the ambient air and water, having potential threat to cause adverse effect on the water and air quality;

WHEREAS, the Central Government has notified the standards for discharge of environmental pollutants from various categories of industries under the Environment (Protection) Act, 1986 and the rules framed there under;

WHEREAS, there is need to inculcate habit of self-monitoring within the industries for complying with the prescribed standards and this can be achieved by the methods like installing online effluent and emission monitoring devices;

WHEREAS, for strengthening the monitoring and compliance through self-regulatory mechanism, online source emission and effluent monitoring systems need to be installed and operated by the industries on 'polluter pays principle' ;

WHEREAS, a direction under section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981 was issued on February 05, 2014 to all the State Pollution Control Boards (SPCBs)/ Pollution Control Committees (PCCs) for installation of online emission monitoring system w.r.t. PM and SO<sub>2</sub> parameters & online effluent monitoring system w.r.t. pH, flow, BOD, COD and TSS in iron & steel industries;

WHEREAS, effluent parameters phenol and cyanide were added for online installation in iron and steel plants with by-product recovery type coke ovens;

WHEREAS, considering the requests/ representations received from industries/ industrial associations/ SPCBs / PCCs, an extension of time up to June 30, 2015 for installation of online monitoring systems was granted vide direction dated March 02, 2015 under section 18 (1) (b) of the Water (Prevention & Control of Pollution) Act, 1974 and the Air (Prevention & Control of Pollution) Act, 1981;

WHEREAS, a letter vide dated May 29, 2015 was issued by the Chairman CPCB to all the SPCBs/ PCCs informing that no further extension of time will be given after June 30, 2015 and withdrawal of consent to operate along with forfeiture of bank guarantee of non-complying units;

contd...

'परिवेश भवन' पूर्वी अर्जुन नगर, दिल्ली-110032

'Parivesh Bhawan', East Arjun Nagar, Delhi - 110032

दूरभाष / Tel. : 43102030, फैक्स / Fax : 22305793, 22307078, 22307079, 22301932, 22304948

ई-मेल / e-mail : cpcb@nic.in वेबसाइट / Website : www.cpcb.nic.in



WHEREAS, concerned SPCB/ PCC issued directions under section 33A of the Water (Prevention & Control of Pollution) Act, 1974 and section 31A of the Air (Prevention & Control of Pollution) Act, 1981 to install the online monitoring system by June 30, 2015 and to submit bank guarantee of 100% of the cost of online emission & effluent monitoring system;

WHEREAS, the Ministry of Environment & Forests, Government of India, vide Notifications No. S. O. 157 (E) of 27.02.1996 and S. O. 730 (E) dated 10.07.2002, has delegated the powers vested under Section 5 of the Environment (Protection) Act, 1986 (29 of 1986) to the Chairman, Central Pollution Control Board, to issue directions to any industry or any local body or any other authority for violations of the standards and rules notified under the Environment (Protection) Rules, 1986 and amendment thereof;

WHEREAS, Show Cause Notice under Section 5 of Environment (Protection) Act 1986, was issued on July 23, 2015 to all integrated iron & steel plants and sponge iron units to show cause as to why the unit should not be closed down if, the unit has not complied fully with the directions issued w.r.t. installation of online emission & effluent monitoring system by June 30, 2015. Further it was directed to submit documentary evidence regarding status of installation and connectivity;

WHEREAS, your representation dated September 03, 2015 was received in response to above mentioned notice, wherein it was requested to exempt you from installing online monitoring system as the unit is not among 17 category of highly polluting industries. The response was examined and it was noted that the unit doesn't fall under 17 category of highly polluting industries;

NOW, therefore in view of above the show cause notice issued under Section 5 of the Environment (Protection) Act, dated July 23, 2015 is withdrawn.

  
(Arun Kumar Mehta)  
Chairman  




02/11/2023

To  
The Member Secretary  
Goa State Pollution Control Board  
Saligao Bardez 403114.

**Subject: Compliance of Consent to Operate for Malco Energy Limited (MEL) for the month of October 2023.**

**Reference:**

**Consent Order No. for Industry: 12/2022-PCB/1466026/R00010846, dated:30/01/2023**

**Consent Order No. for CLSF: 12/2022-PCB/1493991/R00010971, dated:30/01/2023**

Respected Madam,

With respect to condition no 4, sub-condition (xii), of the above stated in Consent to Operate granted to Malco Energy Limited (MEL), we have enclosed herewith the Ambient Air Quality Monitoring report for the month of october 2023.

Thanking You,

For MALCO ENERGY LIMITED (MEL)



SUMIT GUPTA

Authorized Signatory

**MALCO Energy Limited**

Works: L-15, L-19, L-20, M-11, Landfill Site, Cuncolim Industrial Estate, Cuncolim, South Goa – 403703, India  
Website: [www.vedantalimited.com](http://www.vedantalimited.com)

Registered Office: SIPCOT Industrial Complex, Madurai Bypass Road, Thoothukudi (Tamil Nadu) - 628 002  
T +91-461 424 2591 F +91-461 424 2829 | Website: [www.vedantalimited.com](http://www.vedantalimited.com)  
CIN: U31300TN2001PLC069645



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
Recognised by MoEFCC(CPCB) under E(P) Act 1986 & recognition is valid upto 23.05.2025



## TEST REPORT

Table No. 1

### AMBIENT AIR QUALITY

Report No: N19823102

Name of the Project : Malco Energy Limited, (Represented by Shri. Sumit Gupta)  
Plot No. L-15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcete Goa  
Sample Collected by : Environmental Laboratory Representative  
Station at & Code : A1 - Behind Nickel Plant  
Duration : 24 Hrs  
Lab Code : N/23/10/3-198  
Issue Date : 27.10.2023  
Reference IS 5182 & Lab SOP

Date of Sampling	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
14.10.2023	9	11	48	24	<20	<1
Limits for Industrial, Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
14.10.2023	0.15	<0.1	<0.5	<0.5	0.26	23
Limits for Industrial, Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : \* Parameters monitored for period of 1 hr

*M. K. Srinivasan*

Govt. Analyst / Authorised Signatory

# 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
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## TEST REPORT

Table No. 2

### AMBIENT AIR QUALITY

Report No: N19923102

Name of the Project : Malco Energy Limited, (Represented by Shri. Sumit Gupta)  
Plot No. L-15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcete Goa  
Sample Collected by : Environmental Laboratory Representative  
Station at & Code : A2 - Near Crystallization & Evaporation  
Duration : 24 Hrs  
Lab Code : N/23/10/3-199  
Issue Date : 27.10.2023  
Reference IS 5182 & Lab SOP

Date of Sampling	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
14.10.2023	7	10	40	25	<20	<1
<b>Limits for Industrial , Residential, Rural and other Areas</b>	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
14.10.2023	0.13	<0.1	<0.5	<0.5	0.20	25
<b>Limits for Industrial , Residential, Rural and other Areas</b>	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : \* Parameters monitored for period of 1 hr

*M. K. Kulkarni*

Govt. Analyst / Authorised Signatory

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## TEST REPORT

Table No. 3

### AMBIENT AIR QUALITY

Report No: N20023102

Name of the Project : Malco Energy Limited, (Represented by Shri. Sumit Gupta)  
Plot No. L-15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcete Goa  
Sample Collected by : Environmental Laboratory Representative  
Station at & Code : A3 - Near Main Gate  
Duration : 24 Hrs  
Lab Code : N/23/10/3-200  
Issue Date : 27.10.2023  
Reference IS 5182 & Lab SOP

Date of Sampling	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
14.10.2023	10	12	53	27	<20	<1
Limits for Industrial , Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
14.10.2023	0.18	<0.1	<0.5	<0.5	0.24	28
Limits for Industrial , Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : \* Parameters monitored for period of 1 hr

*M. Karandaj*

Govt. Analyst / Authorised Signatory

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## TEST REPORT

Table No. 4

### AMBIENT AIR QUALITY

Report No: N20123102

Name of the Project : Malco Energy Limited, (Represented by Shri. Sumit Gupta)  
Plot No. L-15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcete Goa  
Station at & Code : A4 - Backside of Raw material washing Unit area  
Duration : 24 Hrs  
Lab Code : N/23/10/3-201  
Date of Report : 27.10.2023  
Reference IS 5182 & Lab SOP

Date of Sampling	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
14.10.2023	10	11	45	22	<20	<1
Limits for Industrial, Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
14.10.2023	<0.1	<0.1	<0.5	<0.5	0.11	22
Limits for Industrial, Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : \* Parameters monitored for period of 1 hr

*H. Karimkhan*  
GOVT. ANALYST  
AIR QUALITY

Govt. Analyst / Authorised Signatory

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01/02/2024

To  
The Member Secretary  
Goa State Pollution Control Board  
Saligao Bardez 403114.

**Subject: Compliance of Consent to Operate for Malco Energy Limited (MEL) for the month of January 2024.**

**Reference:**

**Consent Order No. for Industry: 12/2022-PCB/1466026/R00010846, dated:30/01/2023**

**Consent Order No. for CLSF: 12/2022-PCB/1493991/R00010971, dated:30/01/2023.**

Respected Madam,

With respect to condition no 4, sub-condition (xii), of the above stated in Consent to Operate granted to Malco Energy Limited (MEL), we have enclosed herewith the Ambient Air Quality Monitoring report for the month of January 2024.

Thanking You,

For MALCO ENERGY LIMITED (MEL)



SUMIT GUPTA

Authorized Signatory

**MALCO Energy Limited**

Works: L-15, L-19, L-20, M-11, Landfill Site, Cuncolim Industrial Estate, Cuncolim, South Goa – 403703, India

Website: [www.vedantalimited.com](http://www.vedantalimited.com)

Registered Office: SIPCOT Industrial Complex, Madurai Bypass Road, Thoothukudi (Tamil Nadu) - 628 002

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CIN: (12120076)3000109000000



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## TEST REPORT

Table No. 1

### AMBIENT AIR QUALITY

Report No: N4224012

Name of the Project : Malco Energy Limited, (Represented by Shri. Sumit Gupta)  
 Plot No. L-15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcate Goa  
 Sample Collected by : Environmental Laboratory Representative  
 Station at & Code : A1 - Behind Nickel Plant  
 Duration : 24 Hrs  
 Lab Code : N/24/01/2-0042  
 Issue Date : 29.01.2024  
 Reference IS 5182 & Lab SOP

Date of Sampling	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
05.01.2024	12	14	54	28	<20	<1
Limits for Industrial, Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), µg/m <sup>3</sup>	Arsenic (As), µg/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
05.01.2024	0.19	<0.1	<0.5	<0.5	0.32	25
Limits for industrial, Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Kousar*  
 ARSHIYA KOUSAR

Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

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## TEST REPORT

Table No. 2

### AMBIENT AIR QUALITY

Report No: N4324012

Name of the Project : Malco Energy Limited, (Represented by Shri. Sumit Gupta)  
 Plot No. L-15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcete Goa  
 Sample Collected by : Environmental Laboratory Representative  
 Station at & Code : A2 - Near Crystallization & Evaporation  
 Duration : 24 Hrs  
 Lab Code : N/24/01/2-0043  
 Issue Date : 29.01.2024  
 Reference IS 5182 & Lab SOP

Date of Sampling	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
05.01.2024	11	12	51	25	<20	<1
Limits for Industrial, Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
05.01.2024	0.21	<0.1	<0.5	<0.5	0.35	27
Limits for Industrial, Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : \* Parameters monitored for period of 1 hr

ARSHIYA ROUSAR  
 Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

# 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



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## TEST REPORT

Table No. 3

### AMBIENT AIR QUALITY

Report No: N4424012

Name of the Project : Malco Energy Limited, (Represented by Shri. Sumit Gupta)  
 Plot No. L-15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcete Goa  
 Sample Collected by : Environmental Laboratory Representative  
 Station at & Code : A3 - Near Main Gate  
 Duration : 24 Hrs  
 Lab Code : N/24/01/2-0044  
 Issue Date : 29.01.2024  
 Reference IS 5182 & Lab SOP

Date of Sampling	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> , (µg/m <sup>3</sup> )	PM <sub>2.5</sub> , (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
05.01.2024	7	11	56	32	<20	<1
Limits for Industrial, Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	50 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
05.01.2024	0.23	<0.1	<0.5	<0.5	0.28	23
Limits for Industrial, Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiya Kousar*  
 ARSHIYA KOUSAR  
 Dy. T.M. - Chemical

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# ENVIRONMENTAL LABORATORY

## (UNIT OF MINERAL ENGINEERING SERVICES)

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ISO 45001:2018

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### TEST REPORT

Table No. 4

### AMBIENT AIR QUALITY

Report No: N4524012

Name of the Project : Malco Energy Limited, (Represented by Shri. Sumit Gupta)  
Plot No. L-15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcete Goa  
Station at & Code : A4 - Backside of Raw material washing Unit area  
Duration : 24 Hrs  
Lab Code : N/24/01/2-0045  
Date of Report : 29.01.2024  
Reference IS 5182 & Lab SOP

Date of Sampling	Sulphur Dioxide (SO <sub>2</sub> ), µg/m <sup>3</sup>	Nitrogen Dioxide (NO <sub>2</sub> ), µg/m <sup>3</sup>	PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	Ammonia (NH <sub>3</sub> ), µg/m <sup>3</sup>	Benzene (C <sub>6</sub> H <sub>6</sub> ), µg/m <sup>3</sup>
05.01.2024	11	13	48	29	<20	<1
Limits for Industrial, Residential, Rural and other Areas	80 24 Hrs	80 24 Hrs	100 24 Hrs	60 24 Hrs	400 24 Hrs	5 Annual

Date of Sampling	Lead (Pb), µg/m <sup>3</sup>	Nickel (Ni), ng/m <sup>3</sup>	Arsenic (As), ng/m <sup>3</sup>	Benzo(a) Pyrene (BaP), ng/m <sup>3</sup>	Carbon Monoxide* (CO), mg/m <sup>3</sup>	Ozone* (O <sub>3</sub> ), µg/m <sup>3</sup>
05.01.2024	<0.1	<0.1	<0.5	<0.5	0.25	20
Limits for Industrial, Residential, Rural and other Areas	1.0 24 Hrs	20 Annual	6 Annual	1 Annual	4 1 Hr	180 1 Hr

Note : \* Parameters monitored for period of 1 hr

*Arshiyak Dusar*  
ARSHIYAK DUSAR  
Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

# 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# *Certificate of Membership*

*This is to certify that*

*ALCO ENERGY LIMITED*  
*is the member of the [NICOMET]*



**Goa Industries Environment Management  
Association**

Reg. No.:- 66/Goa/2007



Membership No.:

41/2007-08

Date:

03/07/2007

*[Signature]*

*[Signature]*

**K.V.S. Krishnakumar**

*President*

**A.J. D'Souza**

*Treasurer*

## Annexure 1d

### CREP recommendations and compliance status

Sr. No.	Issue	Status of Action Taken
1	<b>Waste minimization:</b> Waste minimization measures and for adoption of clean technologies.	Waste minimization circles have been formed to implement waste minimization measures and for adoption of clean technologies.
2	<b>Reduction of Water Consumption</b>	Water flow meters are installed to measure actual consumption. Awareness training given to the employees for water conservation and minimization of consumption.
3	<b>Compliance of Standards:</b> Monitoring of Compliance status of the industry	Employed qualified and well-trained staff for O & M of the facility. Monitoring pollution loads in core areas. Separate Energy meters provided for the operating facilities. Periodic monitoring of health & safety of workers in the industry are carried out.
4	<b>Wastewater treatment &amp; reuse:</b> Adopted Wastewater treatment & reuse	Process water generated is treated by triple effect evaporation under vacuum. The treated water will come out as condensate and reused in the main process stream.
5	<b>Bye-product recovery in the form of Sodium Sulphate</b>	Sodium Sulphate crystals is recovered as a by-product from evaporation of wastewater.
6	<b>Ambient Air Quality Standards:</b> Maintenance of ambient air quality keeping health aspects in view which is applicable to the hydro-metallurgical industries	Since there is no equipment like blast furnace or other highly polluting machinery in the factory, emission levels are too low. It is monitored by MoEF recognized agency and report submitted to GSPCB periodically.
7	<b>Noise Standards:</b> Maintenance of Cost-effective engineering and administrative measures in keeping health aspects which is applicable to the hydro-metallurgical industries	Occupational noise standards have already been developed keeping health aspects in view which is applicable to the hydro-metallurgical industries. Noise control measures implemented in high noise areas. Acoustic room provided for DG set. Personnel Protective Equipment's like Ear Plugs/Earmuffs are provided for employees as per requirement. Periodic monitoring of noise level done in factory premises.
8	<b>Solid Waste Management:</b> a) Management plan of solid / hazardous waste	Process residue generated is disposed off in CHWTSDF after neutralization and stabilization

	b) Waste management in the process	Process residue after extracting maximum metallic values is stabilized with lime and disposed in secured land fill. Liquid waste which is lean Sodium Sulphate solution is evaporated and converted into Sodium Sulphate crystals which is sold as a byproduct. Condensate is recycled back to the process
9	<b>Utilization of Waste:</b> Maximize the reuse of waste and exploring alternative uses of wastes	Waste oil and used oil are being sold to authorized re-users/ recyclers registered with MoEF / CPCB. Sodium sulphate solution generated from SX plant is processed in triple effect evaporation plant to separate out sodium sulphate salt in the form of anhydrous crystals. Condensate is recycled back in the process.
10	<b>Disposal:</b> Management of wastes generated from the proposed as well as existing plant operative process belong to stockpiled waste cake.	Stockpiled waste residue has already been processed, stabilized, and disposed off in CHWTSDF. No more stockpiled residues left. Process residue generated from current operation is stabilized with lime after extracting maximum metallic values and disposed off in CHWTSDF after stabilization.
11	<b>Action Plan to Control and Monitor Secondary Figurative Emissions from the source</b>	Manual water sprinkling through pipes is done to control fugitive emissions
12	<b>Environmental Management Plan during Operation:</b> Air Pollution sources from the process	Stack monitoring for boiler is done periodically by MoEF recognized Laboratory and report submitted to GSPCB on regular basis. Ambient air monitoring is done periodically by MoEF recognized Laboratory and report submitted to GSPCB.
13	<b>Control of Particulate Emissions:</b> Minimization of the fugitive losses within the process areas	Proper ventilation systems provided for minimizing the fugitive losses within the process areas. Manual water sprinkling through pipes is done to control fugitive emissions.
14	<b>Control of Fugitive Emissions:</b> Manufacturing units, Waste heaps (Dust), Dust Emissions due to Vehicular Movement	Turbo ventilators provided better ventilation. <ul style="list-style-type: none"> <li>• Man coolers provided in process area.</li> <li>• Sprinkling of Water through pipes done to minimize dust emissions.</li> </ul>
15	<b>Stack Gas Monitoring:</b> Monitoring of stack gas emissions from the sources	The emissions from the stacks monitored by MoEF recognized agency and report submitted to GSPCB periodically.
16	<b>Ambient Air Quality Monitoring:</b> Monitoring of Ambient Air Quality in different locations	Ambient air quality in different locations monitored by MoEF recognized Laboratory and report submitted to GSPCB periodically.

17	<b>Housekeeping:</b> Control of fugitive dust emissions	To reduce the generation of fugitive dust from vehicle movement and improve overall house-keeping, water sprinkling done through pipes.
18	<b>Green Belt:</b> Canopy based green belt around the periphery of plant	Green belt development is done in 6031 square meter area. Further development in progress.

02/11/2023

To  
The Member Secretary  
Goa State Pollution Control Board  
Salgao Bardez 403114

**Subject: Compliance of Consent to Operate for Malco Energy Limited (MEL) for the month of October 2023.**

**Reference:**

**Consent Order No. for Industry: 12/2022-PCB/1466026/R00010846, dated:30/01/2023**

Respected Madam,

With respect to condition no. 4 sub condition no.(x) of the above stated in Consent to Operate granted to Malco Energy Limited (MEL), we have enclosed herewith the noise level report for the month of October 2023.

Thanking You,

For MALCO ENERGY LIMITED (MEL)



SUMIT GUPTA

Authorized Signatory

**MALCO Energy Limited**

Works: L-15, L-19, L-20, M-11, Landfill Site, Cuncolim Industrial Estate, Cuncolim, South Goa --403703, India  
Website: [www.vedantalimited.com](http://www.vedantalimited.com)

Registered Office: SIPCOT Industrial Complex, Madurai Bypass Road, Thoothukudi (Tamil Nadu) -620002  
T +91-461 424 2591 F +91-461 424 2829 | Website: [www.vedantalimited.com](http://www.vedantalimited.com)  
CIN: U31300TN2001PLC069645



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory  
 Recognised by MoEFCC(CPCB) under E(P) Act 1986 & recognition is valid upto 23.05.2025



## TEST REPORT

### NOISE LEVEL DATA

Project		: Malco Energy Limited, (Represented by Shri. Sumit Gupta)																	
Plot No. L - 15/19/20,		Cuncolim Industrial Estate , Cuncolim, Salcete Goa																	
Particulars of sample collected		: Sound Levels																	
Sample Collected by		: Environmental Laboratory Representative																	
Date of sample collection		: 14.10.2023																	
Date of sample receipt		: 16.10.2023																	
Issue Date		: 27.10.2023																	
Sampling & Test Method		: IS:9989																	
Code No.	Monitoring stations	Day			Night														
		L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>												
<b>Core Zone</b>																			
N1	Behind Nickel Plant	36.3	49.9	53.8	34.0	40.6	44.8												
N2	Near Crystallization & Evaporation	37.4	49.3	54.0	35.0	40.7	44.6												
N3	Near Main Gate	39.0	50.1	54.7	34.1	40.1	44.7												
<p><b>Permissible Limits of Ambient Noise Levels as per CPCB Guidelines</b></p> <p style="text-align: center;">Leq. Limit dB(A)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Day</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>Industrial Area</td> <td>75</td> <td>70</td> </tr> <tr> <td>Commercial Area</td> <td>65</td> <td>55</td> </tr> <tr> <td>Residential Area</td> <td>55</td> <td>45</td> </tr> </tbody> </table>									Day	Night	Industrial Area	75	70	Commercial Area	65	55	Residential Area	55	45
	Day	Night																	
Industrial Area	75	70																	
Commercial Area	65	55																	
Residential Area	55	45																	

*M. Srinivasan*  
 M. SACHIN RAO  
 Y.M. CHEMICAL

Govt. Analyst / Authorised Signatory

# 948, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.  
 Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in

01/02/2024

To  
The Member Secretary  
Goa State Pollution Control Board  
Saligao Bardez 403114.

---

**Subject: Compliance of Consent to Operate for Malco Energy Limited (MEL) for the month of January 2024.**

**Reference:**

**Consent Order No. for Industry: 12/2022-PCB/1466026/R00010846, dated:30/01/2023**

Respected Madam,

With respect to condition no. 4 sub condition no.(x) of the above stated in Consent to Operate granted to Malco Energy Limited (MEL), we have enclosed herewith the noise level report for the month of January 2024.

---

Thanking You,

For MALCO ENERGY LIMITED (MEL)



SUMIT GUPTA

Authorized Signatory

**MALCO Energy Limited**

Works: L-15, L-19, L-20, M-11, Landfill Site, Cuncolim Industrial Estate, Cuncolim, South Goa – 403703, India  
Website: [www.vedantalimited.com](http://www.vedantalimited.com)

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T +91-461 424 2591 F +91-461 424 2829 | Website: [www.vedantalimited.com](http://www.vedantalimited.com)  
CIN: U21300TN100101000000



# ENVIRONMENTAL LABORATORY

(UNIT OF MINERAL ENGINEERING SERVICES)

Recognised by BIS, FSSAI, ISO:45001:2018 Certified Laboratory

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## TEST REPORT

### NOISE LEVEL DATA

Project		: Malco Energy Limited, (Represented by Shri. Sumit Gupta)																	
		Plot No. L - 15/19/20, Cuncolim Industrial Estate, Cuncolim, Salcate Goa																	
Particulars of sample collected		: Sound Levels																	
Sample Collected by		: Environmental Laboratory Representative																	
Date of sample collection		: 06.01.2024																	
Date of sample receipt		: 06.01.2024																	
Issue Date		: 29.01.2024																	
Sampling & Test Method		: IS:9989																	
Code No.	Monitoring stations	Day			Night														
		L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>	L <sub>min</sub>	L <sub>eq</sub>	L <sub>max</sub>												
<b>Core Zone</b>																			
N1	Behind Nickel Plant	41.0	51.0	56.8	34.0	41.5	47.5												
N2	Near Crystallization & Evaporation	38.0	49.6	54.8	34.6	41.4	45.2												
N3	Near Main Gate	40.0	51.1	55.3	34.1	40.7	46.7												
<p><b>Permissible Limits of Ambient Noise Levels as per CPCB Guidelines</b></p> <p style="text-align: center;">Leq. Limit dB(A)</p> <table border="1" style="margin-left: auto; margin-right: auto;"> <thead> <tr> <th></th> <th>Day</th> <th>Night</th> </tr> </thead> <tbody> <tr> <td>Industrial Area</td> <td>75</td> <td>70</td> </tr> <tr> <td>Commercial Area</td> <td>65</td> <td>55</td> </tr> <tr> <td>Residential Area</td> <td>55</td> <td>45</td> </tr> </tbody> </table>									Day	Night	Industrial Area	75	70	Commercial Area	65	55	Residential Area	55	45
	Day	Night																	
Industrial Area	75	70																	
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 ARSHIYA KOUSAR  
 Dy. T.M. - Chemical

Govt. Analyst / Authorised Signatory

# 94B, 2nd Cross, St. Thomas Town Post, Kammanahalli, Bangalore - 560 084.

Phone : 080-25432969 Tel/fax : 25432968. E-mail : mesbng@gmail.com, www.envtest.in



# MANGUIRISH OCCUPATIONAL HEALTH SERVICES

Shop No. 17,18,19 1<sup>st</sup> Floor, Royal Chambers, Above IDBI Bank, Tisk Ponda- Goa.

Ph: - 0832-2314397

## ANNUAL HEALTH CHECK-UP PERSONAL HISTORY RECORD

Name : Mr. Bulu Khandayataray	Date of Exam : 26/10/2023
Address : Margao - Goa	Gender : Male
	Blood Group : B Rh Positive
Company : Vedanta (Peregrine Security)	Age : 27 Years
Marital Status: Married	Children : 01
Personal History / Hobbies / Addictions :	
Identification Marks : Black mole on the right wrist.	

### HISTORY OF :

Frequent cold /sneezing	Nil	Recent loss of weight	Nil
Urinary Disturbances	Nil	Impaired hearing	Nil
Chronic Cough	Nil	Ear Discharge	Nil
Shortness of breath	Nil	Backache	Nil
Chest pains / Pressure	Nil	Joint Pain	Nil
Allergy to drugs / chemicals	Nil	Intestinal Trouble	Nil
Frequent Headaches	Nil	Epilepsy	Nil
Visual Disturbances	Nil	Swelling of Legs	Nil
Vertigo	Nil	Operations	Nil

Details of above:

### PAST HISTORY:

Disease	Self	Father	Mother	Others
1. Heart disease / Hypertension	Nil	Nil	Nil	Nil
2. Diabetes Mellitus	Nil	Nil	Nil	Nil
3. Tuberculosis	Nil	Nil	Nil	Nil
4. Bronchial asthma	Nil	Nil	Nil	Nil
5. Epilepsy	Nil	Nil	Nil	Nil
6. Arthritis / Rheumatism	Nil	Nil	Nil	Nil
7. Cancer	Nil	Nil	Nil	Nil
8. Kidney Disorder	Nil	Nil	Nil	Nil
9. Liver diseases	Nil	Nil	Nil	Nil
10. Skin diseases	Nil	Nil	Nil	Nil
11. Allergies	Nil	Nil	Nil	Nil
12. Accidents	Nil	Nil	Nil	Nil
13. Any other	Nil	Nil	Nil	Nil


Mr. Bulu Khandayataray


## Occupational History

	Establishment	Occupation	Period	
			From	To
1				
2	Vedanta (Peregrine Security)	Security	3 Years	Till date

ANTHROPOMETRY		Height: 168 cm.		Weight: 70 Kg.				
Chest	Insp. 96 cm	Exp. 93 cm	Abdominal Girth: 91 cm		B.M.I: 24.8			
Skin: NAD			Nails: NAD		Anemia: No			
EYES	Vision		Without glasses			With glasses		Squint: No
			R	L	B	R	L	B
	Near	N/6	N/6	N/6				Colour Blindness: No
	Far	6/6	6/6	6/6				
Ear :	NAD	R-	NAD	L-	NAD			
Nose :	NAD	Septum-	NAD	Nostril-	NAD			
Mouth :	NAD	Teeth-	NAD	Speech-	NAD	Pharynx-	NAD	
LYMPHATIC & ENDOCRINE		Lymph nodes: NAD			Thyroid: NAD		Others: NAD	
RESPIRATORY		Chest: Clear				Breath sound: Normal		
		Rales: Nil				Ronchi: Nil		
CARDIOVASCULAR		Pulse: 80/min		Blood Pressure: 122/82 mmHg		Murmur: Nil		
ABDOMEN		Tenderness: Nil		Ascites: Nil		Other masses: Nil		
		Liver: NAD		Spleen: NAD		Hernia: Nil		
GENITO URINARY		External Genitalia: NAD		Hydrocoele/Swelling: Nil		Discharge: Nil		
		Menstrual History: NA						
MUSCULOSKELETAL		Posture: Normal				Spine: NAD		
		Bones: NAD				Joints: NAD		
NERVOUS SYSTEM		Cranial Nerves: NAD				Motor system: NAD		
		Sensory system: NAD				Reflexes: NAD		
SPIROMETRY: Normal						X-RAY: WNL		
AUDIOMETRY: Normal						ECG: WNL		
OTHERS: NAD								
BLOOD INVESTIGATION			NORMAL VALUES			URINE EXAMINAION		
Hemoglobin:	15.0	M:13-18, F:12-16 g%			Quantity: 5 ml			
Total W.B.C. :	7,100	5,000-10,000 Cells/ Cu. Mm			Colour: Colorless			
Differential WBC:N-	60	45 to 70 %			Odour: Aromatic			
L-	36	25 to 45 %			Specific Gravity: 1.010			
E-	02	1 to 4 %			Reaction: Acidic			
M-	02	2 to 8 %			PH: 6.0			
B-	00	0 to 1 %			Sugar: Nil			
E.S.R (Westergren):	06	M:0 to 15 & F:0 to 20 mm at the end of one hour			Protein: Nil			
Random Glucose Level:	89	Up to 150 mg %			Micro: PC - Nil, Epi - Nil, RBC- Nil			
Creatinine	: 0.7	0.5 to 1.3 mg%			Crystals- Nil			

REMARKS: Medically Fit

Reviewed on 31/10/2023  


  
**DR. GOKULDAS H. MANGESHKAR**  
 Reg. No. GMC 3440, MBBS, D.O.H  
 Occupational Health Physician



# MANGURISH OCCUPATIONAL HEALTH SERVICES

Shop No. 17,18,19 1st Floor, Royal Chambers Above IDBI Bank,  
Tisk, Ponda - Goa. Cell: 9890544691

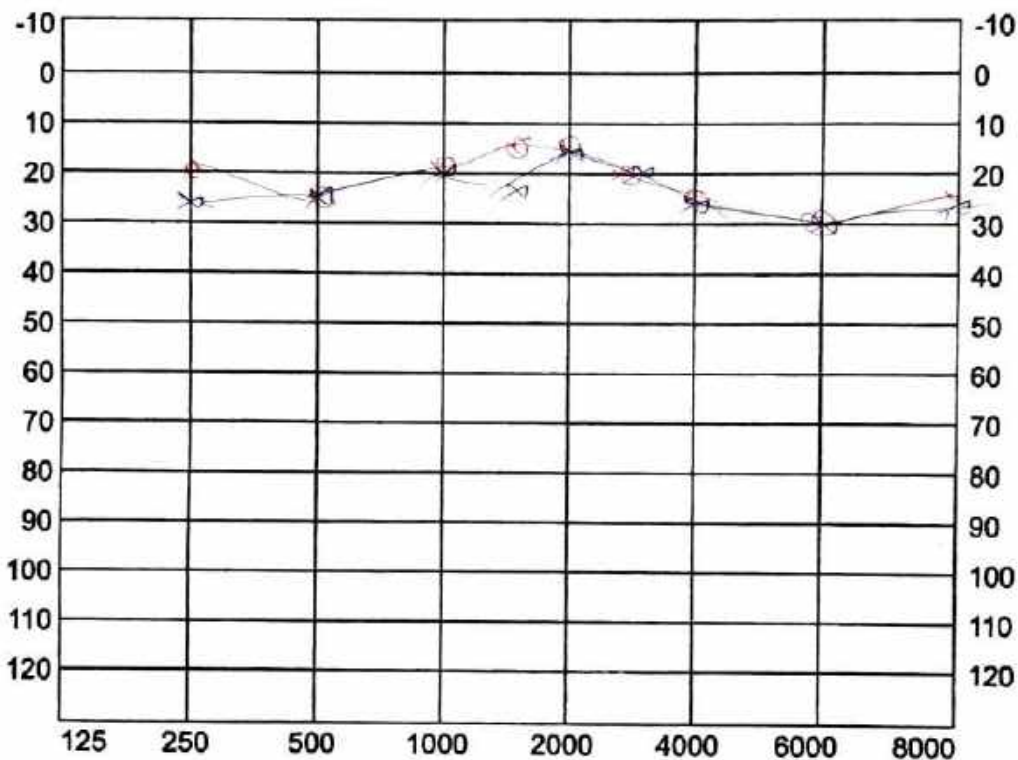
## AUDIOLOGICAL EVALUATION

1. NAME Sul. Ishandayalany SEX M AGE 27

2. ADDRESS .....

..... OCCUPATION .....

3. DIAGNOSIS ..... DT OF AUDIOMETRY 26/10/18



### TEST FREQUENCY

Air  = Left Ear

O = Right Ear

Rinne

Hearing Loss for Speech

RL \_\_\_\_\_

Bone < = Left Ear

> = Right Ear

weber

Discrimination for Speech

RL \_\_\_\_\_

No Response

Audiologist Remarks

Normal

**DR. GOKULDAS H. MANGESHKAR**  
Reg. No. GMC 3440, MBBS, DOIH  
Occupational Health Physician

# MANGUIRISH

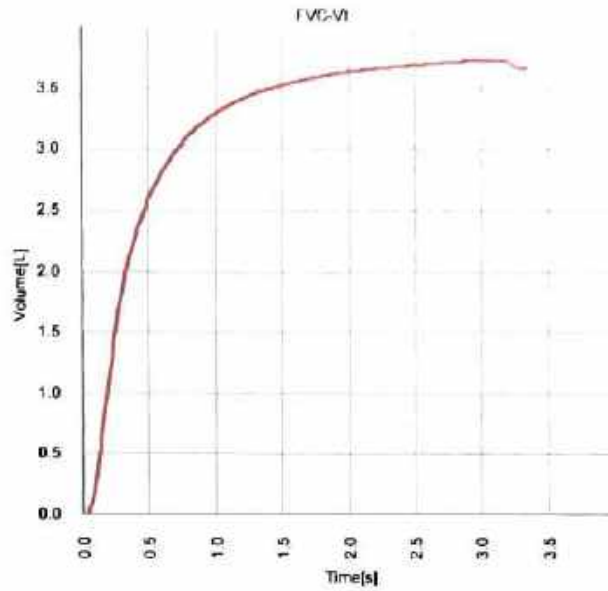
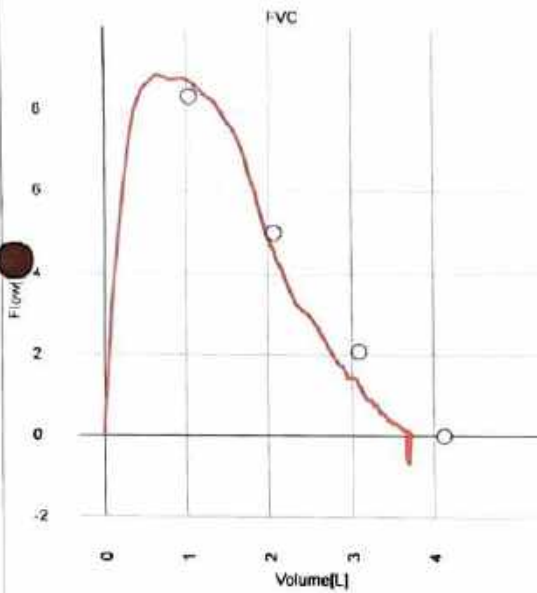
Ponda

Last name Khandayataray  
First name Bulu  
Birth date 26/10/23  
Id 33007  
Age 27 yrs  
Sex male

Goa

Tisk

Height 168 cms  
Weight 70 kgs  
Ethnic Group south indian  
Smoker No  
Time Stamp 26/10/2023  
Prediction method Knudson



Param	Unit	Predicted	%PRED	BEST
FVC	L	4.13	90%	3.73
FEV1	L	3.43	94%	3.23
FEV05	L	0.00	0%	2.54
FEV3	L	0.00	0%	3.73
FEV1%FVC	%	82.98	104%	86.60
FEV1%FVC	%	82.98	6488%	5383.33
FEV3%FVC	%	0.00	0%	100.00
FEV1%FEV6	%	0.00	0%	86.60
1%FVC	%	82.98	121%	100.00
PEF	L/s	9.01	98%	6.85
FET	s	0.00	0%	2.86
ELA	year	36.00	167%	60.00
MMEF2575	L/s	4.19	108%	4.54
FEF25	L/s	8.35	105%	8.77
FEF50	L/s	4.97	112%	5.58
FEF75	L/s	2.05	95%	1.94
MMEF2550	L/s	0.00	0%	7.76

Operator's note

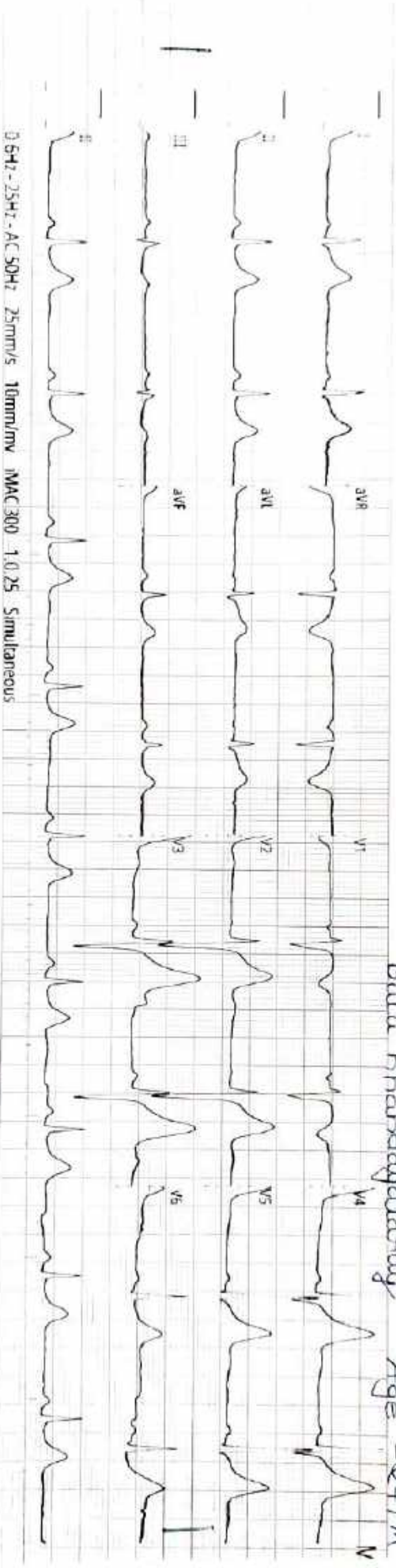
Quality control

NLHEP: QC Grade D

Automatic interpretation

Normal Spirometry

DR. GOKULDAS H. MANGESHKAR  
Reg. No. GMC 3440, MBBS, DOIH  
Occupational Health Physician



0.5Hz-25Hz-AC 50Hz 25mm/s 10mm/mV MAC300 1.0.25 Simultaneous

Balu Kharyadyatary Age - 27/M

ADNL

DR. GOKULDAS H. MANGESHKAR  
 Reg. No. GMC 3440, MBBS, DDIH  
 Occupational Health Director

# MANGUIRISH OCCUPATIONAL HEALTH SERVICES

Shop No. 17,18,19 1<sup>st</sup> Floor, Royal Chambers, Above IDBI Bank, Tisk Ponda- Goa.

Ph: - 0832-2314397

Name : Mr. Bulu Khandayataray  
Age : 27 Yrs  
Gender : Male  
Ref.By : Vedanta (Peregrine Security)  
Date : 26/10/2023

## CHEST P.A. VIEW

*Bones and soft tissues around the chest appears normal.*

*Both the lung fields are clear, with no pleural or parenchymal lesions noted.*

*Both the domes of the diaphragm are at normal level.*

*Heart aorta and the mediastinum are normal.*

*No profusion seen*

**OPINION** : chest x-ray is within normal limits.



**DR. GOKULDAS H. MANGESHKA**  
Reg. No. GMC 3440, MBBS, DOIH  
Occupational Health Physician

**HEALTH REGISTER**


1. Serial number in the register of adult workers  
2. Name of worker

Mr. Gulu Khandayafroy

Medical examination  
And the result thereof

If declared unfit work

3. Sex: M  
4. Date of Birth: 29 yrs


1	Department/work	
2	Name of hazardous process	
3	Dangerous process/operation	
4	Nature of job of occupation	Security
5	Raw materials, products or by-products likely to be exposed to	
6	Date of posting	
7	Date of leaving/transfer to other work	
8	Reasons for discharge/leaving or transfer	
9	Date	26/10/2023
10	Signs and symptoms observed during examination	Nil
11	Nature of tests and results thereof	As per format see the file
12	Result fit/unfit	fit
13	Period of temp withdrawal from that work	
14	Reasons for such withdrawal	
15	Date of declaring him unfit for that work	
16	Date of issuing fitness certificate	26/10/2023
17	Signature with the date of the factory Medical Officer/the Certifying Surgeon	

Note:- (1) Separate page should be maintained for individual worker


(2) Fresh entry should be made for each examination

**DR. GOKULDAS H. MANGESHKAR**  
Ragade, GMC 3440, MBBS, DCH  
Occupational Health Physician

**HEALTH REGISTER**

1	Department/work		
2	Name of hazardous process		
3	Dangerous process/operation		
4	Nature of job of occupation	Security	
5	Raw materials, products or by-products likely to be exposed to		
6	Date of posting		
7	Date of leaving/transfer to other work		
8	Reasons for discharge/leaving or transfer		
9	Date	26/10/2023	Medical examination And the result thereof  If declared unfit work
10	Signs and symptoms observed during examination	Nil	
11	Nature of tests and results thereof	As per format see the file	
12	Result fit/unfit	fit	
13	Period of temp withdrawal from that work		
14	Reasons for such withdrawal		
15	Date of declaring him unfit for that work		
16	Date of issuing fitness certificate	26/10/2023	
17	Signature with the date of the factory Medical Officer/the Certifying Surgeon		

1. Serial number in the register  
 2. Name of worker: Mr. Balu Khandayataraj  
 3. Sex: M  
 4. Date of Birth: 27 yrs

Reviewed on 31/10/2023  


**Note:-** (1) Separate page should be maintained for individual worker (2) Fresh entry should be made for each examination  
**DR. GOKULDASH H. MANGESHKAR**  
 Reg. No. GMC 3440, MBBS, DOH  
 Occupational Health Physician



Dated: 28<sup>th</sup> November 2023

## CERTIFICATE

This is to certify that I have conducted medical check-up of **Mr. BHARAT GOND** of **M/S Monomark Engineering ( 1 ) Pvt.Ltd. situated at Cuncolim Industrial estate, Goa**

This medical check-up was conducted as per the requirement of Inspectorate of Factories and Boilers, Panaji Goa under rule 19A.

Form No. 7 along with the result of the tests have been handed over to the **M/S Monomark Engineering ( 1 ) Pvt.Ltd.Situated at Cuncolim Industrial estate, Goa**

**He is found to be fit.**

**Dr. POONAM M. DESSAI**  
M.B.B.S. Reg. No. 3620  
AFIH Reg. No. 02190  
Occupational Health Physician



Reviewed on 30/11/2023

## HEALTH REGISTER


1. Serial No. in the register : 41.  
Of adult worker

3. Sex : Male

2. Name of worker: Dharat Gond

4. D.O.D Age: 45 yrs

Notes :- 1. Separate page should be maintained for individual worker 2. Fresh entry should be made for each examination

	1	Department/works	Medical examination and the result thereof If declared unfit for work
	2	Name of hazardous process	
	3	Dangerous process/operation	
	4	Nature of job of occupation	
	5	Raw materials, products or by-products likely to be exposed to	
	6	Date of posting	
	7	Date of leaving/transfer to other work	
	8	Reasons for discharge/leaving or transfer	
28/11/2023	9	Date	
NIL	10	Signs and symptoms observed during examination	
Complete blood count, Blood Group, Blood sugar level, Blood Urea, Serum Creatinine, Lipid Profile, Billirubin Profile, SGPT, SGOT, Urine analysis, ECG, Chest -X-ray, Audiometry, Vision Testing, Physical Examination Spirometry.	11	Nature of tests and results thereof	
	12	Result fit/unfit	
FIT	13	Period of temp withdrawal from that work	
	14	Reasons for such withdrawal	
	15	Date of declaring him unfit for that work	
28/11/2023	16	Date of issuing fitness certificate	
	17	Signature with the date of the factory Medical Officer / the Certifying Surgeon	

**Dr. POONAM M. DESSAI**  
M.B.B.S. Reg. No. 3620  
AFIH Reg. No. 02198  
Occupational Health Physician

Reviewed on 30/11/2023  


# Molu Diagnostics & Occupational Health Service

Shop No. 10/2. Ground Floor, Cuncolim Market Complex, Below Cuncolim  
Municipal Hall, Cuncolim Salcete Goa. Mob. 7350188225

**Name: BHARAT GOND**

**Age: 45 yrs**

**Sex: MALE**

**Address: Malco energy**

**Identification marks: Mole on the face**

**Personal History:**

1. Smoking: No
3. Drug addiction: No
5. Gambling: No

2. Alcohol: No
4. Tobacco Chewing : No
6. Nutrition: Normal

**Marital Status: Married**

**Children: 2**

**Family planning: Temporary method**

**Hobbies NIL**

**History of**

Frequent colds/ Sneezing	Nil	Recent loss of weight	Nil
Urinary Disturbances	Nil	Impaired hearing	Nil
Chronic cough	Nil	Ear discharge	Nil
Shortness of breath	Nil	Backache	Nil
Chest pain/ pressure	Nil	Joint pain	Nil
Allergy to drug/ chemicals	Nil	Bowel Disturbance	Nil
Frequent headaches	Nil	Epilepsy	Nil
Visual Disturbances	Nil	Swelling of legs/ feet	Nil
Vertigo	Nil	Operation	Nil
Any other	Nil		

**Details of above: Nil**

**Past History & Family History**

Disease	Self	Father	Mother	Other
1. Heart disease/ Hypertension	Nil	Nil	Nil	Nil
Diabetes	Nil	Nil	Nil	Nil
Tuberculosis	Nil	Nil	Nil	Nil
Bronchial Asthma	Nil	Nil	Nil	Nil
Epilepsy	Nil	Nil	Nil	Nil
Arthritis/Rheumatism	Nil	Nil	Nil	Nil
Cancer	Nil	Nil	Nil	Nil
Kidney Disorder	Nil	Nil	Nil	Nil
Liver Disease	Nil	Nil	Nil	Nil
Skin Diseases	Nil	Nil	Nil	Nil
Allergies	Nil	Nil	Nil	Nil
Accidents	Nil	Nil	Nil	Nil
Any other	Nil	Nil	Nil	Nil



NVTASE

Sr No	:17998	Advised Date	:28/11/2023 01:41:08 PM
Name	:Mr. BHARAT GOND	Patient Code	:PH0004391607
Age	:45 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

### COMPLETE BLOOD COUNT

Test	Result	Unit	BRI/Range Value
HAEMOGLOBIN (Hb)	14.2	gm/dl	13 - 17
ILC (Total Leucocyte Count)	7640	/cumm	4000 - 10000
<b>DIFFERENTIAL LEUCOCYTE COUNT</b>			
NEUTROPHIL	52	%	40 - 70
LYMPHOCYTES	38	%	20 - 40
EOSINOPHILS	06	%	1 - 6
MONOCYTES	04	%	2 - 10
BASOPHILS	00	%	0 - 1
RBC Count	4.2	millions/cmm	3.8 - 5.8
P.C.V. / HEMATOCRIT	42	%	40 - 50
M C V (Mean Corp Volume)	100.00	fL	83 - 101
M C H (Mean Corp Hb)	33.81	pg	27 - 32
M C H C (Mean Corp Hb Conc)	33.81	g/dL	31.5 - 34.5
PLATELET COUNT	226	Thou/mm <sup>3</sup>	150 - 410
ESR (WINTROBE)	05	mm/1st hr.	0 - 10

### BLOOD GROUP

Test	Result	Unit	BRI/Range Value
BLOOD GROUP ABO	A		
RH TYPING	POSITIVE		

### BIOCHEMISTRY ROUTINE

Test	Result	Unit	BRI/Range Value
BLOOD SUGAR RANDOM	97	mg/dl	70 - 140

Normal < 140

Sr Lab Technician

Cons Pathologist  
MBBS, MD



NVTASE

Sr No :17998      Advised Date :28/11/2023 01:41:08 PM  
Name :Mr. BHARAT GOND      Patient Code :PH0004391607  
Age :45 (Y)      Referred By :Dr. POONAM DESSAI  
Gender :Male      Medical Facility :

Diabetes Mellitus :  $\geq 200$   
(on more than one occasion)

BLOOD UREA	20	mg/dl	13 - 45
SERUM CREATININE	0.9	mg/dl	0.7 - 1.4
SGPT (ALT)	26	U/L	< 45
SGOT (AST)	29	U/L	< 40

### LIPID PROFILE

Test	Result	Unit	BRI/Range Value
TOTAL CHOLESTEROL	130	mg/dl	0 - 200
TRIGLYCERIDES	98	mg/dl	0 - 150
HDL CHOLESTEROL	46	mg/dl	> 40
LDL CHOLESTEROL	64.40	mg/dl	< 100
VLDL	19.60	mg/dl	< 30
TOTAL / HDL CHOLESTEROL RATIO	2.83		0 - 4.97
LDL / HDL CHOLESTEROL RATIO	1.40		0 - 3.88

### BILIRUBIN PROFILE

Test	Result	Unit	BRI/Range Value
TOTAL BILIRUBIN	0.9	mg/dl	0.3 - 1.2
DIRECT BILIRUBIN	0.1	mg/dl	0.0 - 0.2
INDIRECT BILIRUBIN	0.80	mg/dl	< 1.1

### URINE ROUTINE EXAMINATION

Test	Result	Unit	BRI/Range Value
------	--------	------	-----------------

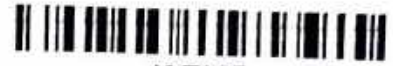
URINE ROUTINE EXAMINATION  
PHYSICAL EXAMINATION

Sr Lab Technician

Cons Pathologist  
MBBS, MD

# MOLU DIAGNOSTICS

Towards Precision Healthcare



NVTASE

Sr No	:17998	Advised Date	:28/11/2023 01:41:08 PM
Name	:Mr. BHARAT GOND	Patient Code	:PH0004391607
Age	:45 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

COLOUR	YELLOW	
TRANSPARENCY	CLEAR	
<b>CHEMICAL EXAMINATION</b>		
PH	6	4.7 - 7.5
SPECIFIC GRAVITY	1.030	
URINE SUGAR	NIL	
URINE PROTEIN	NIL	
URINE BILIRUBIN	NIL	
URINE KETONE BODIES	NEGATIVE	
UROBILINOGEN	NORMAL	
BLOOD	NIL	
LEUCOCYTE	NEGATIVE	
NITRATE	NEGATIVE	
<b>MICROSCOPIC EXAMINATION</b>		
PUS CELLS	2-3	/hpf
EPITHELIAL CELLS	1-2	/hpf
RBC	NIL	
CRYSTALS	NIL	
CASTS	NIL	
BACTERIA	NOT SEEN	
YEAST BUDDING CELLS	NOT SEEN	
OTHERS	NIL	

## X-RAY CHEST

### X-RAY CHEST PA VIEW

Lung fields do not reveal any active parenchymal pathology.

Both hilar shadows appear normal.

Cardiac size and silhouette appear normal.

Both costophrenic angles are normal.

Sr Lab Technician

Cons Pathologist  
MBBS, MD

Shop No. 2, New market complex, Phase II, Below Community Hall, Cuncolim, Salcete, Goa. 403703.

Ph.: +91(832)-2763747 Mob./Whatsapp : 8208683305 Email : moludiagnosics@gmail.com Website : www.moludiagnosicsgoa.com

Contd.

Page 3 of 4



N/TASE

Sr No	:17998	Advised Date	:28/11/2023 01:41:08 PM
Name	:Mr. BHARAT GOND	Patient Code	:PH0004391607
Age	:45 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

Soft tissues and bones underview appear normal.

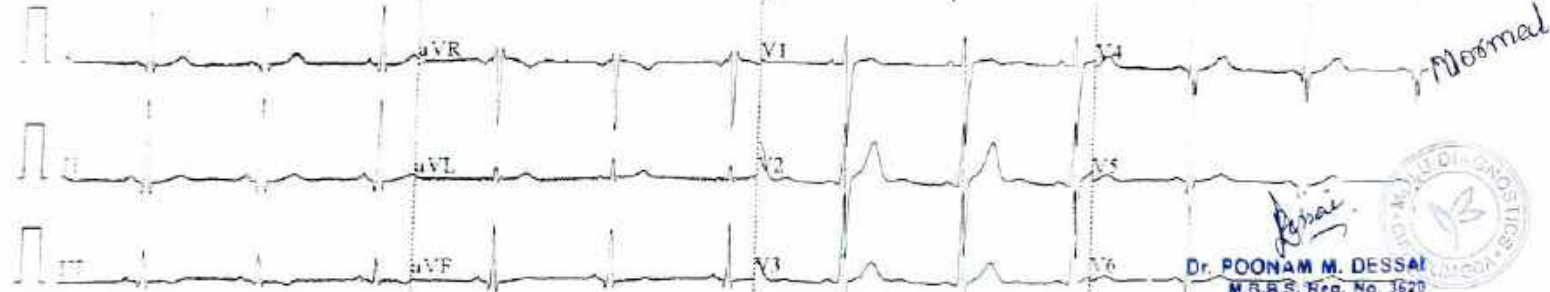
\*\*\*End of Report\*\*\*

**DR. CHARUDUTT SAMBHAJI**  
MBBS, M.D. (RADIOLOGIST)  
G.M.C. Reg. No. 1683  
CONSULTANT INTERVENTIONAL RADIOLOGIST

Sr Lab Technician

Cons Pathologist  
MBBS, MD

Bharat Gond 45yr



100Hz AC50 25mm/s 10mm/mV ♡70 VLD SEMIP V17 MOLTU DIAGNOSTICS

*Poonam*  
**Dr. POONAM M. DESSAI**  
 M.B.B.S. Reg. No. 3620  
 AFH Reg. No. 02198  
 Occupational Health Physician






# MOLU DIAGNOSTICS

TOWARDS PRECISION HEALTHCARE



## AUDIOLOGICAL EVALUATION REPORT

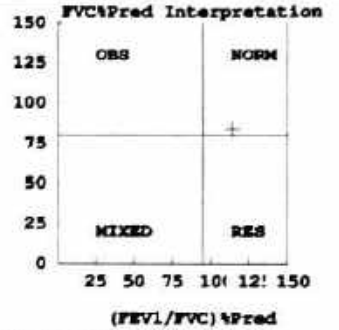
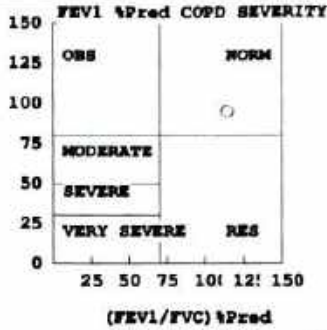
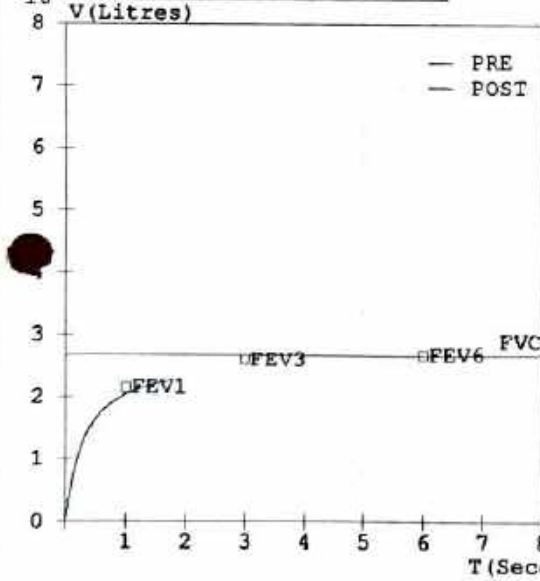
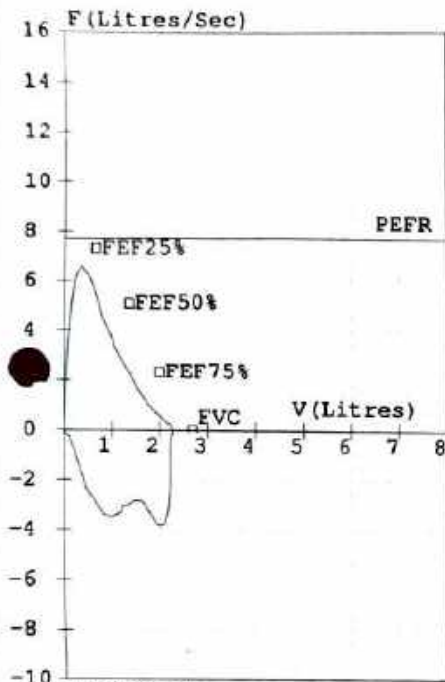
Name	BHARAT GOND			ID									
Age	45	Gender	MALE	Date	28-11-2023								
Designation													
Impression	WITHIN NORMAL LIMIT												
	RIGHT					LEFT							
					-10								
					0								
					10								
					20								
					30								
					40								
					50								
					60								
					70								
					80								
					90								
					100								
					110								
					120								
	125	250	500	1000		125	250	500	1000	2000	4000	6000	8000
	Test frequency in Hz												
Air	X= Left ear		O = Right ear			Bone		> = left ear		< = right ear			
	 Audiologist												

# MOLU DIAGNOSTICS

Shop No. 10/2, New Municipal Market Complex, Phase II, Cuncolim, Salcette - Goa.

Patient: BHARAT GOND  
 Refd. By:  
 Pred.Eqns: RECORDERS  
 Date : 28-Nov-2023 01:05 PM

Age : 45 Years Gender : Male  
 Height : 156 Cms Smoker : No  
 Weight : 59 Kgs Eth. Corr: 100  
 ID: 25 Temp :



### Spirometry (FVC Results)

Parameter	Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC (L)	02.68	02.25	084	---	---	---
FEV1 (L)	02.16	02.06	095	---	---	---
FEV1/FVC (%)	80.60	91.56	114	---	---	---
FEF25-75 (L/s)	03.45	02.62	076	---	---	---
PEFR (L/s)	07.68	06.49	085	---	---	---
FIVC (L)	---	02.26	---	---	---	---
FEV.5 (L)	---	01.67	---	---	---	---
FEV3 (L)	02.60	02.25	087	---	---	---
PIFR (L/s)	---	03.81	---	---	---	---
FEF75-85 (L/s)	---	00.92	---	---	---	---
FEF.2-1.2 (L/s)	05.84	04.53	078	---	---	---
FEF 25% (L/s)	07.29	05.88	081	---	---	---
FEF 50% (L/s)	05.11	03.00	059	---	---	---
FEF 75% (L/s)	02.32	01.21	052	---	---	---
FEV.5/FVC (%)	---	74.22	---	---	---	---
FEV3/FVC (%)	97.01	100.00	103	---	---	---
FET (Sec)	---	01.71	---	---	---	---
ExpTime (Sec)	---	00.05	---	---	---	---
Lung Age (Yrs)	045	047	104	---	---	---
FEV6 (L)	02.68	---	---	---	---	---
FIF25% (L/s)	---	03.02	---	---	---	---
FIF50% (L/s)	---	03.28	---	---	---	---
FIF75% (L/s)	---	02.63	---	---	---	---

Pre Test COPD Severity  
 Test within normal limits

Pre Medication Report Indicates  
 Spirometry within normal limits as (FEV1/FVC)%Pred >95 and FVC%Pred >80.





## **DIVINE MEDICAL CENTRE**

51, 52 & 55, Kamat Commercial, Above Women's Look,  
Martires Dias Road, Near Hari Mandir, Margao, Salcete, Goa - 403 601.  
Ph.: 2711140 E-mail : medicalsdivine@yahoo.com



22<sup>nd</sup> DECEMBER 2023

### **TO WHOMSO EVER IT MAY CONCERN**

This is to certify that I, Dr. Phillip Mascarenhas, have performed Pre Employment Medical examination for MALCO ENERGY LTD of MR. AJAY ANIL VELIP ,21 Years Male on 22<sup>nd</sup> DECEMBER 2023 according to Factories Act 1984.

The Employee is Fit for work.



  
**Dr. Phillip Mascarenhas**  
MBBS, DNB (Med), AFH  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 1498  
DGFASLI Reg. No: 1097  
Margao - Goa

[See rules 19(7) and 60N and Schedules III, IV, VIII, X, XIV, XVI, XX, XXI, XXIII, XXV, XXVII to rule 13(1)]

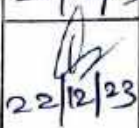
FORM No. 7

HEALTH REGISTER

1. Serial number in the register of adult workers  
2. Name of worker

Aljay A. Velip

3. Sex: Male  
4. Date of birth: 24-06-2002

1	Department/works	
2	Name of hazardous process	
3	Dangerous process/operation	
	Nature of job of occupation	Boiler operator & Trainee
5	Raw materials, products or by-products likely to be exposed to	
6	Date of posting	
7	Date of leaving/transfer to other work	
8	Reasons for discharge/leaving or transfer	
9	Date	22/12/23
10	Signs and symptoms observed during examination	No signs & symp observed during exam
11	Nature of tests and results thereof	Lab, ECG, Exam, And Spine X-ray
12	Result fit/unfit	Fit
13	Period of temp withdrawal from that work	
14	Reasons for such withdrawal	
15	Date of declaring him unfit for that work	
16	Date of Issuing fitness certificate	22/12/23
17	Signature with the date of the factory Medical Officer/the Certifying Surgeon	 22/12/23

Notes:- (1) Separate page should be maintained for individual worker (2) Fresh entry should be made for each examination.

**Dr. Phillip Mascarenhas**  
 MBB6, DNB (Med), AFIH  
 Occupation Health Physician  
 DIVINE MEDICAL CENTRE, GMC Reg. No. 1498  
 DGFASLI Reg. No: 1097  
 Margao - Goa



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## PRE-EMPLOYMENT MEDICAL EXAMINATION

Record No.

1. Name: <b>AJAY VELIP</b>	2. Date: <b>22-12-2023</b>
3. Address:	4. Occupation: <b>BOILER OPERATOR TRAINEE</b>
5. Establishment: <b>MALCO ENERGY LTD</b>	6. SEX: Male /Female
5. Age: <b>21 YRS</b>	
<u>PERSONAL HISTORY</u>	
A. 1. Smoking : <b>No</b>	2. Alcohol: <b>No</b>
3. Drug Addiction : <b>No</b>	4. Tobacco chewing: <b>No</b>
B. MARITAL STATUS : Single /Married	Identification Mark: <b>BIRTH MARK ON LEFT HAND</b>

B. PERSONAL HISTORY & FAMILY HISTORY: **NIL**

C. TREATMENT HISTORY:

D. PAST HISTORY:

DISEASE	FATHER	MOTHER	OTHERS
1. Heart Disease/Hypertension	-	-	-
2. Diabetes Mellitus	-	-	-
3. Tuberculosis	-	-	-
4. Bronchial Asthma/COPD	-	-	-
5. Epilepsy	-	-	-
6. Arthritis	-	-	-
7. Cancer	-	-	-
8. Kidney Disorder	-	-	-
9. Liver Disease	-	-	-
10. Skin Disease	-	-	-
11. Allergies	-	-	-
12. Accidents / injuries	-	-	-
13. Surgeries	-	-	-





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## CLINICAL EXAMINATION REPORT

<b>1. General Appearance:</b> Height : <b>173</b> cms Weight : <b>63</b> Kg Waist : <b>93</b> cms Hip : <b>98</b> cms Height in CM-100= <b>73</b> Weight in KG= <b>63</b>		Teeth : <b>No caries</b> Chest : <b>88 / 85</b> cms BMI : <b>21 Kg/m2</b> Build : <b>Normal</b>
<b>2. Skin : Healthy and clean, No infection</b>		Nail: <b>Normal</b>
<b>3. Eyes</b> Conjunctiva : <b>Normal</b> Pupil <b>Normal</b>		Cornea : <b>Normal</b> Phorias : <b>Normal</b>
<b>4. Ears</b> Auditory Canal : <b>Normal</b> Hearing : <b>Normal</b>		Ear Drums: <b>Normal</b>
<b>5. Nose</b> Septum : <b>Normal</b>		Nostril: <b>Normal</b>
<b>6. Mouth</b> Tongue : <b>Normal</b> Palate : <b>Normal</b> Speech : <b>Normal</b>		Tonsils : <b>Normal</b> Teeth : <b>No caries</b> Pharynx : <b>Normal</b>
<b>7. Lymphatic &amp; Endocrine</b> Lymph. Nodes : <b>Normal</b>		Thyroid: <b>Normal</b>
<b>8. Respiratory System</b> Chest : <b>Normal</b> Chest Exp/Ins : <b>Normal</b> Crepitations : <b>No</b> Respiratory Rate : <b>17</b>		Sound : <b>Normal</b> Shape : <b>Normal</b> Ronchi : <b>No</b>
<b>9. Cardiovascular System</b> Pulse : <b>70</b> /min Rhythm : <b>REGULAR</b> Thrills : <b>Absent</b> Murmurs : <b>Absent</b>		Blood Pressure : <b>120/80</b> mm Hg Heart sounds : <b>Normal</b> Peri Vessels : <b>Normal</b> Heart Size : <b>Normal</b>





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<b>10. Abdomen</b>	
Kidney : <b>Not palpable</b>	Liver : <b>Not palpable</b>
Spleen : <b>Not palpable</b>	Any lump/Masses: <b>Not palpable</b>
<b>11. Genito- Urinary</b>	
Inguninal Hernia : <b>Nil</b>	Ext. Genitalia : <b>Nil</b>
Hydrocele : <b>Nil</b>	Discharge /V.D : <b>Nil</b>
Phimosis: <b>Nil</b>	
<b>12. Musculoskeletal</b>	
Posture: <b>Normal</b>	Spines: <b>Normal</b>
Bones : <b>Normal</b>	Joints : <b>Normal</b>
<b>13. Nervous System</b>	
Cranial Nerves : <b>Normal</b>	Motor System: <b>Normal</b>
Sensory System : <b>Normal</b>	Reflexes : <b>Normal</b>
Special observation, if any or Evidence of any operation : <b>No deformity, Injury or accident</b>	

<b>TITMUS VISION TESTING :</b>	
Corrected : <b>NA</b>	Uncorrected: <b>6/6</b>
Near Vision : <b>N-6</b>	Colour blindness: <b>No</b>
Far Vision : Right Eye- <b>6/6</b>	Field of Vision: <b>Normal</b>
Left eye- <b>6/6</b>	
Bilateral- <b>Normal</b>	
Phorias : <b>No</b>	Stereo Depth <b>Normal</b>





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## LABORATORY TESTS REPORT

I. Blood Group :RH - **O +ve**

### II. Routine Blood Report

1. HAEMOGLOBIN: <b>15.9</b>	(M(13-18.0) F(12-16)g/d)
2.RBC : <b>5.0</b>	(4.5-5.7million/cu.mm)
3. Total W.B.C : <b>7900</b>	(4,000-11000/cu.mm)
4.DIFFERENTIAL COUNT (D.C)Neutrphil/Polymorphs : <b>60 %</b>	(N.40-75%)
Lymphocytes : <b>36 %</b>	(N. 16-45%)
Eosinophils : <b>04 %</b>	(N. 0-5%)
Monocyte : <b>00 %</b>	(N. 0-5%)
Basophils : <b>00 %</b>	(N.0-2%)

5. ESR **04** mm/hr

### III. BIOCHEMICAL TESTS :

Blood Glucose(F/R) : <b>108</b>	(N70-140mg/dl)
Total Cholesterol: <b>196</b>	(N 120-250 mg/dl)
Sr.Triglyceride : <b>148</b>	(N 40-160 mg/dl)
Sr.LDL : <b>NA</b>	(UPTO 130 mg/dl)
Sr.HDL : <b>45</b>	(N 35-55 mg/dl)
Sr.VLDL : <b>NA</b>	(N 10-40 mg/dl)
Sr.Uric acid : <b>NA</b>	(N 3.6 - 7.7 mg/dl)
Creatinine : <b>0.8</b>	(0.5-1.2 mg/dl)
Blood Urea : <b>19</b>	(10-40 mg/dl)

### IV. HORMONE TEST :

DHEA-S : <b>NA</b>	(N 238.40-539.30 ug/dL)
ESTRADIOL (E2) : <b>NA</b>	<39.0 pg/MI
TOTAL TESTOSTERONE : <b>NA</b>	(N 166.00-811 ng/dl)
PROGESTERONE : <b>NA</b>	(N 0.28-1.22 ng/dl)

### V. URINE EXAMINATION

(a) General Examination:

Quantity : <b>10 ml</b>	Appearance : <b>CLEAR</b>
Specific Gravity : <b>1.015</b>	Deposit : <b>Absent</b>
Colour : <b>PALE YELLOW</b>	Reaction: <b>6.0</b>
Odour : <b>Normal</b>	

(b) Chemical Examination

Protein : <b>ABSENT</b>	Blood <b>Absent</b>
Glucose : <b>ABSENT</b>	Bile Salts : <b>Absent</b>
Acetone : <b>Absent</b>	Bile Pigments : <b>ABSENT</b>
Urobilinogen: <b>NORMAL</b>	

(c) Microscopic Examination

Pus Cells : <b>0-1Hpf</b>	Amorphous material: <b>NII</b>
Red Blood Cells: <b>ABSENT</b>	Yeast Cells: <b>NII</b>
Epithelial Cells : <b>0-1Hpf</b>	Crystals: <b>ABSENT</b>







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**AUDIOMETRY:**  
**BILATERAL HEARING SENSITIVITY WITHIN NORMAL LIMITS**

**SPIROMETRY**  
Opinion: **NORMAL**

**CHEST X-RAY REPORT**  
Opinion : **NORMAL STUDY**

**ELECTROCARDIOGRAM**  
Opinion : **WITHIN NORMAL LIMITS**

**ULTRASOUND**  
Opinion : **NA**

**Doctors Remark :** Based on above mentioned tests **AJAY VELIP** is free from any communicable and infectious disease and is **FIT**.

**Dr. Phillip Mascarenhas**  
MBBS, DNB (Med), AFIH  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 1438  
DGFASLI Reg. No: 1097  
Margao - Goa



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Ph.: 2711140 E-mail : medicalsdvine@yahoo.com



Sr.No. : DMC2212237

Sampling Date : 22 / 12 / 2023

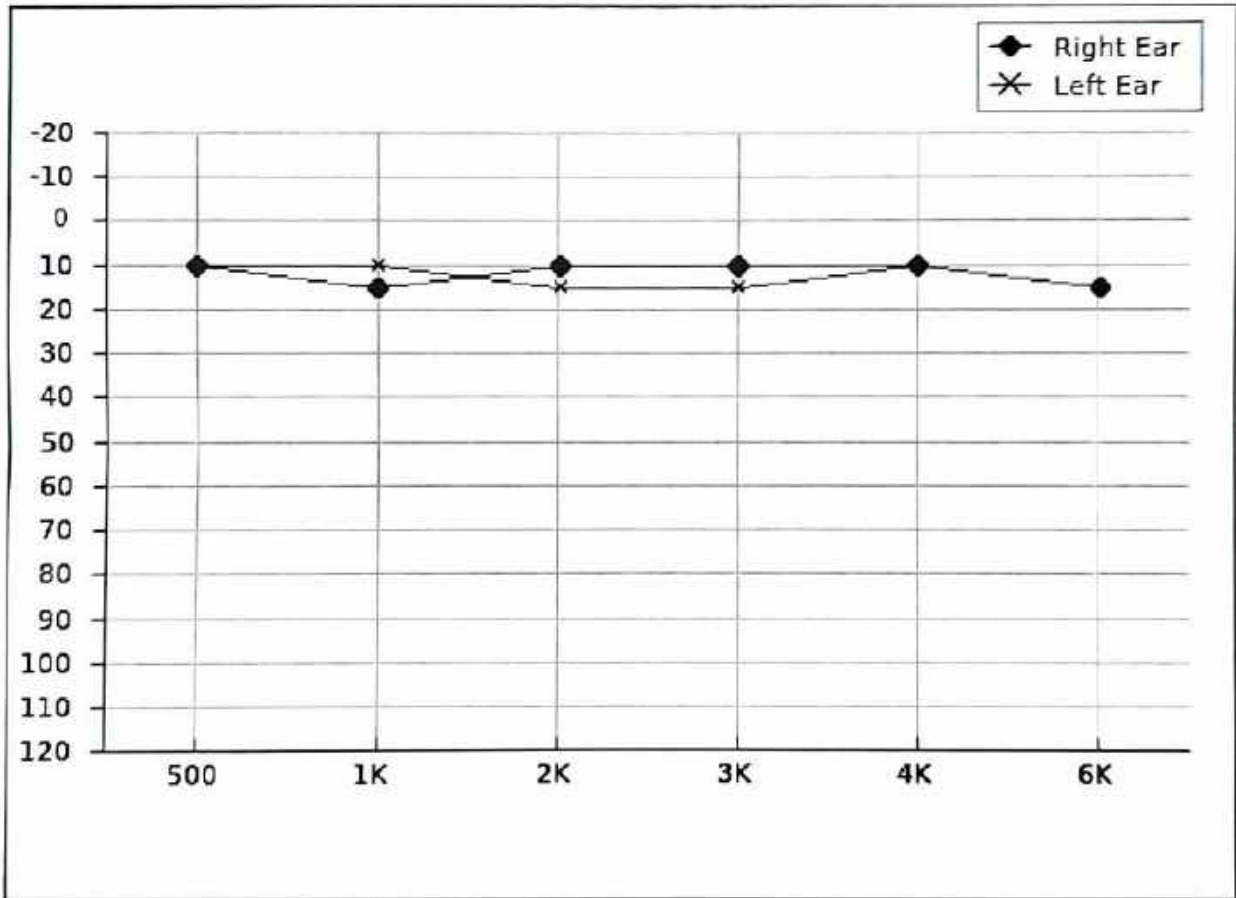
Patient Name : AJAY ANIL VELIP

Time : 08:33:00

Adv. BY. : Dr. Phillip Mascarenhas

Age / Sex: 21 / Male

Hearing Levels (dB)



Frequency in Hertz (Hz)

ACL x ACR O BCL > BCR < ACLm □ ACRm △ BCLm ] BCRm [

Interpretation:

**BILATERAL HEARING SENSITIVITY WITHIN NORMAL LIMITS** Dr. Phillip Mascarenhas

MBBS, DNB (Med), AFIH  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 145  
DGFASLI Reg. No: 1097  
Margao - Goa



DMC2212237

**DIVINE MEDICAL CENTRE  
MARGOA-GOA**

**Patient Information**

Name : **AJAY ANIL VELIP**

DATE : 22-12-23 09:18:00

AGE : 21 /M ID : 954

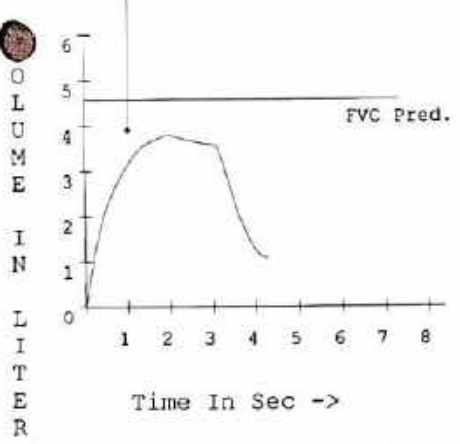
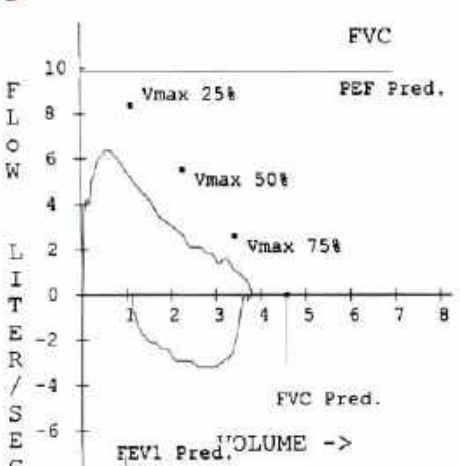
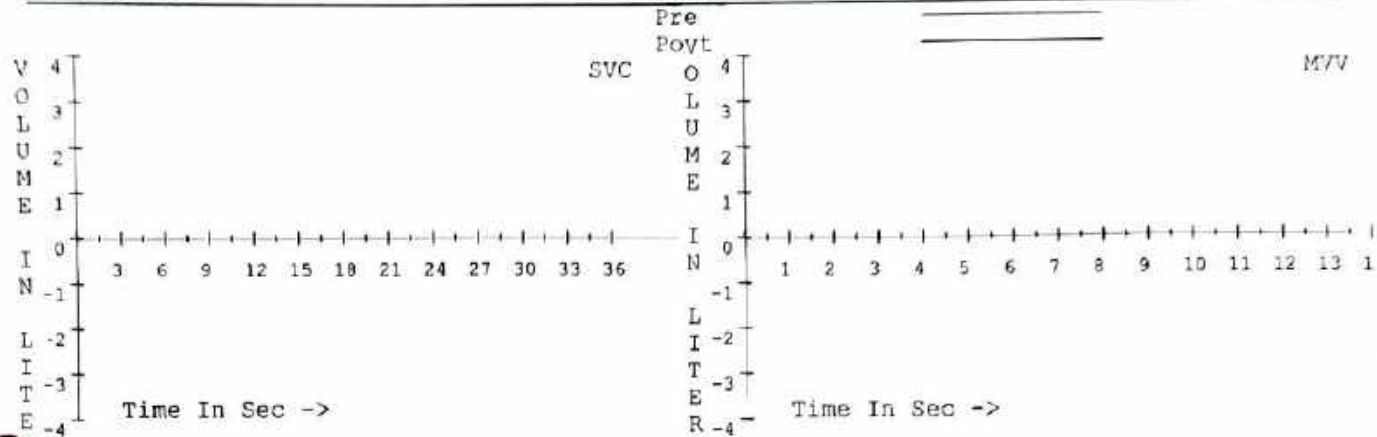
Height : 173

REF. BY : Dr.

Weight : 63

Indication:

Smoker : Non Smoker



Parameter	Pred	Pre	%Pred	Post	%Pred	Dif.%
FVC (L)	4.57	3.80	83.09			
FEV0.5 (L)		2.17				
FEV1 (L)	3.91	3.13	80.07			
FEV1/FVC %	85.45	82.35	96.37			
PEF (L/S)	9.87	6.38	64.68			
PIF (L/S)		3.19				
FEF25-75%(L/S)	5.15	2.95	57.34			
VMax25 %	8.37	5.59	66.75			
VMax50 %	5.56	3.59	64.63			
VMax75 %	2.63	1.99	75.86			
FET100 %		1.95				
SVC (L)	4.78					
ERV (L)	1.48					
IRV (L)						
Rf (BrPM)						
VT (L)						
TI (s)						
TE(s)						
VE (l/m)						
VT/TI (L/S)						
TI/T.TOT						
IC						
MVV	135.71					
FEF50 % (L/S)		2.79				
FIF50 % (L/S)		2.39				
FEF50/FIF50 %		1.17				

**Diagnosis :**

Normal Spirometry ( FVC and FEV1/FVC > 80% of Predicted value )

**Dr. Phillip Mascarenhas**

MBBS, DNB (Med), AFH  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 145  
DGFASLI Reg. No: 1097  
Margao - Goa

Dr.



# DIVINE MEDICAL CENTRE

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**Name: AJAY VELIP**

**Date: 22/12/2023**

## CHEST X-RAY ( PA VIEW)

The lung fields are clear.

Both hilar shadows are normal.

Both the costophrenic angles appear clear.

The cardiac shadow appears normal.

Bony rib cage appears normal.

Soft tissues are normal.

**OPINION: Normal study**

With regards,



*Miranda*

**Dr Franzil de Miranda**  
DMRD, M.Med, DICR, EDiR, FRCR  
Consultant Radiologist



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S1, S2 & S5, Kamat Commercial, Above Women's Look,  
Martires Dias Road, Near Hari Mandir, Margao, Salcete, Goa - 403 601.  
Ph.: 2711140 E-mail : medicalsdvine@yahoo.com



Sr.No. : DMC2212237

Sampling Date : 22 / 12 / 2023

Patient Name : AJAY ANIL VELIP


Time : 08:33:00

Adv. BY. : Dr. Phillip Mascarenhas

Age / Sex: 21 / Male

## BIOCHEMICAL INVESTIGATION

TEST	RESULT	UNITS	REFERENCE RANGE
BLOOD SUGAR (F)	: 108	mg/dl	70 - 110
TOTAL CHOLESTEROL	: 196	mg/dl	130 - 200
TRIGLYCERIDES	: 148	mg/dl	30 - 150
SERUM G.O.T	: 34	IU/L	5 - 34
SERUM G.P.T	: 36	IU/L	0 - 55
SERUM BILIRUBIN (TOTAL)	: 0.4	mg/dl	0.2 - 1.2
SERUM BILIRUBIN (DIRECT)	: 0.2	mg/dl	0 - 0.5
SERUM BILIRUBIN (INDIRECT)	: 0.2	mg/dl	0 - 0.7
BLOOD UREA	: 19	mg/dl	10 - 40
SERUM CREATININE	: 0.8	mg/dl	0.5 - 1.2

  
**Dr. Phillip Mascarenhas**  
MBBS, DNB (Med), AFIM  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 1438  
DGFASLI Reg. No: 1097  
Margao - Goa

\*L = LOW, \*H = HIGH



DMC2212237



# DIVINE MEDICAL CENTRE

S1, S2 & S5, Kamat Commercial, Above Women's Look,  
Martires Dias Road, Near Hari Mandir, Margao, Salcete, Goa - 403 601.  
Ph.: 2711140 E-mail : medicalsdivine@yahoo.com



Sr.No. : DMC2212237

Sampling Date : 22 / 12 / 2023

Patient Name : AJAY ANIL VELIP

Time : 08:33:00

Adv. BY. : Dr. Phillip Mascarenhas

Age / Sex: 21 / Male

## COMPLETE BLOOD COUNT

TEST	RESULT	UNITS	REF.RANGE
RBC	: 5.0	m/cu.mm	4.6 - 6.7
HAEMOGLOBIN (HGB)	: 15.9	g/dl	13 - 18
MEAN CORP. VOL (MCV)	: 86	fl	80 - 95
MEAN CORP. HGB (MCH)	: 31	pg	28 - 33
MEAN CORP. HGB CONC. (MCHC)	: 36	g/dl	32 - 36
PLATELETS COUNT (PLT)	: 260000	/cmm	130000 - 400000
WBC	: 7900	/cmm	4000 -11000
PCV-HCT	: 43	%	40 - 50
<b>DIFFERENTIAL COUNT</b>			
NEUTROPHILS	: 60	%	40 - 75
EOSINOPHILS	: 04	%	0 - 5
LYMPHOCYTES	: 36	%	16 - 45
MONOCYTES	: 00	%	0 - 5
BASOPHILS	: 00	%	0 - 2
E.S.R	: 04	mm/hr	0 - 10
<b>BLOOD GROUP</b>			
BLOOD GROUP	: O +ve		

  
Dr. Phillip Mascarenhas  
MBBS, DNB (Med), AFH  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 143F  
DGFASLI Reg. No: 1097  
Margao - Goa

\*L = LOW , \*H = HIGH



DMC2212237



# DIVINE MEDICAL CENTRE

S1, S2 & S5, Kamat Commercial, Above Women's Look,  
Martires Dias Road, Near Hari Mandir, Margao, Salcete, Goa - 403 601.  
Ph.: 2711140 E-mail : medicalsdivine@yahoo.com



Sr.No. : DMC2212237

Sampling Date : 22 / 12 / 2023

Patient Name : AJAY ANIL VELIP


Time : 08:33:00

Adv. BY. : Dr. Phillip Mascarenhas

Age / Sex: 21 / Male

## LIPID PROFILE

TEST	RESULT	UNITS	REFERENCE RANGE
TOTAL CHOLESTEROL	: 196	mg/dl	130 - 200
TRIGLYCERIDES	: 148	mg/dl	30 - 150
HDL CHOLESTEROL	: 45	mg/dl	40.0 - 80.0
Total CHOL/HDL CHOL Ratio	: 4.36 mg/dL	mg/dL	0 - 05

  
**Dr. Phillip Mascarenhas**  
MBBS, DNB (Med), AFH  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 145F  
DGFASLI Reg. No: 1097  
Margao - Goa

\*L = LOW, \*H = HIGH



DMC2212237



# DIVINE MEDICAL CENTRE

S1, S2 & S5, Kamat Commercial, Above Women's Look,  
Martires Dias Road, Near Hari Mandir, Margao, Salcete, Goa - 403 601.  
Ph.: 2711140 E-mail : medicalsdivine@yahoo.com



Sr.No. : DMC2212237

Sampling Date : 22 / 12 / 2023

Patient Name : AJAY ANIL VELIP


Time : 08:33:00

Adv. BY. : Dr. Phillip Mascarenhas

Age / Sex: 21 / Male

## LIVER FUNCTION TEST

TEST	RESULT	UNITS	REFERENCE RANGE
SERUM BILIRUBIN (TOTAL)	: 0.4	mg/dl	0.20 - 1.20
SERUM BILIRUBIN (DIRECT)	: 0.2	mg/dl	0 - 0.50
SERUM BILIRUBIN (INDIRECT)	: 0.2	mg/dl	0 - 0.7
SERUM G.O.T	: 34	IU/L	5 - 34
SERUM G.P.T	: 36	IU/L	0 - 55

  
Dr. Phillip Mascarenhas  
MBBS, DNS (Med), AFIP  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 1458  
DGFASLI Reg. No: 1097  
Margao - Goa





# DIVINE MEDICAL CENTRE

S1, S2 & S5, Kamat Commercial, Above Women's Look,  
Martires Dias Road, Near Hari Mandir, Margao, Salcete, Goa - 403 601.  
Ph.: 2711140 E-mail : medicalsdvine@yahoo.com



Sr.No. : DMC2212237

Sampling Date : 22 / 12 / 2023

Patient Name : AJAY ANIL VELIP

Time : 08:33:00

Adv. BY. : Dr. Phillip Mascarenhas

Age / Sex: 21 / Male

## EXAMINATION OF URINE

### PHYSICAL EXAMINATION


VOLUME	: 10 ml	APPEARANCE	: CLEAR
COLOUR	: PALE YELLOW	SP. GRAVITY	: 1.015

### CHEMICAL EXAMINATION

PH	: 6.0	GLUCOSE	: ABSENT
KETONES	: ABSENT	OCCULT BLOOD	: ABSENT
BILIRUBIN	: ABSENT	UROBILINOGEN	: NORMAL
PROTEIN	: ABSENT	NITRITE	: ABSENT
BILE SALTS	: ABSENT		

### MICROSCOPIC EXAMINATION

CRYSTALS	: ABSENT	CASTS	: ABSENT
LEUCOCYTES	: ABSENT	ERYTHROCYTES	: ABSENT
EPITHELIAL CELLS	: 0-1Hpf Hpf	BACTERIA	: ABSENT
PARASITES	: ABSENT	PUS CELLS	: 0-1Hpf

  
**Dr. Phillip Mascarenhas**  
MBBS, DNB (Med), AFM  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No 1458  
DGFASLI Reg. No: 1097  
Margao - Goa



DMC2212237




# DIVINE MEDICAL CENTRE

S1, S2 & S5, Kamat Commercial, Above Women's Lock,  
Near Old Hari Mandir, Margao, Salcete - Goa 403 601 Tel.: 0832-2711140  
email : medicaledivine@yahoo.com, www.divinemedicalcentre.in  
Time : 7.30 a.m. to 6.00 p.m.

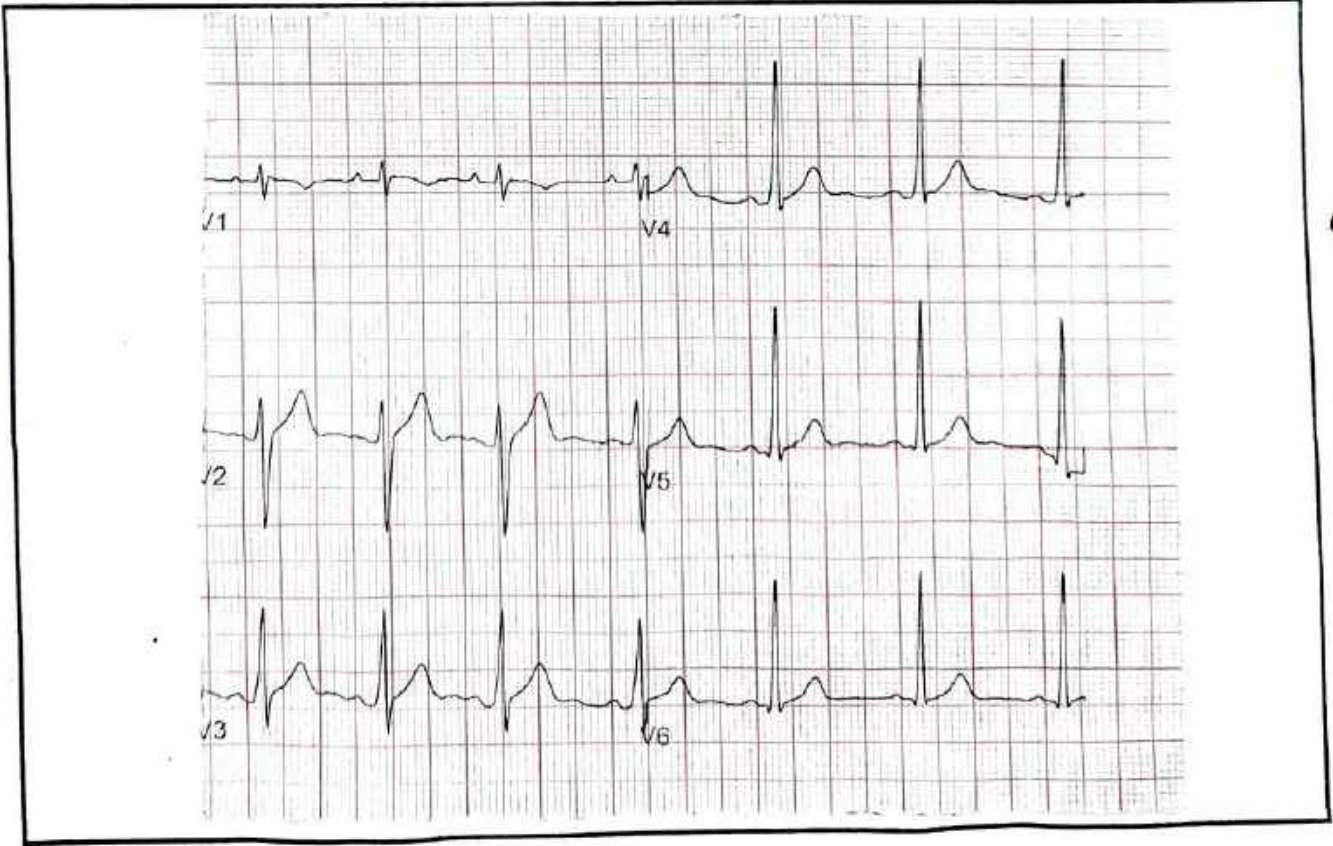
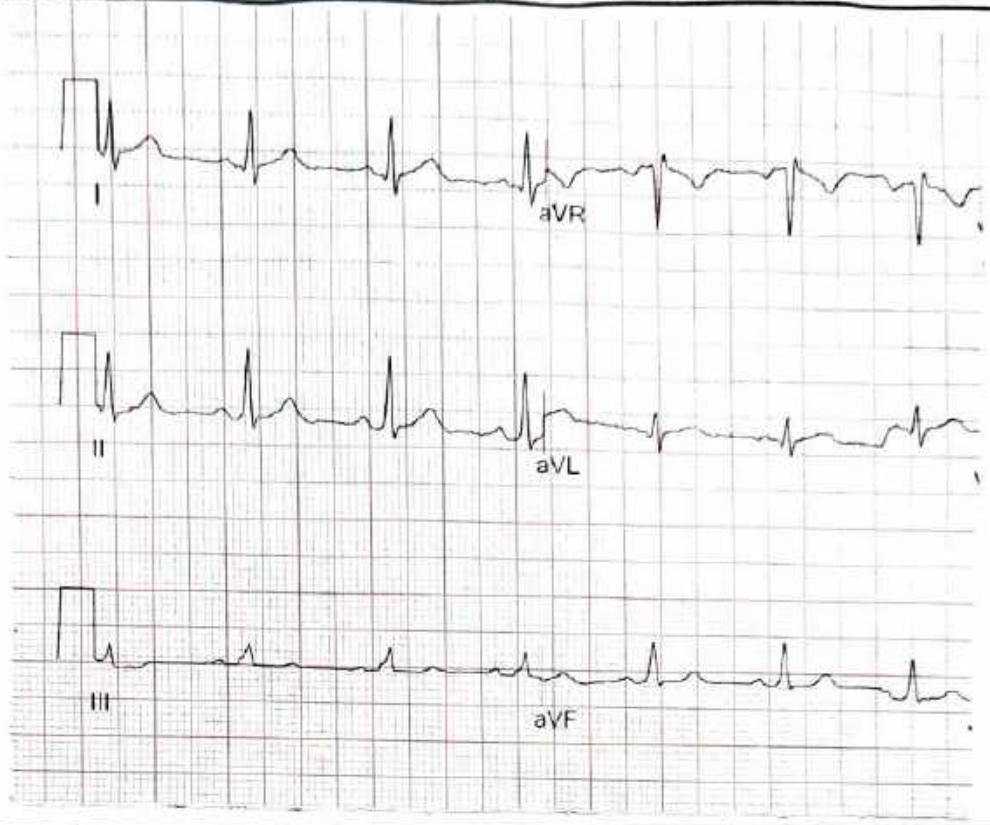
## ELECTROCARDIOGRAM

REFERRED BY	NAME :- Ajay . A . Velip	DATE :- 22/12/13
	AGE :- 21 yrs	SEX :- Male
	HISTORY :- No significant Past History	
	CLINICAL FINDINGS :- No Clinical findings	

REMARKS :-  
within Normal Limits

  
**Dr. Phillip Mascarenhas**  
MBBS, DNB (Med), AFIM  
Occupation Health Physician  
DIVINE MEDICAL CENTRE, GMC Reg. No. 1406  
DGFASLI Reg. No: 1097  
Margao - Goa

RATE :- 80bpm	RHYTHM :- Sinus
AXIS :- Normal	P.WAVE :- 106ms
QRS :- 92ms	P. R. INTERVAL :- 156ms
ST. SEGMENT :- Normal	Q. R. INTERVAL :- Normal
T WAVE :- Normal	





Dated: 03<sup>rd</sup> January 2024

2038

## CERTIFICATE

This is to certify that I have conducted medical check-up of **Mr. MANISH SAHU** of **M/S Monomark Engineering (1) Pvt.Ltd. situated at Cuncolim Industrial estate, Goa**

This medical check-up was conducted as per the requirement of Inspectorate of Factories and Boilers, Panaji Goa under rule 19A.

Form No. 7 along with the result of the tests have been handed over to the **M/S Monomark Engineering (1) Pvt.Ltd.Situated at Cuncolim Industrial estate, Goa**

**He is found to be fit.**

**Dr. POONAM M. DESSAI**  
M.B.B.S. Reg. No. 3620  
AFIH Reg. No. 02198  
Occupational Health Physician

Reviewed on 09/01/2024


**HEALTH REGISTER**1. Serial No. in the register :  
Of adult worker

126

3. Sex : Male

2. Name of worker: Manish Sahu

4. D.O.B Age: 26 yrs

	1	Department/works	
	2	Name of hazardous process	
	3	Dangerous process/operation	
	4	Nature of job of occupation	
	5	Raw materials, products or by-products likely to be exposed to	
	6	Date of posting	
	7	Date of leaving/transfer to other work	
	8	Reasons for discharge/leaving or transfer	
03/01/2024	9	Date	If declared unfit for work Medical examination and the result thereof
NIL	10	Signs and symptoms observed during examination	
Complete blood count, Blood Group, Blood sugar level, Blood Urea, Serum Creatinine, Lipid Profile, Bilirubin Profile, SGPT, SGOT, Urine analysis, ECG, Chest -X-ray, Audiometry, Vision Testing, Physical Examination Spirometry	11	Nature of tests and results thereof	
FIT	12	Result fit/unfit	
	13	Period of temp withdrawal from that work	
	14	Reasons for such withdrawal	
	15	Date of declaring him unfit for that work	
03/01/2024	16	Date of issuing fitness certificate	
	17	Signature with the date of the factory Medical Officer / the Certifying Surgeon	

Notes :- 1. Separate page should be maintained for individual worker 2. Fresh entry should be made for each examination

Dr. POONAM M. DESAI  
M.B.B.S. Reg. No. 2620  
AFTM Reg. No. 02104  
DCCOCH/AM/1/1/2024

Reviewed on

# Molu Diagnostics & Occupational Health Service

Shop No. 10/2. Ground Floor, Cuncolim Market Complex, Below Cuncolim  
Municipal Hall, Cuncolim Salcete Goa. Mob. 7350188225

**Name: MANISH SAHU**

**Age: 26 yrs**

**Sex: MALE**

**Address: Malco energy**

**Identification marks: Mole over the neck**

**Personal History:**

- |                       |                         |
|-----------------------|-------------------------|
| 1. Smoking: No        | 2. Alcohol: No          |
| 3. Drug addiction: No | 4. Tobacco Chewing : No |
| 5. Gambling: No       | 6. Nutrition: Normal    |

**Marital Status: Married**

**Children: 0**

**Family planning: Temporary method**

**Hobbies Playing Cricket**

**History of**

Frequent colds/ Sneezing	Nil	Recent loss of weight	Nil
Urinary Disturbances	Nil	Impaired hearing	Nil
Chronic cough	Nil	Ear discharge	Nil
Shortness of breath	Nil	Backache	Nil
Chest pain/ pressure	Nil	Joint pain	Nil
Allergy to drug/ chemicals	Nil	Bowel Disturbance	Nil
Frequent headaches	Nil	Epilepsy	Nil
Visual Disturbances	Nil	Swelling of legs/ feet	Nil
Vertigo	Nil	Operation	Nil
Any other	Nil		

**Details of above: Nil**

**Past History & Family History**

Disease	Self	Father	Mother	Other
1. Heart disease/ Hypertension	Nil	Nil	Nil	Nil
Diabetes	Nil	Nil	Nil	Nil
Tuberculosis	Nil	Nil	Nil	Nil
Bronchial Asthma	Nil	Nil	Nil	Nil
Epilepsy	Nil	Nil	Nil	Nil
Arthritis/Rheumatism	Nil	Nil	Nil	Nil
Cancer	Nil	Nil	Nil	Nil
Kidney Disorder	Nil	Nil	Nil	Nil
Liver Disease	Nil	Nil	Nil	Nil
Skin Diseases	Nil	Nil	Nil	Nil
Allergies	Nil	Nil	Nil	Nil
Accidents	Nil	Nil	Nil	Nil
Any other	Nil	Nil	Nil	Nil



BFSYFA

Sr No :18696      Advised Date :03/01/2024 12:51:19 PM  
Name :Mr. Manish Sahu      Patient Code :PH0004433870  
Age :26 (Y)      Referred By :Dr. POONAM DESSAI  
Gender :Male      Medical Facility :

### COMPLETE BLOOD COUNT

Test	Result	Unit	BRI/Range Value
HAEMOGLOBIN (Hb)	14.2	gm/dl	13 - 17
TLC (Total Leucocyte Count)	8200	/cumm	4000 - 10000
<b>DIFFERENTIAL LEUCOCYTE COUNT</b>			
NEUTROPHIL	61	%	40 - 70
LYMPHOCYTES	31	%	20 - 40
EOSINOPHILS	04	%	1 - 6
MONOCYTES	03	%	2 - 10
BASOPHILS	01	%	0 - 1
RBC Count	6.3	millions/cmm	3.8 - 4.8
P.C.V. / HEMATOCRIT	43	%	40 - 50
M C V (Mean Corp Volume)	68.25	fL	83 - 101
M C H (Mean Corp Hb)	22.54	pg	27 - 32
M C H C (Mean Corp Hb Conc)	33.02	g/dL	31.5 - 34.5
PLATELET COUNT	321	Thou/mm <sup>3</sup>	150 - 410

### BLOOD GROUP

Test	Result	Unit	BRI/Range Value
BLOOD GROUP ABO	B		
RH TYPING	POSITIVE		

### BIOCHEMISTRY ROUTINE

Test	Result	Unit	BRI/Range Value
BLOOD SUGAR RANDOM	128	mg/dl	70 - 140

Sr Lab Technician

Cons Pathologist  
MBBS, MD



BFSYFA

Sr No :18696      Advised Date :03/01/2024 12:51:19 PM  
Name :Mr. Manish Sahu      Patient Code :PH0004433870  
Age :26 (Y)      Referred By :Dr. POONAM DESSAI  
Gender :Male      Medical Facility :

BLOOD UREA	20	mg/dl	13 - 45
SERUM CREATININE	0.7	mg/dl	0.7 - 1.4
SGPT (ALT)	31	U/L	< 45
SGOT (AST)	32	U/L	< 40

### BILIRUBIN PROFILE

Test	Result	Unit	BRI/Range Value
TOTAL BILIRUBIN	0.3	mg/dl	0.3 - 1.2
DIRECT BILIRUBIN	0.2	mg/dl	0.0 - 0.2
INDIRECT BILIRUBIN	0.10	mg/dl	< 1.1

### LIPID PROFILE

Test	Result	Unit	BRI/Range Value
TOTAL CHOLESTEROL	125	mg/dl	0 - 200
TRIGLYCERIDES	132	mg/dl	0 - 150
HDL CHOLESTEROL	50	mg/dl	> 40
LDL CHOLESTEROL	48.60	mg/dl	< 100
VLDL	26.40	mg/dl	< 30
TOTAL / HDL CHOLESTEROL RATIO	2.50		0 - 4.97
LDL / HDL CHOLESTEROL RATIO	0.97		0 - 3.88

### URINE ROUTINE EXAMINATION

Test	Result	Unit	BRI/Range Value
------	--------	------	-----------------

URINE ROUTINE EXAMINATION  
PHYSICAL EXAMINATION

Sr Lab Technician

Cons Pathologist  
MBBS, MD





BFSYFA

Sr No	:18696	Advised Date	:03/01/2024 12:51:19 PM
Name	:Mr. Manish Sahu	Patient Code	:PH0004433870
Age	:26 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

COLOUR	PALE YELLOW	
TRANSPARENCY	CLEAR	
<b>CHEMICAL EXAMINATION</b>		
PH	5.0	4.7 - 7.5
SPECIFIC GRAVITY	1012	
URINE SUGAR	NIL	
URINE PROTEIN	NOT DETECTED	
URINE BILIRUBIN	NIL	
URINE KETONE BODIES	NIL	
UROBILINOGEN	NORMAL	
BLOOD	NIL	
LEUCOCYTE	NEGATIVE	
NITRATE	NEGATIVE	
<b>MICROSCOPIC EXAMINATION</b>		
PUS CELLS	1-2	/hpf
EPITHELIAL CELLS	1-2	/hpf
RBC	1-2	
CRYSTALS	NIL	
CASTS	NIL	
BACTERIA	NOT SEEN	
YEAST BUDDING CELLS	NOT SEEN	

### X-RAY CHEST

#### X-RAY CHEST PA VIEW

Lung fields do not reveal any active parenchymal pathology.

Both hilar shadows appear normal.

Cardiac size and silhouette appear normal.

Both costophrenic angles are normal.

Sr Lab Technician

Cons Pathologist  
MBBS, MD

# MOLU DIAGNOSTICS

TOWARDS PRECISION HEALTHCARE



BFSYFA

Sr No	:18696	Advised Date	:03/01/2024 12:51:19 PM
Name	:Mr. Manish Sahu	Patient Code	:PH0004433870
Age	:26 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

Soft tissues and bones underview appear normal.

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

DR. CHARUDUTT  
M.B.B.S., M.D. (POSTGRADUATE)  
CONSULTANT IN RADIOLOGY  
MOLU DIAGNOSTICS

Sr Lab Technician

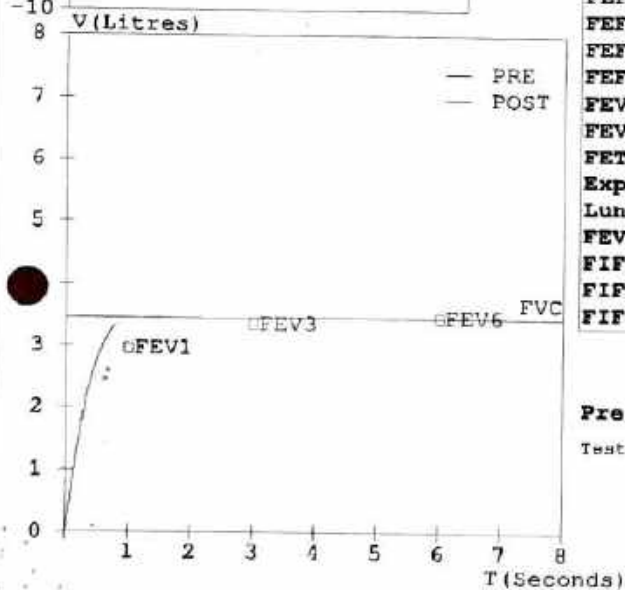
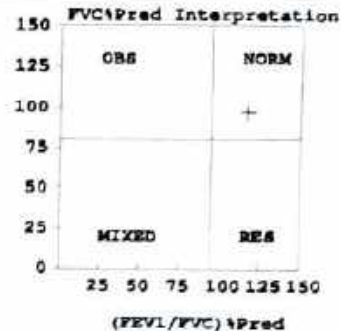
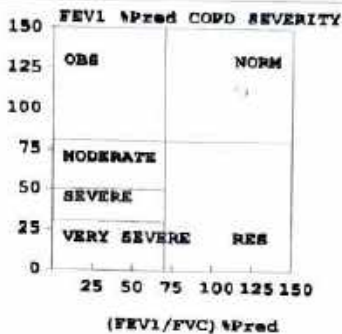
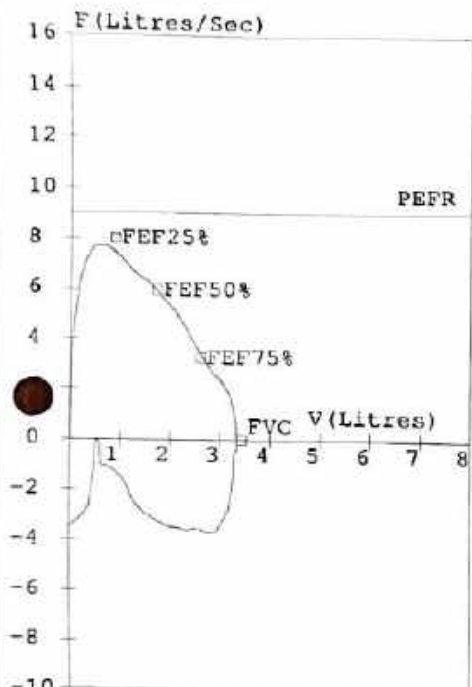
Cons Pathologist  
MBBS, MD

# MOLU DIAGNOSTICS

Shop No. 10/2, New Municipal Market Complex, Phase II, Cuncolim, Salcette - Goa.

Patient: Manish Sahu  
 Refd. By:  
 Pred. Eqns: RECORDERS  
 Date : 03-Jan-2024 11:55 AM

Age : 26 Years Gender : Male  
 Height : 166 Cms Smoker : No  
 Weight : 52 Kgs Eth. Corr: 100  
 ID: 213 Temp :



Spirometry (FVC Results)							
Parameter		Pred	M.Pre %Pred	%Pred	M.Post %Pred	%Pred	%Imp
FVC	(L)	03.45	03.33	097	-----	---	---
FEV1	(L)	02.96	03.33	112	-----	---	---
FEV1/FVC	(%)	85.80	100.00	117	-----	---	---
FEF25-75	(L/s)	04.49	05.56	124	-----	---	---
PEFR	(L/s)	09.06	07.64	084	-----	---	---
FIVC	(L)	-----	08.13	---	-----	---	---
FEV.5	(L)	-----	02.80	---	-----	---	---
FEV3	(L)	03.34	03.33	100	-----	---	---
PIFR	(L/s)	-----	04.07	---	-----	---	---
FEF75-85	(L/s)	-----	03.13	---	-----	---	---
FEF.2-1.2	(L/s)	07.64	07.21	094	-----	---	---
FEF 25%	(L/s)	08.02	07.48	093	-----	---	---
FEF 50%	(L/s)	05.94	06.00	101	-----	---	---
FEF 75%	(L/s)	03.24	03.67	113	-----	---	---
FEV.5/FVC	(%)	-----	84.08	---	-----	---	---
FEV3/FVC	(%)	-----	96.81	100.00	103	-----	---
FET	(Sec)	-----	00.82	---	-----	---	---
ExplTime	(Sec)	-----	00.07	---	-----	---	---
Lung Age	(Yrs)	026	023	088	-----	---	---
FEV6	(L)	03.45	-----	---	-----	---	---
FIF25%	(L/s)	-----	04.02	---	-----	---	---
FIF50%	(L/s)	-----	00.00	---	-----	---	---
FIF75%	(L/s)	-----	00.00	---	-----	---	---

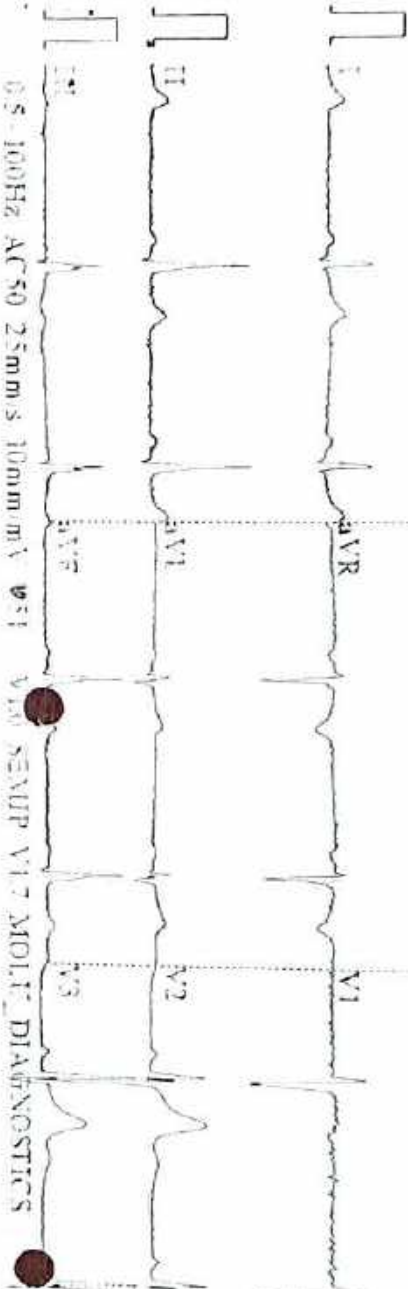
**Pre Test COPD Severity**  
 Test within normal limits

Pre Medication Report Indicates  
 Spirometry within normal limits as (FEV1/FVC)%Pred >95 and FVC%Pred >80.

Walso

ID: 2194 03-01-2024 12:09:58

Mawick Sabur 26 yrs



**DR. POONAM M. DESAI**

B.S. Reg. No. 12345

AFH Reg. No. 67890

International Heart Institute

*[Handwritten Signature]*



*[Handwritten Note]*





2132

Dated: 05<sup>th</sup> February 2024

## CERTIFICATE

This is to certify that I have conducted medical check-up of **Mr. BHUPENDRA BHARTIYA** of **M/S Monomark Engineering ( 1 ) Pvt.Ltd. situated at Cuncolim Industrial estate, Goa**

This medical check-up was conducted as per the requirement of Inspectorate of Factories and Boilers, Panaji Goa under rule 19A.

Form No. 7 along with the result of the tests have been handed over to the **M/S Monomark Engineering ( 1 ) Pvt.Ltd.Situated at Cuncolim Industrial estate, Goa**

**He is found to be fit.**

**Dr. POONAM M. DESSAI**  
M.B.B.S. Reg. No. 3520  
APM Reg. No. 02158  
Occupational Health Physician

Reviewed on 12/02/2024

### HEALTH REGISTER

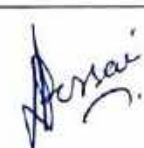
1. Serial No. in the register : 217.  
Of adult worker

3. Sex : Male

2. Name of worker: Bhupendra Bhartiya

4. D.O.B Age: 23 yrs

Notes :- 1. Separate page should be maintained for individual worker 2. Fresh entry should be made for each examination

	1	Department/works	Medical examination and the result thereof If declared unfit for work
	2	Name of hazardous process	
	3	Dangerous process/operation	
	4	Nature of job of occupation	
	5	Raw materials, products or by-products likely to be exposed to	
	6	Date of posting	
	7	Date of leaving/transfer to other work	
	8	Reasons for discharge/leaving or transfer	
05/02/2024	9	Date	
NIL	10	Signs and symptoms observed during examination	
Complete blood count, Blood Group, Blood sugar level, Blood Urea, Serum Creatinine, Lipid Profile, Bilirubin Profile, SGPT, SGOT, Urine analysis, ECG, Chest - X-ray, Audiometry, Vision Testing, Physical Examination Spirometry	11	Nature of tests and results thereof	
FIT	12	Result fit/unfit	
	13	Period of temp withdrawal from that work	
	14	Reasons for such withdrawal	
	15	Date of declaring him unfit for that work	
05/02/2024	16	Date of issuing fitness certificate	
	17	Signature with the date of the factory Medical Officer / the Certifying Surgeon	

Dr. POONAM M. DESSAI  
M.B.B.S. Reg. No. 3613  
AFIH Reg. No. 02128  
Occupational Health Physician

Reviewed on 13/02/2024



# Molu Diagnostics & Occupational Health Service

Shop No. 10/2, Ground Floor, Cuncolim Market Complex, Below Cuncolim  
Municipal Hall, Cuncolim Salcete Goa. Mob. 7350188225

Name; BHUPENDRA BHARTIYA

Age: 23 yrs

Sex: MALE

Address: Malco energy

Identification marks: Mole over the right chick

Personal History:

- |                       |                         |
|-----------------------|-------------------------|
| 1. Smoking: No        | 2. Alcohol: No          |
| 3. Drug addiction: No | 4. Tobacco Chewing : No |
| 5. Gambling: No       | 6. Nutrition: Normal    |

Marital Status: Married

Children: 0

Family planning: Temporary method

Hobbies Playing Football

History of

Frequent colds/ Sneezing	Nil	Recent loss of weight	Nil
Urinary Disturbances	Nil	Impaired hearing	Nil
Chronic cough	Nil	Ear discharge	Nil
Shortness of breath	Nil	Backache	Nil
Chest pain/ pressure	Nil	Joint pain	Nil
Allergy to drug/ chemicals	Nil	Bowel Disturbance	Nil
Frequent headaches	Nil	Epilepsy	Nil
Visual Disturbances	Nil	Swelling of legs/ feet	Nil
Vertigo	Nil	Operation	Nil
Any other	Nil		

Details of above: Nil

Past History & Family History

Disease	Self	Father	Mother	Other
1. Heart disease/ Hypertension	Nil	Nil	Nil	Nil
Diabetes	Nil	Nil	Nil	Nil
Tuberculosis	Nil	Nil	Nil	Nil
Bronchial Asthma	Nil	Nil	Nil	Nil
Epilepsy	Nil	Nil	Nil	Nil
Arthritis/Rheumatism	Nil	Nil	Nil	Nil
Cancer	Nil	Nil	Nil	Nil
Kidney Disorder	Nil	Nil	Nil	Nil
Liver Disease	Nil	Nil	Nil	Nil
Skin Diseases	Nil	Nil	Nil	Nil
Allergies	Nil	Nil	Nil	Nil
Accidents	Nil	Nil	Nil	Nil
Any other	Nil	Nil	Nil	Nil





9COM8M

Sr No	:19118	Advised Date	:05/02/2024 03:34:12 PM
Name	:Mr. Bhupendra Bhartiya	Patient Code	:PH0004473496
Age	:23 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

### COMPLETE BLOOD COUNT

Test	Result	Unit	BRI/Range Value
HAEMOGLOBIN (Hb)	15.1	gm/dl	13 - 17
TLC (Total Leucocyte Count)	9800	/cumm	4000 - 10000
<b>DIFFERENTIAL LEUCOCYTE COUNT</b>			
NEUTROPHIL	60	%	40 - 70
LYMPHOCYTES	31	%	20 - 40
EOSINOPHILS	02	%	1 - 6
MONOCYTES	06	%	2 - 10
BASOPHILS	01	%	0 - 1
RBC Count	5.0	millions/cmm	3.8 - 4.8
P.C.V. / HEMATOCRIT	45	%	40 - 50
M C V (Mean Corp Volume)	91	fL	83 - 101
M C H (Mean Corp Hb)	30	pg	27 - 32
M C H C (Mean Corp Hb Conc)	33	g/dL	31.5 - 34.5
PLATELET COUNT	333	Thou/mm <sup>3</sup>	150 - 410

### BLOOD GROUP

Test	Result	Unit	BRI/Range Value
BLOOD GROUP ABO	O		
RH TYPING	POSITIVE		

### BIOCHEMISTRY ROUTINE

Test	Result	Unit	BRI/Range Value
BLOOD SUGAR RANDOM	132	mg/dl	70 - 140

Sr Lab Technician

Cons Pathologist  
MBBS, MD



9COM8M

Sr No	:19118	Advised Date	:05/02/2024 03:34:12 PM
Name	:Mr. Bhupendra Bhartiya	Patient Code	:PH0004473496
Age	:23 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

BLOOD UREA	28	mg/dl	13 - 45
SERUM CREATININE	0.7	mg/dl	0.7 - 1.4
SGPT (ALT)	32	U/L	< 45
SGOT (AST)	28	U/L	< 40

### BILIRUBIN PROFILE

Test	Result	Unit	BRI/Range Value
TOTAL BILIRUBIN	0.8	mg/dl	0.3 - 1.2
DIRECT BILIRUBIN	0.2	mg/dl	0.0 - 0.2
INDIRECT BILIRUBIN	0.6	mg/dl	< 1.1

### LIPID PROFILE

Test	Result	Unit	BRI/Range Value
TOTAL CHOLESTEROL	165	mg/dl	0 - 200
TRIGLYCERIDES	122	mg/dl	0 - 150
HDL CHOLESTEROL	57	mg/dl	> 40
LDL CHOLESTEROL	83.60	mg/dl	< 100
VLDL	24.40	mg/dl	< 30
TOTAL / HDL CHOLESTEROL RATIO	2.89		0 - 4.97
LDL / HDL CHOLESTEROL RATIO	1.47		0 - 3.88

### URINE ROUTINE EXAMINATION

Test	Result	Unit	BRI/Range Value
------	--------	------	-----------------

#### URINE ROUTINE EXAMINATION PHYSICAL EXAMINATION

Sr Lab Technician

Cons Pathologist  
MBBS, MD



9COM8M

Sr No	:19118	Advised Date	:05/02/2024 03:34:12 PM
Name	:Mr. Bhupendra Bhartiya	Patient Code	:PH0004473496
Age	:23 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

COLOUR	PALE YELLOW	
TRANSPARENCY	CLEAR	
<b>CHEMICAL EXAMINATION</b>		
PH	7.0	4.7 - 7.5
SPECIFIC GRAVITY	1012	
URINE SUGAR	NIL	
URINE PROTEIN	NOT DETECTED	
URINE BILIRUBIN	NIL	
URINE KETONE BODIES	NIL	
UROBILINOGEN	NORMAL	
BLOOD	NOT DETECTED	
LEUCOCYTE	NEGATIVE	
NITRATE	NOT DETECTED	
<b>MICROSCOPIC EXAMINATION</b>		
PUS CELLS	2-3	/hpf
EPITHELIAL CELLS	1-2	/hpf
RBC	0-1	
CRYSTALS	NIL	
CASTS	NIL	
BACTERIA	NOT SEEN	
YEAST BUDDING CELLS	NOT SEEN	
OTHERS	NIL	

### X-RAY CHEST

#### X-RAY CHEST PA VIEW

Lung fields do not reveal any active parenchymal pathology.

Both hilar shadows appear normal.

Cardiac size and silhouette appear normal.

Both costophrenic angles are normal.

Sr Lab Technician

Cons Pathologist  
MBBS, MD



9COM8M

Sr No	:19118	Advised Date	:05/02/2024 03:34:12 PM
Name	:Mr. Bhupendra Bhartiya	Patient Code	:PH0004473496
Age	:23 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

Soft tissues and bones underview appear normal.

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

DR. SAMBHAJI RAMBHAJI  
MBBS (MD (GENERAL RADIOLOGIS)  
CONSULTANT IN RADIOLOGIS

Sr Lab Technician

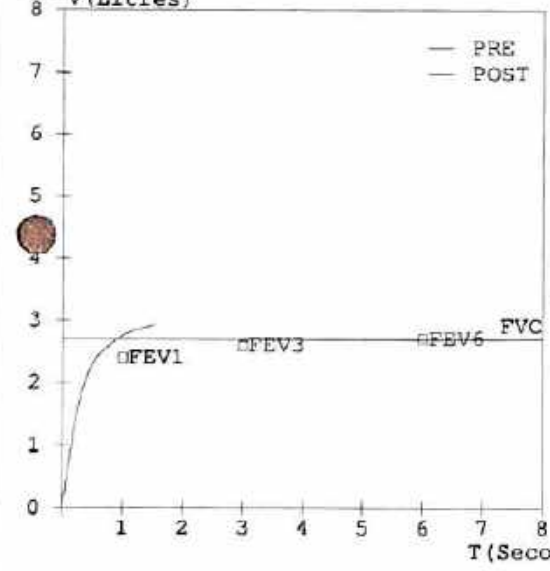
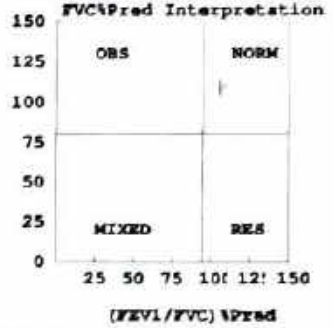
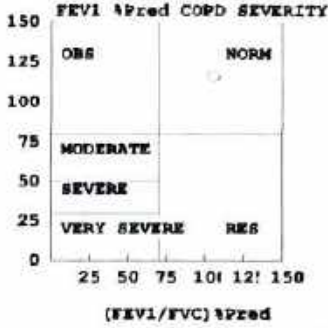
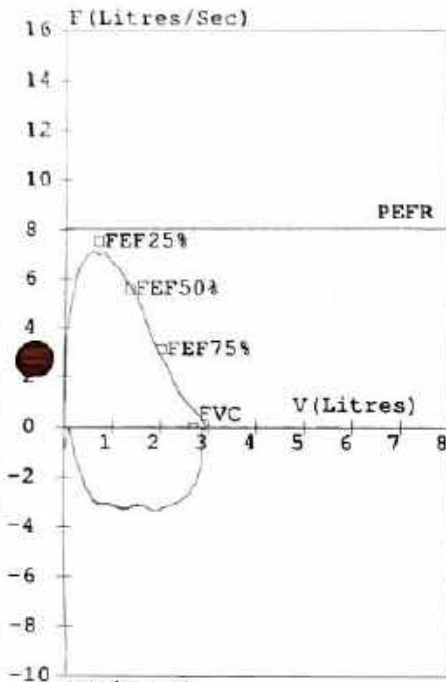
Cons Pathologist  
MBBS , MD

# MOLU DIAGNOSTICS

Shop No. 10/2, New Muncpal Market Complex, Phase II, Cuncolm. Salcette - Goa.

Patient: Bhupendra Bhartiya  
 Refd. By:  
 Pred.Eqns: RECORDERS  
 Date : 05-Feb-2024 03:43 PM

Age : 23 Years Gender : Male  
 Height : 150 Cms Smoker : No  
 Weight : 69 Kgs Eth. Corr: 100  
 ID: 364 Temp :



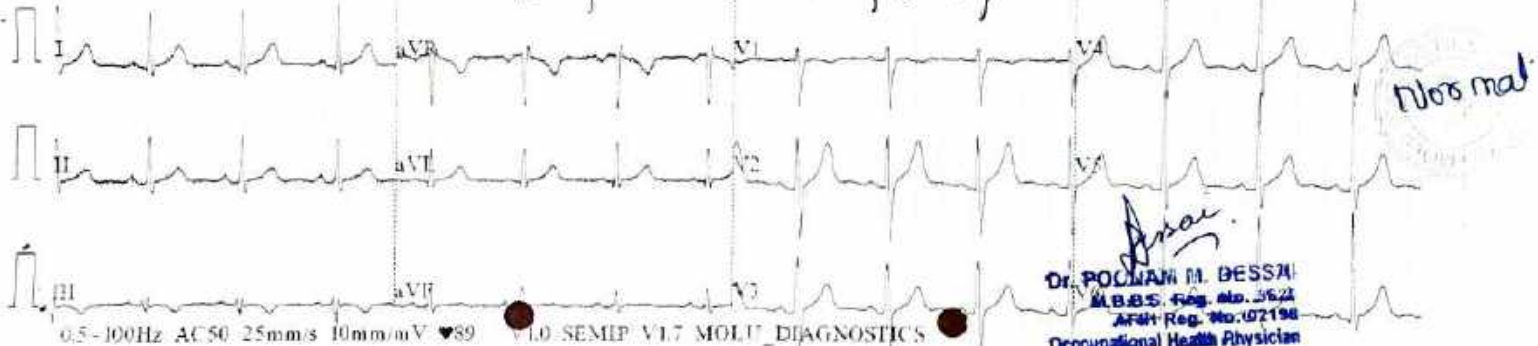
Spirometry (FVC Results)						
Parameter	Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC (L)	02.69	02.94	109	-----	---	---
FEV1 (L)	02.39	02.78	116	-----	---	---
FEV1/FVC (%)	88.85	94.56	106	-----	---	---
FEF25-75 (L/s)	04.32	04.31	100	-----	---	---
PEFR (L/s)	08.02	07.03	088	-----	---	---
FIVC (L)	-----	05.44	---	-----	---	---
FEV.5 (L)	-----	02.32	---	-----	---	---
FEV3 (L)	02.61	02.94	113	-----	---	---
PIFR (L/s)	-----	03.37	---	-----	---	---
FEF75-85 (L/s)	-----	01.45	---	-----	---	---
FEF.2-1.2 (L/s)	07.03	06.59	094	-----	---	---
FEF 25% (L/s)	07.52	06.94	092	-----	---	---
FEF 50% (L/s)	05.61	05.30	094	-----	---	---
FEF 75% (L/s)	03.14	02.13	068	-----	---	---
FEV.5/FVC (%)	-----	78.91	---	-----	---	---
FEV3/FVC (%)	97.03	100.00	103	-----	---	---
FET (Sec)	-----	01.64	---	-----	---	---
ExplTime (Sec)	-----	00.08	---	-----	---	---
Lung Age (Yrs)	023	019	083	-----	---	---
FEV6 (L)	02.69	-----	---	-----	---	---
FIF25% (L/s)	-----	02.97	---	-----	---	---
FIF50% (L/s)	-----	01.91	---	-----	---	---
FIF75% (L/s)	-----	00.00	---	-----	---	---

Pre Test COPD Severity  
 Test within normal limits

Pre Medication Report Indicates  
 Spirometry within normal limits as (FEV1/FVC)%Pred >95 and FVC%Pred >80.

ID: 2315 05-02-2024 15:24:23

Bhupendra Bhartiya 23yr



Normal

*Dr. Poojan M. Bessari*

Dr. POOJAN M. BESSARI  
M.B.B.S. Reg. No. 3621  
AFMH Reg. No. 02198  
Occupational Health Physician


0.5-100Hz AC 50 25mm/s 10mm/mV ♥89 V1.0 SEMIP V1.7 MOLI\_DIAGNOSTICS

# MOLU DIAGNOSTICS

TOWARDS PRECISION HEALTHCARE



## AUDIOLOGICAL EVALUATION REPORT

Name	Bhupendra Bhartiya			ID													
Age	23	Gender	MALE	Date	05-02-2024												
Designation																	
Impression	WITHIN NORMAL LIMIT																
	RIGHT					LEFT											
					-10												
					0												
					10												
					20												
					30												
					40												
					50												
					60												
					70												
					80												
					90												
					100												
					110												
					120												
	125	250	500	1000	2000	4000	6000	8000		125	250	500	1000	2000	4000	6000	8000
	Test frequency in Hz																
Air	X= Left ear			O = Right ear			Bone	> = left ear			< = right ear			 Audiologist			



Dated: 13<sup>th</sup> March 2024

## CERTIFICATE

**This is to certify that I have conducted medical check-up of Mr. ARUN THAKUR of M/S Monomark Engineering (1) Pvt.Ltd. situated at Cuncolim Industrial estate, Goa**

This medical check-up was conducted as per the requirement of Inspectorate of Factories and Boilers, Panaji Goa under rule 19A.

Form No. 7 along with the result of the tests have been handed over to the M/S Monomark Engineering (1) Pvt.Ltd. Situated at Cuncolim Industrial estate, Goa

**He is found to be fit.**

**Dr. POONAM M. DESSAI**  
M.B.B.S. Reg. No. 3620  
AFIH Reg. No. 02198  
Occupational Health Physician

Reviewed on 21/03/2024



**HEALTH REGISTER**


1. Serial No. In the register : 274  
Of adult worker

3. Sex : Male


2. Name of worker: Arun Thakur

4. D.O.B Age: 45 yrs

Notes :- 1. Separate page should be maintained for individual worker. 2. Fresh entry should be made for each examination

	1	Department/works	
	2	Name of hazardous process	
	3	Dangerous process/operation	
	4	Nature of job of occupation	
	5	Raw materials, products or by-products likely to be exposed to	
	6	Date of posting	
	7	Date of leaving/transfer to other work	
	8	Reasons for discharge/leaving or transfer	
13/03/2024	9	Date	If declared unfit for work Medical examination and the result thereof
NIL	10	Signs and symptoms observed during examination	
Complete blood count, Blood Group, Blood sugar level, Blood Urea, Serum Creatinine, Lipid Profile, Bilirubin Profile, SGPT, SGOT, Urine analysis, ECG, Chest -X-ray, Audiometry, Vision Testing, Physical Examination Spirometry.	11	Nature of tests and results thereof	
FIT	12	Result fit/unfit	
	13	Period of temp withdrawal from that work	
	14	Reasons for such withdrawal	
	15	Date of declaring him unfit for that work	
13/03/2024	16	Date of issuing fitness certificate	
	17	Signature with the date of the factory Medical Officer / the Certifying Surgeon	

Dr. POONAM M. DESSAI  
M.B.B.S. Reg. No. 3620  
AFIP Reg. No. 02193  
Occupational Health Physician

Reviewed on 21/03/2024  


# +Molu Diagnostics & Occupational Health Service

Shop No. 10/2. Ground Floor, Cuncolim Market Complex, Below Cuncolim  
Municipal Hall, Cuncolim Salcete Goa. Mob. 7350188225

Name; ARUN THAKUR

Age: 45 yrs

Sex: MALE

Address: Malco energy

Identification marks: Mole over the left chick

### Personal History:

1. Smoking: No
3. Drug addiction: No
5. Gambling: No

2. Alcohol: Yes
4. Tobacco Chewing : Yes
6. Nutrition: Normal

Marital Status: Married

Children: 4

Family planning: Temporary method

Hobbies NIL

### History of

Frequent colds/ Sneezing	Nil	Recent loss of weight	Nil
Urinary Disturbances	Nil	Impaired hearing	Nil
Chronic cough	Nil	Ear discharge	Nil
Shortness of breath	Nil	Backache	Nil
Chest pain/ pressure	Nil	Joint pain	Nil
Allergy to drug/ chemicals	Nil	Bowel Disturbance	Nil
Frequent headaches	Nil	Epilepsy	Nil
Visual Disturbances	Nil	Swelling of legs/ feet	Nil
Vertigo	Nil	Operation	Nil
Any other	Nil		

Details of above: Nil

### Past History & Family History

Disease	Self	Father	Mother	Other
1. Heart disease/ Hypertension	Nil	Nil	Nil	Nil
Diabetes	Nil	Nil	Nil	Nil
Tuberculosis	Nil	Nil	Nil	Nil
Bronchial Asthma	Nil	Nil	Nil	Nil
Epilepsy	Nil	Nil	Nil	Nil
Arthritis/Rheumatism	Nil	Nil	Nil	Nil
Cancer	Nil	Nil	Nil	Nil
Kidney Disorder	Nil	Nil	Nil	Nil
Liver Disease	Nil	Nil	Nil	Nil
Skin Diseases	Nil	Nil	Nil	Nil
Allergies	Nil	Nil	Nil	Nil
Accidents	Nil	Nil	Nil	Nil
Any other	Nil	Nil	Nil	Nil



WPMJY1

Sr No :19759      Advised Date :13/03/2024 10:38:27 AM  
Name :Mr. Arun Thakur      Patient Code :PH0004523296  
Age :45 (Y)      Referred By :Dr. POONAM DESSAI  
Gender :Male      Medical Facility :

### COMPLETE BLOOD COUNT

Test	Result	Unit	BRI/Range Value
HAEMOGLOBIN (Hb)	14.0	gm/dl	13 - 17
TLC (Total Leucocyte Count)	4500	/cumm	4000 - 10000
<b>DIFFERENTIAL LEUCOCYTE COUNT</b>			
NEUTROPHIL	51	%	40 - 70
LYMPHOCYTES	40	%	20 - 40
EOSINOPHILS	06	%	1 - 6
MONOCYTES	02	%	2 - 10
BASOPHILS	01	%	0 - 1
RBC Count	4.5	millions/cmm	3.8 - 4.8
P.C.V. / HEMATOCRIT	45	%	40 - 50
M C V (Mean Corp Volume)	100.00	fL	83 - 101
M C H (Mean Corp Hb)	31.11	pg	27 - 32
M C H C (Mean Corp Hb Conc)	31.11	g/dL	31.5 - 34.5
PLATELET COUNT	215	Thou/mm <sup>3</sup>	150 - 410

### BIOCHEMISTRY ROUTINE

Test	Result	Unit	BRI/Range Value
BLOOD SUGAR RANDOM	132	mg/dl	70 - 140
BLOOD UREA	25	mg/dl	13 - 45
SERUM CREATININE	0.8	mg/dl	0.7 - 1.4
SGPT (ALT)	25	U/L	< 45
SGOT (AST)	28	U/L	< 40

Sr Lab Technician

Cons Pathologist  
MBBS, MD



WPMJY1

Sr No :19759      Advised Date :13/03/2024 10:38:27 AM  
Name :Mr. Arun Thakur      Patient Code :PH0004523296  
Age :45 (Y)      Referred By :Dr. POONAM DESSAI  
Gender :Male      Medical Facility :

### BILIRUBIN PROFILE

Test	Result	Unit	BRI/Range Value
TOTAL BILIRUBIN	0.3	mg/dl	0.3 - 1.2
DIRECT BILIRUBIN	0.2	mg/dl	0.0 - 0.2
INDIRECT BILIRUBIN	0.10	mg/dl	< 1.1

### LIPID PROFILE

Test	Result	Unit	BRI/Range Value
TOTAL CHOLESTEROL	135	mg/dl	0 - 200
TRIGLYCERIDES	142	mg /dl	0 - 150
HDL CHOLESTEROL	57	mg/dl	> 40
LDL CHOLESTEROL	49.60	mg/dl	< 100
VLDL	28.40	mg/dl	< 30
TOTAL / HDL CHOLESTEROL RATIO	2.37		0 - 4.97
LDL / HDL CHOLESTEROL RATIO	0.87		0 - 3.88

### URINE ROUTINE EXAMINATION

Test	Result	Unit	BRI/Range Value
<b>URINE ROUTINE EXAMINATION</b>			
<b>PHYSICAL EXAMINATION</b>			
COLOUR	PALE YELLOW		
TRANSPARENCY	CLEAR		
<b>CHEMICAL EXAMINATION</b>			
PH	5.2		4.7 - 7.5
SPECIFIC GRAVITY	1010		
URINE SUGAR	NIL		
URINE PROTEIN	NOT DETECTED		

Sr Lab Technician

Cons Pathologist  
MBBS , MD



WPMJY1

Sr No	:19759	Advised Date	:13/03/2024 10:38:27 AM
Name	:Mr. Arun Thakur	Patient Code	:PH0004523296
Age	:45 (Y)	Referred By	:Dr. POONAM DESSAI
Gender	:Male	Medical Facility	:

URINE BILIRUBIN	NIL
URINE KETONE BODIES	NIL
UROBILINOGEN	NORMAL
BLOOD	NIL
LEUCOCYTE	NEGATIVE
NITRATE	NEGATIVE

### MICROSCOPIC EXAMINATION

PUS CELLS	0 -5	/hpf
EPITHELIAL CELLS	1-2	/hpf
RBC	0-1	
CRYSTALS	NIL	
CASTS	NIL	
BACTERIA	NOT SEEN	
YEAST BUDDING CELLS	NOT SEEN	
OTHERS	NIL	

### X-RAY CHEST

#### X-RAY CHEST PA VIEW

Lung fields do not reveal any active parenchymal pathology.


Both hilar shadows appear normal.

Cardiac size and silhouette appear normal.


Both costophrenic angles are normal.

Soft tissues and bones underview appear normal.

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

  
DR. CHARUDUTT SAMSHAJI  
MBBS, M.D. (RADIOLOGNOSIS)  
G.M.C. Reg. No. 1083  
RADIOLOGICAL RADIOLOGIST

Sr Lab Technician

  
Cons Pathologist  
MBBS, MD



Mr. ARUN THAKUR

Salcette..

403601

PIN No:

PID NO: P38923520258559

Age: 45 Year(s) Sex: Male



Reference: SELF

Sample Collected At:

Molu Diagnostics

Shop No-2, New Market Complex, Phase  
2, Below Community Hall, Cuncoim Goa,-  
403703.

Processing Location:- Metropolis  
Healthcare Ltd. Hi-Life

Building,Borda,Margao,Goa-403 601.

VID: 230321505507359

Registered On:

13/03/2024 12:03 PM

Collected On:

13/03/2024 12:01PM

Reported On:

13/03/2024 02:46 PM

**Investigation**

**Observed Value**

**Biological Reference Interval**

**Blood Group ABO & Rh Typing**

(EDTA Whole Blood,,Manual Slide Method)

**Blood group (ABO typing)**

AB

**RhD factor (Rh typing)**

Positive

**Method:** Column agglutination technology (CAT) is an automated. System for blood grouping which is superior in sensitivity to conventional tube method.

-- End of Report --

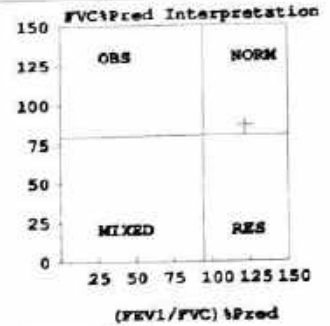
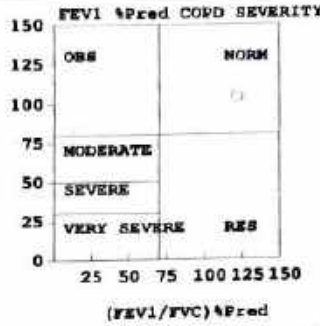
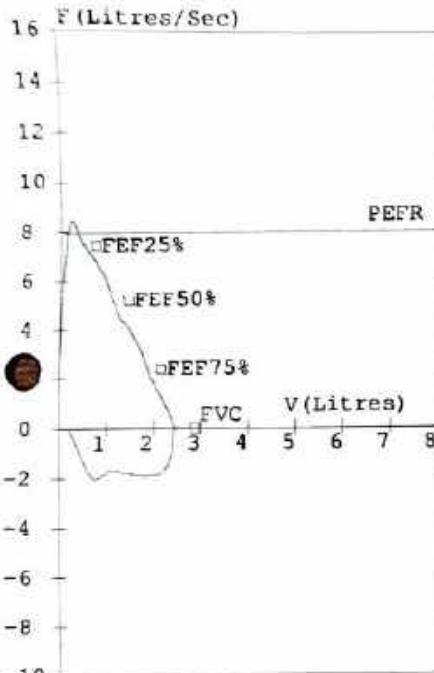
# MOLU DIAGNOSTICS

MOLU DIAGNOSTICS

TOWARDS PRECISION HEALTHCARE  
Shop No. 10/2, New Municipal Market Complex, Phase II, Cuncolim, Salcete - Goa.

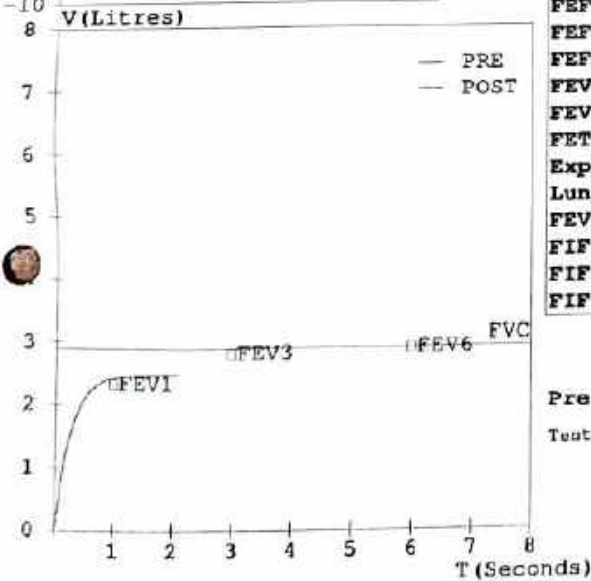
Patient: Arun Thakur  
Refd. By:  
Pred. Eqns: RECORDERS  
Date : 13-Mar-2024 11:52 AM

Age : 45 Years      Gender : Male  
Height : 160 Cms      Smoker : No  
Weight : 56 Kgs      Eth. Corr: 100  
ID: 468      Temp :



### Spirometry (FVC Results)

Parameter	Pred	M.Pre	%Pred	M.Post	%Pred	%Imp
FVC (L)	02.88	02.47	086	-----	----	----
FEV1 (L)	02.32	02.42	104	-----	----	----
FEV1/FVC (%)	80.56	97.98	122	-----	----	----
FEF25-75 (L/s)	03.52	04.34	123	-----	----	----
PEFR (L/s)	07.96	08.37	105	-----	----	----
FIVC (L)	-----	02.25	----	-----	----	----
FEV.5 (L)	-----	02.11	----	-----	----	----
FEV3 (L)	02.79	02.47	089	-----	----	----
PIFR (L/s)	-----	02.03	----	-----	----	----
FEF75-85 (L/s)	-----	01.79	----	-----	----	----
FEF.2-1.2 (L/s)	06.04	06.44	107	-----	----	----
FEF 25% (L/s)	07.43	07.01	094	-----	----	----
FEF 50% (L/s)	05.21	04.51	087	-----	----	----
FEF 75% (L/s)	02.38	02.44	103	-----	----	----
FEV.5/FVC (%)	-----	85.43	----	-----	----	----
FEV3/FVC (%)	96.88	100.00	103	-----	----	----
FET (Sec)	-----	02.13	----	-----	----	----
ExptTime (Sec)	-----	00.02	----	-----	----	----
Lung Age (Yrs)	045	043	096	-----	----	----
FEV6 (L)	02.88	-----	080	-----	----	----
FIF25% (L/s)	-----	01.81	----	-----	----	----
FIF50% (L/s)	-----	01.83	----	-----	----	----
FIF75% (L/s)	-----	01.77	----	-----	----	----



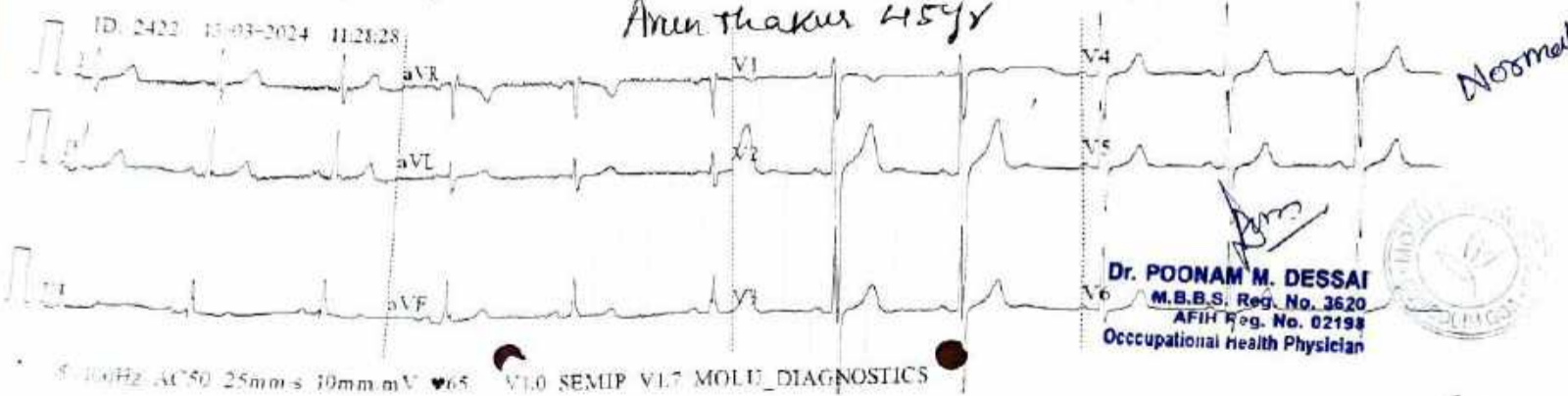
Pre Test COPD Severity  
Test within normal limits

Pre Medication Report Indicates  
Spirometry within normal limits as (FEV1/FVC)%Pred >95 and FVC%Pred >80.

ID: 2422 15-03-2024 11:28:28

Anur Thakur 45yr

Normal



*[Handwritten Signature]*

**Dr. POONAM M. DESSAI**  
 M.B.B.S. Reg. No. 3620  
 AFIH Reg. No. 02198  
 Occupational Health Physician



50-100Hz AC 50 25mm/s 10mm/mV ♡65 V1.0 SEMIP V1.7 MOLI\_DIAGNOSTICS




# MOLU DIAGNOSTICS



TOWARDS PRECISION HEALTHCARE

## AUDIOLOGICAL EVALUATION REPORT

Name	Arun Thakur			ID		
Age	45	Gender	MALE	Date	13-03-2024	
Designation						
Impression	WITHIN NORMAL LIMIT					
	RIGHT				LEFT	
					-10	
					0	
					10	
					20	
					30	
					40	
					50	
					60	
					70	
					80	
					90	
					100	
					110	
					120	
	125	250	500	1000	2000	4000
	8000	125	250	500	1000	2000
	4000	6000	8000	1000	2000	4000
	6000	8000	1000	2000	4000	6000
	8000	1000	2000	4000	6000	8000
	Test frequency in Hz					
Air	X = Left ear		O = Right ear		Bone > = left ear	
					< = right ear	
	 Audiologist					

**Boiler Chimney**



**Sodium Sulphate Evaporation Plant for Process water treatment**



**Raw material storage shed**

**Before**



**After**



**Reactor repairs**





**GOA STATE POLLUTION CONTROL BOARD**

**FORM V**

(See Rule 14)

Environmental Statement for the financial year ending on 31st March on or before 30th of September every year.

**PART A**

- (i) Name and address of the owner/ occupier of the industry operation or process : SUMIT GUPTA
- (ii) Industry category Primary-(STC Code) : RED, Miscellaneous Red  
Secondary-(STC Code)
- (iii) Production capacity : Tonnes

Production Name	Production Capacity	Production Unit
Nickel, Cobalt & Copper Metal & its Salts	630	Metric Tonnes/Month
Zinc Sulphate Solution	5	Metric Tonnes/Month
Sodium Sulphate Crystals	810	Metric Tonnes/Month
Manganese Sulphate Solution and Crystal	100	Metric Tonnes/Month

- (iv) Year of establishment : 1996
- (v) Date of the last environment statement submitted : 29/08/2022

**PART B**

1. Water consumption m<sup>3</sup>/ d

Process : 34

Cooling : NIL

Domestic : 24

Name of products	Process water consumption per unit of product output	
	During the previous financial year	During the current financial year
Nickel, Cobalt & Copper Metal & its Salts	NIL	8.04

2. Raw material consumption

Name of raw materials	Name of products	Consumption of raw material per unit	
		During the previous financial year	During the current financial year

mixed hydroxide precipitate	Nickel cobalt and copper metal and its salts Zinc sulfate solution, Sodium sulphate MnSO4	NIL	3564.601
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\*Industry may use codes if disclosing details of raw materials would violate contractual obligations, otherwise all industries have to name the raw material used.

### PART C

Pollution discharged to environment/ unit of output.

Pollution	Quantity of pollutants discharged(mass/day)	Concentration of pollutants in discharges(mass/volume)	Percentage of variation from prescribed standards with reasons
Water	NIL	NIL	NIL
Air	NIL	NIL	NIL

Name of Pollutants : SO2 and SPM from boiler stack.

### PART D

#### Hazardous Wastes

(as specified under Hazardous Wastes (Management and Handling) Rules, 1989)

Hazardous Wastes	Total Quantity (Kg)	
	During the previous financial year	During the current financial year
(a) From process	NIL	NIL
(b) From pollution control facilities	NIL	NIL

### PART E

#### Solid Wastes

	Total Quantity	
	During the previous financial year	During the current financial year
(a) From process	NIL	NIL
(b) From pollution control facility	NIL	NIL
(c)(1) Quantity recycled or re-utilised within the unit	NIL	NIL
(2) Sold	NIL	NIL
(3) Disposed	NIL	NIL

### PART F

Please specify the characterization (in terms of composition and quantum) of hazardous as well as solid wastes and indicate disposal practice adopted for both these categories of wastes Hazardous waste generated during the industry process are (1) Process residue(solid) and used/spent oil. (liquid)

disposal: To be disposed in CHWTSDF. /Authorized recyclers. .

## **PART G**

Impact of the pollution abatement measures taken on conservation of natural resources and on the cost of production Using clean fuel (briquettes) for boiler firing.

Chimney replacement has been done.

Stacking monitoring as per requirement.

Greenbelt development at industry premises.

## **PART H**

Additional measures/ investment proposal for environmental protection abatement of pollution, prevention of pollution Acid proof lining has been provided.

water quality monitoring as per the requirement .

## **PART I**

Any other particulars for improving the quality of the environment Acid proof lining has been provided.

water quality monitoring as per the requirement

Construction of dyke-walls for liquid storage tanks is provided. .

Remarks : We are using clean fuel for firing the boiler burners. Which results into reduction of generation of Greenhouse gas emissions. .