



Ref: PJI/ENV/2021/360

दूर की सोच

Date: 01.06.2021

To,  
The Regional Director,  
Ministry of Environment, Forest & Climate Change  
Paryavaran Bhawan,  
Ravishankar Nagar, Bhopal (M.P.)

**Sub:** Six Monthly EC Compliance Report of Prism Cement Unit II & Int. Limestone Mines  
**Ref:** Environmental Clearance letter no. F. No.-J- 11011/949/2007/IA-II (I) dated 22.09.2008.

Dear Sir,

With reference to above mentioned subject and notification issued by MoEF & CC S.O. no. 5845 (E) dated 26.11.2018, we are submitting herewith the soft copy of half yearly report (October 2020-March 2021) related to compliance of accorded environmental clearance of Prism Cement Unit II & Integrated Limestone Mines (772.067 ha, 512.317 ha, 117.594 ha and 99.416 ha).

Thanking you,

Yours faithfully,  
**For PRISM JOHNSON LIMITED**

**Manoj Kumar Kashyap**  
Sr. General Manager

Encl: As above

CC: The Director, MOEF & CC, Delhi  
The Member Secretary- MPPCB, Bhopal  
The Member Secretary- CPCB, Bhopal  
The Regional Director- CGWB, Bhopal  
The Regional Officer- MPPCB, Satna

**PRISM JOHNSON LIMITED**

(Cement Division - Unit II)

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Corres. Add.: 'Rajdeep', Rewa Road, Satna - 485 001 (M.P.) India. T: +91-07672-402726  
Registered Office: Prism Johnson Limited, 305, Laxmi Niwas Apartments, Ameerpet, Hyderabad - 500 016, India.  
w: www.prismjohnson.in, www.cement.prismjohnson.in, E: info@prismjohnson.in

CIN: L26942TG1992PLC014033



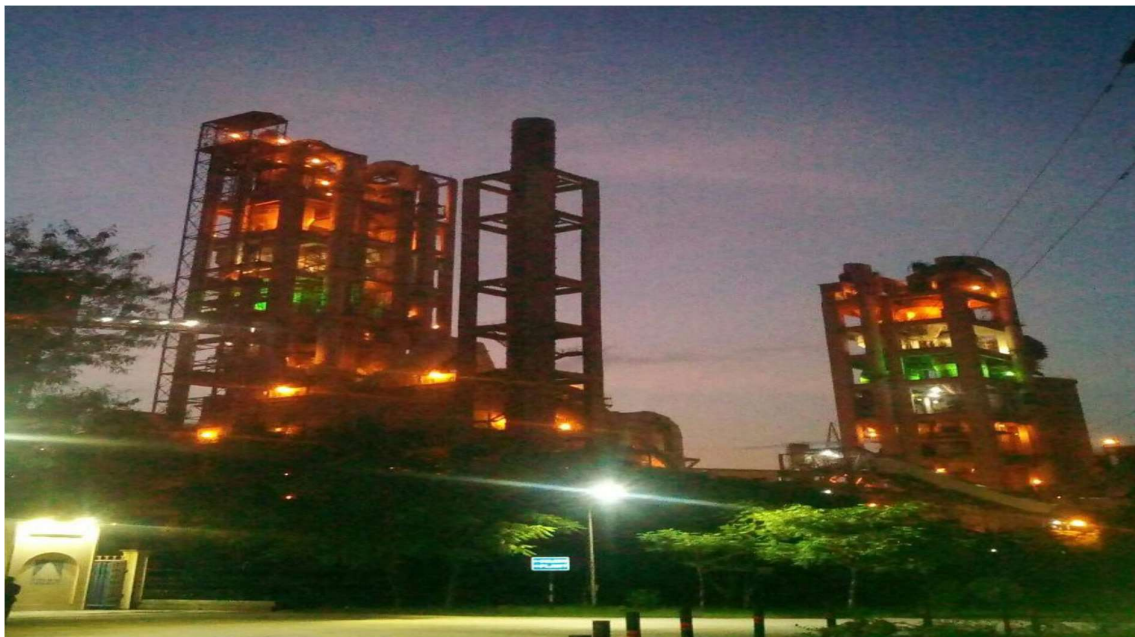
# COMPLIANCE REPORT

**For**

## **INTEGRATED CEMENT PROJECT**

**Cement Plant – II & Mines (Hinouti & Sijahata-I-772 Ha. Hinouti & Sijahata-II-99 Ha., Mendhi – 117 Ha. & Bagahai – 512 Ha.)**

**(Period : October, 2020 - March, 2021)**



**OF**



**M/s Prism Johnson Limited.**  
**(Formerly Prism Cement Limited)**  
**Village—Mankahari, P.O.-Bhatila**  
**Distt., - Satna (M.P.)**

**Compliance report with Regard to Environment Clearance accorded by MoEF&CC vide letter no.J-11011/949/2007-IA-II(I)  
dated 22.09.2008**

S.No.	Conditions	Compliance Status																								
<b>A. Specific Conditions:</b>																										
1.	The gaseous and particulate matter emissions from various units shall conform to the standards prescribed by the Madhya Pradesh Pollution Control Board. At no time, particulate emissions from the cement plant including kiln, coal mill, and cement mill, cooler and captive power plant (CPP) shall not exceed 50 mg/Nm <sup>3</sup> .	The gaseous and the particulate matter emissions from various units i.e. Kiln, Coal Mill, Clinker Cooler and Cement Mill are well within the prescribed norms. There is no CPP at our cement plant. The analysis report of emissions from various units is enclosed as <b>Annexure 1</b> .																								
	Continuous on-line monitors for particulate emissions shall be installed. Interlocking facility shall be provided in the pollution control equipment so that in the event of the pollution control equipment not working, the respective unit(s) is shut down automatically.	Continuous Ambient Air quality monitoring system for Ambient air quality monitoring and Continuous emission monitoring system for particulate emissions and gaseous emissions monitoring from various units, have been installed and the monitored data is displayed at the main gate of the premises by the means of digital display board. Photographs of AAQMS, CEMS & display board is enclosed as <b>Annexure 2</b> . Interlocking facility has been provided in the pollution control equipment so that in the event of the pollution control equipment didn't work the respective unit(s) will be shut down automatically.																								
2	Secondary fugitive emissions shall be controlled within the prescribed limits and regularly monitored Guidelines/Code of Practice issued by the CPCB in this regard should be followed.. The company shall install adequate dust collection and extraction system to control fugitive dust emissions at material transfer points. Atomized water spray system with reclaimers shall be installed in silo used for the storage of ash. Covered conveyor belts shall be used to reduce fugitive emissions. Concreting of all the roads, water sprinkling system at limestone and coal handling area shall be ensured to reduce fugitive emissions	Secondary fugitive emissions are controlled and are maintained well within the prescribed limits by the means of various practices. Atomized sprinklers and water spraying arrangement provided at source of dust generation. Guidelines/Code of Practice issued by the CPCB in this regard are being followed. Details of practices adopted to control fugitive emission are as follows:- 1. Covered Sheds and Silos are provided for storage of Raw materials. Details are mentioned below:- <table border="1" data-bbox="711 1465 1304 1824"> <tr> <th>S.No</th><th>Name of raw material</th><th>Storage Facility</th></tr> <tr> <td>1.</td><td>Limestone</td><td>Covered Shed</td></tr> <tr> <td>2.</td><td>Coal</td><td>Covered Shed</td></tr> <tr> <td>3.</td><td>Gypsum</td><td>Covered Shed</td></tr> <tr> <td>4.</td><td>Laterite</td><td>Covered Shed</td></tr> <tr> <td>5.</td><td>Clinker</td><td>Silo</td></tr> <tr> <td>6.</td><td>Fly ash</td><td>Silo</td></tr> <tr> <td>7.</td><td>Cement</td><td>Silo</td></tr> </table> 2. Flexible curtains and water spray arrangement has been	S.No	Name of raw material	Storage Facility	1.	Limestone	Covered Shed	2.	Coal	Covered Shed	3.	Gypsum	Covered Shed	4.	Laterite	Covered Shed	5.	Clinker	Silo	6.	Fly ash	Silo	7.	Cement	Silo
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		<p>provided at the unloading of limestone at crusher.</p> <ol style="list-style-type: none"> <li>3. Fog Canon installed Near Stock Pile of Lime stone to control fugitive Emission.</li> <li>4. Bag filters (114 No. of Bag filters) are installed to control fugitive emission.</li> <li>5. Dry fly ash is pneumatically unloaded and stored in silo from closed bulkers.</li> <li>6. Permanent water sprinklers system has been installed at the haul roads of Limestone Mine and Water spraying with the help of water tankeris also done to control fugitive emission which can be caused by the movement of vehicles.</li> <li>7. Closed conveyor belts are provided for transfer of raw materials within the plant premises.</li> <li>8. Closed bulkers are used for transfer of fly ash to avoid fugitive emission.</li> <li>9. Covered trucks are used for transfer of other raw materials and end products.</li> <li>10. Wet drilling is practiced to prevent secondary fugitive emission.</li> <li>11. Dense plantation is done along the periphery of roads and in plant and mines premises as measure to control fugitive emission.</li> <li>12. Concrete road and truck parking area is provided to mitigate secondary fugitive emission.</li> </ol> <p>Photographs of various measures to control fugitive emission is enclosed as <b>Annexure 3</b>.</p>
3	Ambient air quality including ambient noise levels shall not exceed the standards stipulated under EPA or by the State authorities.	<p>Ambient Air emission parameters are well within the prescribed norms.</p> <p>Noise levels are also within the norms.</p> <p>Monitoring report of ambient air quality analysis and noise monitoring is enclosed as <b>Annexure 4</b></p>
	<p>Monitoring of ambient air quality and shall be carried-out regularly in consultation with MPPCB and data for air emissions shall be submitted to the CPCB and MPPCB regularly.</p> <p>The instruments used for ambient air quality monitoring shall be calibrated time to time.</p>	<p>Regular ambient air quality monitoring and noise level monitoring are done with the calibrated instruments. Ambient air quality and Ambient Noise levels does not exceed the standards stipulated under EPA or by the state authorities.</p> <p>Calibration certificates are attached at -<b>Annexure no. 4(b)</b></p>
4	Efforts shall be made to reduce impact of the transport of the raw materials and end products on the surrounding environment including agricultural land.	<p>Raw materials and end products are being transported in trucks covered by the tarpaulin and bulkers to reduce the effects of fugitive emission on the surrounding environment and agriculture land.</p> <p>Raw materials and end products are transported within the plant premises with the help of closed conveyor belts to reduce impact of transport.</p>






Rail transport system has also been used which also help to reduce impact of transport. Some of them are as follows:







1. All the Roads inside the plant premises are Concreted.
2. Permanent water sprinklers system has been installed at the haul roads of Limestone Mine and Water spraying with the help of water tanker is also done to control fugitive emission which can be caused by the movement of vehicles.
3. 114 No's Bag-filters have been installed to control fugitive emission.
4. Dense plantation is done in Plant & Mines premises.

5.	Fly ash shall be utilized as per the provisions of Fly Ash Notification-1999, subsequently amended in 2003. Fly ash shall be stored in ash silo and 100% used in the cement manufacturing	<p>Fly ash is being utilized as per the provisions of Fly ash Notification 1999, subsequently amended in 2003.</p> <p>Fly ash is being transported by the means of closed bulkers and it is stored in Silos having capacity of....</p> <p>and 100 % fly ash is used in cement manufacturing.</p> <p>Consumption of fly ash is as follows:</p> <table><tr><th colspan="2">Yearly Fly Ash Consumption</th></tr><tr><th>Year Qty</th><th>(MT)</th></tr><tr><td>2014-2015</td><td>907848</td></tr><tr><td>2015-2016</td><td>848939</td></tr><tr><td>2016-2017</td><td>810908</td></tr><tr><td>2017-2018</td><td>701922</td></tr><tr><td>2018-2019</td><td>855770</td></tr><tr><td>2019-2020</td><td>808392</td></tr><tr><td>2020-2021</td><td>906630</td></tr></table>	Yearly Fly Ash Consumption		Year Qty	(MT)	2014-2015	907848	2015-2016	848939	2016-2017	810908	2017-2018	701922	2018-2019	855770	2019-2020	808392	2020-2021	906630
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6.	The company shall make the efforts to utilize the high calorific hazardous waste in the cement kiln and necessary provisions shall be made accordingly. The company shall keep the record of the waste utilized and shall submit the details to Ministry's Regional Office at Bhopal, CPCB and SPCB.	<p>Permission for utilization of High calorific hazardous waste in the cement kiln has been taken.</p> <p>Copy of same is enclosed as <b>Annexure 5</b>.</p> <p>Record of the waste utilized is being maintained and is submitted to the Ministry's Regional Office at Bhopal, CPCB and SPCB.</p> <p>Details of hazardous waste used are as follows:</p>																		
7.	Total water requirement shall not exceed 2500 m3/day.	<p>Water consumption will not exceed 2500 m3 / day. Details of water consumption is mentioned below:</p> <p>Waste water generated is treated with the help of STP having capacity of 600 KLD and the treated water is being used for the development of green belt.</p> <p>Water consumption details is enclosed as <b>Annexure 5 (a)</b>.</p> <p>STP treated water analysis report is enclosed as <b>Annexure 5 (b)</b>.</p> <p>Photographs of STP and Green Belt is enclosed as <b>Annexure 5 (c)</b>.</p>																		
	The treated wastewater from STP and utilities shall be reutilized for green belt development and other plant related activities i.e. Cooling and dust suppression in raw material handling area etc., after necessary treatment. 'Zero' discharge shall be strictly adopted and no effluent from the process shall be discharged outside the premises.	<p>STP of capacity 600 KLD has been installed to treat the domestic waste water generated and the treated waste water is being utilized for green belt development, dust suppression and cooling and the sludge waste so generated from the sewage treatment plant is used as manure in plantation.</p> <p>No effluent discharge from the plant premises is there and has maintained the Zero discharge.</p> <p>Analysis of treated water is enclosed as <b>Annexure 5(b)</b>.</p>																		
8	Rainwater harvesting measures shall be adopted for the augmentation of ground water at cement plant, colony and mine site.	Rain water harvesting measures have been implemented in plant premises as well in Mines and nearby villages. Details of water harvesting measures are mentioned below:																		

		<ol style="list-style-type: none"> <li>1. Water harvesting pond of capacity 13 Lac m<sup>3</sup> has been constructed in Mines area.</li> <li>2. 7 Nos. of Roof Top rain water harvesting has been developed to harvest rain water.</li> <li>3. Runoff Water Harvesting Structure Near Guest House.</li> <li>4. Ground water recharge with 3 Abandoned bore-wells.</li> <li>5. Groundwater Recharge Pit Connected with Storm Drain - A type Colony.</li> <li>6. Groundwater Recharge Pit Connected with Storm Drain - Near Nursery</li> <li>7. Ground water recharge with abandoned bore well near steel yard.</li> <li>8. Recharge Bore Hole for Recharging the Ground Water - 22 Nos</li> <li>9. Deepening of Ponds at Mankahari and Bamhauri village with Hume pipe and ground water recharge system.</li> <li>10. Construction of water reservoir at Baghai village for water conservation.</li> </ol> <p>Photographs of rain water Harvesting Structure is enclosed as <b>Annexure 6</b>.</p>
	Besides, company must also harvest the rain water from the roof tops and storm water drains to recharge the ground water	<p>There are 7 Nos of Roof top rain water harvesting structures in plant premises These are:</p> <ol style="list-style-type: none"> <li>1. MRSS building</li> <li>2. Project Office building</li> <li>3. School Building.</li> <li>4. Cement Mill Unit II Load Center</li> <li>5. Cooler load Center of Unit I</li> <li>6. Cooler load Center of Unit II</li> <li>7. Store building.</li> </ol> <p>Filters have been installed at roof top drain so as to filter out the dust, grits solid contents into bore-wells.</p>
	The company must also collect rain water in the mined out pits of captive lime stone mine and use the same water for the various activities of the project to avoid fresh water requirement.	<p>The company collects rain water in the mined out pits of captive lime stone mine and use the same water for the various activities. The water is used for various activities i.e. spraying On haul roads, crusher hopper, green belt development etc.</p> <p>Rain water harvesting pond with capacity of 13 lac m<sup>3</sup> has been developed and the harvested water is used for various purpose which helps conservation of fresh ground water.</p>
	<p>The company shall construct the rain water harvesting and ground water recharge structures outside the plant premises also in consultation with local gram panchayat and Village heads to augment the ground water level.</p> <p>An action plan shall be submitted to Ministry's Regional Office at Bhopal within 3 months from date of issue of this letter.</p>	<p>Rain water Harvesting structures have been measures have been implemented in nearby villages are also. Some of them are as follows:</p> <ol style="list-style-type: none"> <li>1. Deepening of Ponds at Mankahari and Bamhauri village with Hume pipe and ground water recharge system.</li> <li>2. Construction of water reservoir at Baghai village for water conservation.</li> </ol> <p>The action plan is submitted to Ministry's Regional Office at Bhopal. Copy of same is enclosed as <b>Annexure 7</b>.</p>



9	<p>The project proponent shall modify the mine plan of the project at the time of seeking approval for the next mining scheme from the Indian Bureau of Mines so as to reduce the area for external over burden dump by suitably increasing the height of the dumps with proper terracing. It shall be ensured that the overall slope of the dump does not exceed 28°.</p>	<p>We have obtained approval of further Schemes of mining for the leases of PCL as follows:</p> <ol style="list-style-type: none"> <li>1. 772.067 ha (Hinauti &amp; Sijahata) vide IBM letter no MP/Satna/ Limestone/RMP-39/2019-20 Dt.31.03.2020,</li> <li>2. 99.416 ha (Hinauti &amp; Sijahata) vide IBM letter no MP/Satna/ Limestone/RMP-44/17-18Dt. 27.04.2017,</li> <li>3.512.317ha (Baghai) vide IBM letter no MP/Satna/Limestone/RMP-57/2020-21 Dt.09.04.2021 and</li> <li>4. 117.594 ha (Mendhi) vide IBM letter no MP/Satna/ Limestone/ M.Sch-6/16-1 Dt. 04.11.2016by the Indian Bureau of Mines.</li> </ol> <p>Copy of approval letter is enclosed as <b>Annexure 8</b>.</p> <p>Dump height and slope has been maintained as per guidelines. The details are enclosed as <b>Annexure 9</b>.</p>
10	<p>Top soil if any, shall be stacked with proper slope at earmarked site(s) only with adequate measures and should be used for reclamation and rehabilitation of mined out areas.</p>	<p>The top soil generated during Mining is being stacked at the earmarked site and is used for reclamation of Mined out area by spreading it over the waste rock after backfilling, and for plantation purpose.</p> 
11	<p>The project proponent shall ensure that no natural water course shall be obstructed due to any mining and plant operations</p>	<p>The Surface water bodies in area are observed as Tamas River, which is adjacent to the Hinauti &amp; Sijhata Limestone Mine in North direction. The Magardaha nalla is located outside the lease area in the western side. Magardaha nalla ultimately joins the Tamas River. Nar Nala falls outside the lease area and flanks the Baghai mining lease from the western side.</p> <p>No natural water course is obstructed due to mining and plant operations. The company is taking following measures for Protection of the Tamas River, Magardaha Nala and Nar Nala (natural water course) which is adjacent to the Hinouti Sijhata and Baghai Limestone Mine in North East and west direction respectively.</p> <ul style="list-style-type: none"> <li>• Solid barrier of minimum 60 m width has been made from the river bank to avoid the flow of surface run off to the River.</li> <li>• Garland drains made along the slope of dumps.</li> <li>• Rain water is channelized to a Settling Tank to eliminate silting of river and then discharged in natural drainage course.</li> <li>• Plantation has been done all along inside safety barrier of Tamas River.</li> <li>• Proper landscape has been developed near the River bank to avoid erosion.</li> </ul>

		There is no proposal for diversion/ obstruction/ modification of any natural water course during mining activity.
	The company shall make the plan for protection of the natural water course passing nearby mine area and submit to the Ministry's Regional Office at Bhopal.	The proposal for natural water course protection passing nearby mines area is submitted. Copy is enclosed as <b>Annexure no. 10.</b>
12	The inter burden and other waste generated shall be stacked at earmarked dump site(s) only and should not be kept active for long period.	<p>The inter burden and waste generated during mining has been stacked at earmarked dump site as per approved mining plan. Dumps have been stabilized simultaneously by planting local species and bushes i.e. Bouganvillea, karanj, Alstonia, Neem etc.</p> <p>Total 36500 number of plantation has been done in Mines area and 7838 no. of plantation has been done in plant and colony premises. In addition to the above we have planted 81106 no. of plants during CSR activities in nearby village area FY 2020-21.</p>
	The total height of the dumps shall not exceed 30 m in three terraces of 10 m each and the overall slope of the dump shall be maintained to 28. The inter burden dumps should be scientifically vegetated with suitable native species to prevent erosion and surface run off.	<p>The total height of the dumps are not exceeding then 30 m and the slope of the dumps are maintained at 28°.</p> <p>Details regarding dumps is enclosed as <b>Annexure 9.</b></p>
	Monitoring and management of rehabilitated areas should continue until the vegetation becomes self- sustaining.	Monitoring and management of rehabilitated areas will be continued until the vegetation becomes self-sustaining.
	Compliance status should be submitted to the Ministry of Environment & Forests and its Regional Office, Bhopal on six monthly bases.	Compliance status is submitted on regular basis to Ministry of Environment & Forests and its Regional Office, Bhopal. Last EC Compliance was submitted vide letter no. <b>PJL/ENV/2020/292 dated 01.12.20.</b>
13	The void left unfilled shall be converted into water body.	<p>Agreed.</p> <p>A Rain water harvesting reservoir has been already developed which is having capacity of 13 lakh Cubic meter.</p> <p>The accumulated water is used for industrial purpose at mine and cement plant. Proper landscaping is done around the water body.</p>
	The higher benches of excavated void/mining pit shall be terraced and plantation to be done to stabilize the slopes. The slope of higher benches shall be made gentler for easy accessibility by local people to use the water body.	Mined out pit has been terraced and the gentle slope is stabled and planted with adequate vegetation of local species.
	Peripheral fencing shall be carried out along the excavated area.	Fencing is being done around the periphery of Mines excavated area.

		
14	<p>Catch drains and siltation ponds of appropriate size should be constructed for the working pit, inter-burden and mineral dumps to arrest flow of silt and sediment.</p>	<p>Approximately 720 m. of Catch drains along dumps and 02 siltation ponds of appropriate size have been constructed. The catch drains are for inter-burden and Mineral dumps to arrest flow of silt and sediment.</p> <p>Garland drain along lease boundaries of 3.0 Km (cumulative in two locations) has been constructed.</p> <p>Check dams have been made at regular intervals in garland drains to hinder the flow of rain water and to arrest the silt.</p>   
	<p>The water so collected should be utilized for watering the mine area, roads, green belt development etc.</p>	<p>Complying with.</p> <p>The water so collected is being utilized for watering of Mine area, green belt development etc.</p>







	The drains should be regularly de-silted, particularly after monsoon, and maintained properly.	The drains are regularly de- silted, particularly after monsoon, and maintained properly
15	Garland drain of appropriate size, gradient and length shall be constructed for both mine pit and inter-burden dumps and sump capacity should be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and de-silted at regular intervals.	Garland drain having dimension of cumulative length of 3.0 Km, a width of 2.0 to 3 meters and depth of 0.75 to 1.2 meter. It is having appropriate gradient following Natural contour. Sump size of length 25m x width 15m and depth 4m. has been constructed along the garland drain. One additional siltation ponds has been constructed. It is having a capacity of 50% safety margin to accommodate over and above peak sudden rainfall and maximum Discharge in the area. Garland drains and de-siltation ponds are de-silted at regular intervals, especially after monsoon.
16	Dimension of the retaining wall at the toe of inter-burden dumps and inter-burden benches within the mine to check run-off and siltation should be based on the rain fall data.	Retaining walls and toe drains are maintained to check runoff and siltation.
17	Regular monitoring of ground water level and quality should be carried out by establishing a network of existing wells and constructing new piezometers at suitable locations by the project proponent in and around project area in consultation with Regional Director, Central Ground Water Board. The frequency of monitoring should be four times a year- pre-monsoon (April / May), monsoon (August), post monsoon (November), and winter (January). Data thus collected shall be sent at regular intervals to Ministry of Environment and Forests and its Regional Office at Bangalore, Central Ground Water Authority and Central Ground Water Board.	Regular monitoring of ground water level and quality is being carried out by the means of constructed Piezometers at the site in and around Project area. Frequency of monitoring is four times a year- pre-monsoon (April / May), monsoon (August), post monsoon (November), and winter (January). The monitoring results for Ground water Quality & water level is being submitted to the MoEF, New Delhi, Regional Office of MoEF, Bhopal, Central Ground Water Authority, New Delhi, Central Ground Water Board, Bhopal on regular basis.  <b>Analysis report is enclosed as Annexure 11.</b>
18	Blasting operation should be carried out only during the daytime.	Complying with. Blasting operations are carried out during the day time only.
	Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders shall be implemented	Controlled blasting is carried out according to the recommendation of Central Institute of Mining And Fuel Research. The salient recommendations are given below: <ul style="list-style-type: none"> <li>The AOP has been recorded within prescribed limits All the recorded data (blast vibrations, air overpressures and fly rocks) were well within the safe limit at the houses/structures concerned. The dominant peak frequencies of ground vibrations were in the range of 11.4 to 129 Hz. FFT analysis of blast vibration frequencies confirmed that concentration of frequencies is in band of 13.3-40.3 Hz.</li> </ul>

		<p>So, the safe level of vibration has been taken as 10 mm/s for the safety of houses/structures of the surrounding villages as per DGMS standard.</p> <ul style="list-style-type: none"><li>• Propagation equation for the prediction of blast vibration has been established and is given as Equation 1. The permissible explosive weight per delay may be computed from the Equation to contain vibration within safe limits for distances of houses/ structures concerned. For convenience, the recommended explosives weight per delay has been computed and is given in Table A3.</li><li>• The delay interval between the holes in a row should be 17 ms whereas between the rows, it should be 65 ms or more depending upon the number of rows and effective burden. If the numbers of rows are more than two, the delay interval between rows should be increased by 15% in successive rows.</li><li>• It is recommended that the existing Nonel initiation system should be continued in the Blasting operations and Electronic initiation systems should be practiced on the benches near to the structures for more precise and accurate delay design. The sub-grade drilling should be 0.3 to 0.5 m for a blast hole depth of 6 to 7 m and should be initiated from the Bottom of the hole.</li><li>• It is advisable to use blasting mate with sand bags in sensitive area to ensure any non ejection of fly rocks. For this Nonel as well as electronic system may be used as an Initiation system.</li></ul> <p>Each blast is monitored for vibrations with Minimate and Nomis seismographs.</p>  <p>Vibration report is enclosed as <b>Annexure 12</b>.</p>
19	The project proponent shall adopt wet drilling.	<p>Complying with Regular wet drilling is practiced.</p> 

20	As proposed, green belt should be developed in 33% in and around the plant as per the CPCB guidelines.	Total 36500 number of plantation has been done in Mines area and 7838 no. of plantation has been done in plant and colony premises. In addition to the above we have planted 81106 no. of plants during CSR activities in nearby village area FY 2020-21.	
21	All the recommendations of the Corporate Responsibility for Environmental Protection (CREP) shall be strictly followed.	Action Plan	Compliance status
		Cement Plant, which are not complying with notified standards shall do the following to meet the standards <ul style="list-style-type: none"> <li>• Augmentation of existing Air Pollution Control Devices : by July 2003</li> <li>• Replacement of existing Air Pollution Control devices : by July 2003</li> </ul>	Complied with.
		Cement plants located in the critically polluted or urban areas (including 5 Km distance outside urban boundary) will meet 100 Mg/Nm <sup>3</sup> limit of particulate matter by December 2004 and continue working to reduce the emission of the particulate to 50 mg/Nm <sup>3</sup>	Complied with. We are achieving the PM emission norms within 30 mg/Nm <sup>3</sup> .
		The new cement kilns to be accorded NOC/Environmental Clearance w.e.f 01.04.2003 will meet the limit of 50 mg/Nm <sup>3</sup> for particulate matter emissions	Complied.
		CPCB will evolve load based standards by December 2003	-----
		CPCB & NCBM will evolve SO <sub>2</sub> & NO <sub>x</sub> emission standards by June 2004	Not applicable.
		The cement industries will control fugitive emissions from all the raw material and products storage and transfer points by December 2003. However, the feasibility for the control of fugitive emissions from limestone and coal storage areas will be decided by the National Task Force (NTF). The NTF shall	Complied Bag Filters installed at all Material transfer points, Water spraying regularly on haul roads.

		submit its recommendations within three months	
		CPCB , NCBM, BIS and Oil refineries will jointly prepare the policy on use of petroleum coke as fuel in cement kiln by July 2003	We are using pet coke.
		After performance evaluation of various types of continuous monitoring equipment and feedback from the industries and equipment manufacturers, NTF will decide feasible unit operations/sections for installation of continuous monitoring equipment. The industry will install the continuous monitoring systems (CMS) by December 2003	Installed continuous monitoring systems (CEMS) in all process stack.
		Trippings in kiln ESP to be minimized by July 2003 as per the recommendation of NTF	Complied.
		Industries will submit the target date to enhance the utilization of waste material by April 2003	We are using the AFR waste material in our kiln.
		NCBM will carry out a study on hazardous waste utilization in cement kiln by December 2003	Not Applicable
		Cement industries will carry out feasibility study and submit target dates to CPCB for co-generation of power by July 2003	Agreed.
22	Vehicular emissions should be kept under control and regularly monitored. Measures shall be taken for maintenance of vehicles used in mining operations and in transportation of mineral. The vehicles should be covered with a tarpaulin and shall not be overloaded.	<p>Vehicular emission is kept under control. Regular maintenance of all vehicles is done as per manufacturer's maintenance schedule i.e. changing of timely diesel filters, calibration of Fuel pump, overhauling of engines etc.</p> <p>No vehicle without valid PUC is allowed inside the plant and mines area.</p> <p>The vehicles engaged in transportation of minerals outside the core zone are provided with tarpaulin and no overloading is allowed.</p>	
23	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional Office, Bhopal	<p>Complying with.</p> <p>Digital processing of entire lease area using remote sensing technique is being done and copy of same has been submitted to MoEF&amp;CC and its Regional office.</p> <p><b>Copy is enclosed as Annexure 13.</b></p>	

24	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forests 5 years in advance of final mine closure, for approval.	The documents will be submitted well before the 5 years of mine closure.
25	The company shall comply with all the commitments made during public hearing on 22 <sup>nd</sup> May, 2008.	Adhering to the given condition we will strictly comply with all the commitments made during public hearing on 22 <sup>nd</sup> May, 2008. The public hearing comments are enclosed as <b>Annexure 14</b> .
<b>B. General Condition:</b>		
1	The project authority shall adhere to the stipulations made by State Pollution Control Board (SPCB) and State Government.	Cement plant and all the mining operation are carried out with valid consent under air and water act issued by SPCB. The copy of consent is enclosed as <b>Annexure-15</b> .
2	No further expansion or modification of the plant shall be carried out without prior approval of this Ministry	Agreed, further expansion or modification will be carried only after obtaining the permission from Ministry.
3	At least four ambient air quality monitoring stations shall be established in the down wind direction as well as where maximum ground level concentration of SPM, SO <sub>2</sub> and NO <sub>x</sub> are anticipated in consultation with the SPCB	We are regularly monitor the ambient air quality at different locations in villages.
4	Data on ambient air quality and stack emissions shall be regularly submitted to this Ministry including its Regional Office and SPCB /CPCB once in six months.	Complying with. Data on ambient air quality and stack emissions are being regularly submitted.
5	Industrial waste water shall be properly collected and treated so as to conform to the standards prescribed under GSR 422(E) dated 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. The treated waste water shall be utilized for plantation purpose.	<p>No industrial wastewater is generated as the cement plant is operated on dry process.</p> <p>For domestic wastewater, there is a sewage treatment plant with capacity of 600 KLD.</p>  <p>Contaminated water generated due to washing of equipment is passed through oil and grease separation tankers. For separation of oil and grease particles from water, prime mover has been provided.</p>

		   <p>STP treated water analysis report is enclosed as <b>Annexure 5 (b)</b>.  <b>Mines workshop treated water Analysis Report is enclosed as Annexure- 16</b></p>
6	The overall noise levels in and around the plant area shall be kept well within the standards [85 dB(A)] by providing noise control measures including acoustic hoods, silencers, enclosures etc. on all sources of noise generation.	<p>The overall noise level is within threshold limit of 85 dB(A).          To arrest the noise levels all equipment are equipped with acoustic hoods, silencer, enclosures etc. besides that operators have been provided with PPE.          Green belt is developed along the plant and mining area to minimize the noise pollution.</p>
	The ambient noise levels shall conform to the standards prescribed under Environmental (Protection) Act, 1986 Rules, 1989 viz. 75 dB(A) (day time) and 70 dB(A) (night time).	<p>Ambient Noise levels are maintained well within the prescribed norms under Environmental (Protection) Act, 1986 Rules, 1989.          Noise Monitoring report is enclosed as <b>Annexure 4</b>.</p>
7	Proper housekeeping and adequate occupational health programs shall be taken up. Occupational Health Surveillance programme shall be done on a regular basis and records for at least 30-	<p>We have already conducted various health surveillance programs whose records are maintained properly. Also sufficient preventive measures are adopted during the plant and mining operation to avoid direct exposure to dust etc.</p>



	<p>40 years. The programme shall include lung function and sputum analysis maintained properly tests once in six months. Sufficient preventive measures shall be adopted to avoid direct exposure to dust etc</p>	<p>Occupational Health Survey (OHS)</p> <p>a) Periodical Medical Examinations are conducted of each employee by outside specialists once in every 5 years. Under this scheme each employee undergoes Pathological tests, blood group test, chest X-Rays, Audiometry tests, eye test etc. once every 5 years. Proper records of such tests are maintained. Not a single case of any occupational disease has so far been detected in our mines/plant. – Sample medical examination note is displayed.</p> <p>b) Welfare Amenities: A well-equipped Dispensary has been provided with Provision of Ambulance, Pathological Laboratory &amp; X-Ray, and Audiometry etc.</p> <p>OHC reports are enclosed as <b>Annexure 17 (a)</b>. Details of various health programmes conducted is enclosed as <b>Annexure 17 (b)</b>.</p>
7	<p>The company shall undertake eco-development measures including community welfare measures in the project area.</p>	<p>Various programs per training to eco development and community welfare has been taken up by the company. Various Social, educational, healthcare and environment initiative have been taken by the company.</p> <p>Details of CSR Activities of year 2020-21 are enclosed as <b>Annexure 18</b>.</p>
8	<p>The project proponent shall also comply with all the environmental protection measures and safeguards recommended in the EIA/ EMP.</p>	<p>Complying with We are strictly adhering with the Environment protection measures as stipulated in approved EMP of mines.</p> <p><b>Environment Management measures adopted in Prism Johnson Limited:-</b></p> <ol style="list-style-type: none"> <li>1. Air Pollution Control Measures i.e. bag house, ESP and bag filters installed at all process stack &amp; transfer tower respectively.</li> <li>2. Truck mounted road sweeping machine for fugitive emission control.</li> <li>3. CO<sub>2</sub> abatement by the way of plantation.</li> <li>4. Limiting and minimization of hazardous materials and chemicals during manufacturing and zero disposal of hazardous waste within the boundaries.</li> <li>5. Fleet and route optimization for energy and fuel saving resulting in a reduction of the CO<sub>2</sub> emission.</li> <li>6. Installation of Continuous Emission Monitoring System (CEMS) to monitor and analyze the flue gas emitting from the stack and other emission devices.</li> <li>7. Installation of bag filter, bag house and Electrostatic Precipitators (ESP) to prevent the emission of Particulate Matters.</li> <li>8. Continuous and regular housekeeping of shop floor and premises to collect the waste generated and put back that waste back into a process which is to target circular economy. Zero waste has been generated through processing; all waste is reused for manufacturing.</li> </ol>

		<ol style="list-style-type: none"> <li>9. Rigid pavements have been constructed within the plant and in the vicinity of plant for the transportation of the fleets.</li> <li>10. Carbon sinks have been made; plantation have been done in the periphery of the establishment under to absorb the CO<sub>2</sub> emitted and to become a carbon neutral.</li> <li>11. In house Sewage Treatment Plant (STP) of the capacity of 600KLD has been in operation from (1996) and the no all treated water is used in nursery and in manufacturing operations especially for cooling purposes.</li> <li>12. Various AFRs like carbon black and plastic waste have been used to as a fuel to avoid disposal of the waste.</li> <li>13. Natural STP has been set up to reuse the leaked or spilled water during the operations and the treated water is used for gardening purposes.</li> <li>14. All the water pipelines are reviewed and maintained on a regular basis. Leaked taps have been replaced immediately which resulted in saving water resources.</li> <li>15. Mist Cannons are used to prevent the fugitive emissions occurred during the operations.</li> <li>16. Installation of Waste Heat Recovery System (WHRS) and Selective Non-Catalytic Reduction (SNCR) has been carrying out to reduce the impact of CO<sub>2</sub> &amp; Nox on the environment respectively.</li> <li>17. Solar Panels of the capacity of 17MW which is 40% of the total energy required for the entire establishment are being installed.</li> </ol>
9	Environmental Management Cell has to be established to carry out functions relating to environmental management action plans. The head of the cell should directly report to the Chief Executive	Environmental Management Cell is functioning effectively, Structure of which is enclosed as <b>Annexure 19</b> .
10	The capital cost and recurring cost annum earmarked for environmental protection equipments shall be Rs. 115 Crores and Rs.3.20 Crores to implement the conditions stipulated by the Ministry of Environment and Forests as well as the State Government. Time bound implementation schedule for implementing all the conditions stipulated herein shall be submitted. The funds so provided shall not be diverted for any other purpose.	<p>Complying with the condition, the capital cost and the recurring cost earmarked for environmental protection are not diverted for any other purpose.</p> <p>Year Wise Recurring Expenditure for Environmental Management is enclosed as <b>Annexure 20</b>.</p>
11	The Regional Office of this Ministry / CPCB / SPCB shall monitor the stipulated conditions. The project authorities shall extend full cooperation to the officer (s) of the Regional Office by furnishing the requisite data / information / monitoring reports.	<p>Agreed.</p> <p>Full cooperation shall be provided to the officer(s) of the Regional Officer in furnishing the requisite data/ information/ monitoring reports.</p>

	A six monthly compliance report and the monitored data along with statistical interpretation shall be submitted to them regularly.	Six monthly compliance report and the monitored data is being submitted to Regional Office of the Ministry / CPCB / SPCB regularly. Last compliance report was submitted vide letter no – <b>PJL/ENV/2020/292 dated 01.12.20.</b>
12	The Project Authorities shall inform the Regional Office 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.	The copy of the intimation of the financial closure Of the project is enclosed as <b>Annexure-21.</b>
13	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment & Forests. No change in the calendar plan including excavation, quantum of limestone and waste shall be made.	Agreed. No change in mining technology and scope of working will be made without prior approval of the Ministry of Environment & Forests.
14	Measures should be taken for control of noise levels below 85dB (A) in the work environment. Workers engaged in operations of HEMM etc. should be provided with ear plugs/muffs.	Noise monitoring is carried out on regular basis so as to comply with the prescribed norms. Workers and employees are provided with earmuffs and necessary PPE's.
15	Industrial waste water (workshop and waste water from the mine) should 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. Oil and grease trap should be installed before discharge of workshop effluents.	No industrial wastewater is generated as the cement plant is operated on dry process.  For domestic wastewater, there is a sewage treatment plant of the state-of -art technology. It has the capacity to treat domestic wastewater of 600 KLPD.  Contaminated water generated due to washing of equipment is passed through grease and oil trap tank having separation chambers and pumping arrangement. For separation of oil and grease particles from water, prime mover has been provided. The oil and grease is skimmed and kept in sealed barrels for further disposal to authorized vendors.
16	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects. Occupational health surveillance program of the workers should be undertaken periodically to observe any contractions due to exposure to dust and take corrective measures, if needed.	Personal protective Equipment's are being provided to the workers and they are given adequate training and information regarding safety and health aspects related to the kind of job they are engaged in. Regular Health check-up program is conducted is done for the workers.
17	The project authorities shall inform to the Regional Office located regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	The copy of the intimation of the financial closure of the project is enclosed as <b>Annexure-21.</b>

18	A copy of clearance letter will be marked to concerned Panchayat / local NGO, if any, from whom suggestion / representation, if any, was received while processing the proposal.	Complied.
19	State pollution control board should display a copy of the clearance letter at the Regional Office, District Industry Centre & Collector's office/ Tehsildar's office for 30 days.	
20	The project authorities shall advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of the clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forests at "http://envfor.nic.in" and a copy of the same shall be forwarded to the Regional Office of this Ministry.	<p>Complied.</p> <p>The advertisement regarding issuance of Environment clearance and the copy of same is available at State Pollution Control Board and also at web site of the Ministry of Environment and Forests at "http://envfor.nic.in" was given in two newspapers i.e. Navswadesh and DeshBandhu on 25.09.2008.</p> <p>Copy of advertisement is enclosed as <b>Annexure 22</b>.</p>

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FORMAT NO. ECO/QS/FORMAT/12

TEST REPORT NO: ECO LAB/Stack1/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 11.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Raw Mill Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Kiln/Raw Mill Unit-1  
Stack Height (m) : 100  
Stack Top : Circular  
Inside Diameter of Stack (m) : 4.75  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 17.71  
Ambient Air (°C) : 32.0  
Flue Gas Temperature (°C) : 128.0  
Exit Velocity of Gas (m/sec.) : 13.85  
Flow Rate (Nm<sup>3</sup>/ sec.) : 177.69  
APCD if any : Bag House

Sl. No.	Tests Conducted	Method	<b><u>Pollutant Concentration in</u></b> (At 10% O <sub>2</sub> )
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	19.50
2.	Sulphur Dioxide (SO <sub>2</sub> ) (mg/Nm <sup>3</sup> )	IS:11255 (Part-2)	16.20
3.	Nitrogen Oxides (NO <sub>x</sub> ) (mg/Nm <sup>3</sup> )	IS:11255 (Part-7)	525.10

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12

TEST REPORT NO: ECO LAB/Stack2/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 11.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Raw Mill Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Kiln/Raw Mill Unit-2  
Stack Height (m) : 100  
Stack Top : Circular  
Inside Diameter of Stack (m) : 4.75  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 17.71  
Ambient Air (°C) : 32.0  
Flue Gas Temperature (°C) : 141.0  
Exit Velocity of Gas (m/sec.) : 14.28  
Flow Rate (Nm<sup>3</sup>/ sec.) : 177.45  
APCD if any : Bag House

Sl. No.	Tests Conducted	Method	<b><u>Pollutant Concentration in</u></b> ( At 10% O <sub>2</sub> )
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	22.10
2.	Sulphur Dioxide (SO <sub>2</sub> ) (mg/Nm <sup>3</sup> )	IS:11255 (Part-2)	15.80
3.	Nitrogen Oxides (NO <sub>x</sub> ) (mg/Nm <sup>3</sup> )	IS:11255 (Part-7)	516.50

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12

TEST REPORT NO: ECO LAB/Stack3/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 12.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Coal Mill Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Coal Mill Unit-1  
Stack Height (m) : 65.0  
Stack Top : Circular  
Inside Diameter of Stack (m) : 2.24  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 3.94  
Ambient Air (°C) : 30.0  
Flue Gas Temperature (°C) : 89.0  
Exit Velocity of Gas (m/sec.) : 8.85  
Flow Rate (Nm<sup>3</sup>/ sec.) : 27.98  
APCD if any : Bag House

Sl. No.	Tests Conducted	Method	Pollutant Concentration
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	19.85

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12

TEST REPORT NO: ECO LAB/Stack4/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 12.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Coal Mill Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Coal Mill Unit-2  
Stack Height (m) : 65.0  
Stack Top : Circular  
Inside Diameter of Stack (m) : 2.24  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 3.94  
Ambient Air (°C) : 32.0  
Flue Gas Temperature (°C) : 89.0  
Exit Velocity of Gas (m/sec.) : 9.82  
Flow Rate (Nm<sup>3</sup>/ sec.) : 31.05  
APCD if any : Bag House

Sl. No.	Tests Conducted	Method	Pollutant Concentration
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	15.20

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12

TEST REPORT NO: ECO LAB/Stack5/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 12.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Cooler Stack Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Cooler Unit-1  
Stack Height (m) : 50.0  
Stack Top : Circular  
Inside Diameter of Stack (m) : 4.5  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 15.89  
Ambient Air (°C) : 30.0  
Flue Gas Temperature (°C) : 239.0  
Exit Velocity of Gas (m/sec.) : 11.60  
Flow Rate (Nm<sup>3</sup>/ sec.) : 104.58  
APCD if any : ESP

Sl. No.	Tests Conducted	Method	Pollutant Concentration
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	25.20

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12

TEST REPORT NO: ECO LAB/Stack6/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 12.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Cooler Stack Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Cooler Unit-2  
Stack Height (m) : 50.0  
Stack Top : Circular  
Inside Diameter of Stack (m) : 4.5  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 15.89  
Ambient Air (°C) : 30.0  
Flue Gas Temperature (°C) : 220.0  
Exit Velocity of Gas (m/sec.) : 13.92  
Flow Rate (Nm<sup>3</sup>/ sec.) : 130.33  
APCD if any : ESP

Sl. No.	Tests Conducted	Method	Pollutant Concentration
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	24.80

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12 TEST REPORT NO: ECO LAB/Stack7/11/20  
TEST REPORT ISSUE DATE: 24.11.2020**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 13.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Cement Mill Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Cement Mill-1 (Unit II)  
Stack Height (m) : 49.0  
Stack Top : Circular  
Inside Diameter of Stack (m) : 1.0  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 0.785  
Ambient Air (°C) : 29.0  
Flue Gas Temperature (°C) : 86.0  
Exit Velocity of Gas (m/sec.) : 6.96  
Flow Rate (Nm<sup>3</sup>/ sec.) : 4.42  
APCD if any : Bag House

Sl. No.	Tests Conducted	Method	Pollutant Concentration
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	16.40

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12

TEST REPORT NO: ECO LAB/Stack8/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 13.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Cement Mill Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Cement Mill-2 (Unit II)  
Stack Height (m) : 49.0  
Stack Top : Circular  
Inside Diameter of Stack (m) : 1.0  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 0.785  
Ambient Air (°C) : 29.0  
Flue Gas Temperature (°C) : 82.0  
Exit Velocity of Gas (m/sec.) : 7.29  
Flow Rate (Nm<sup>3</sup>/ sec.) : 4.63  
APCD if any : Bag House

Sl. No.	Tests Conducted	Method	Pollutant Concentration
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	15.60

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12 TEST REPORT NO: ECO LAB/Stack9/11/20  
TEST REPORT ISSUE DATE: 24.11.2020**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 13.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Cement Mill Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Cement Mill -2 (Unit -I)  
Stack Height (m) : 36.0  
Stack Top : Circular  
Inside Diameter of Stack (m) : 0.96  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 0.72  
Ambient Air (°C) : 30.0  
Flue Gas Temperature (°C) : 84.0  
Exit Velocity of Gas (m/sec.) : 7.35  
Flow Rate (Nm<sup>3</sup>/ sec.) : 4.31  
APCD if any : Bag House

Sl. No.	Tests Conducted	Method	Pollutant Concentration
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	27.4

\*The results are related only to item tested.

  
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FORMAT NO. ECO/QS/FORMAT/12 TEST REPORT NO: ECO LAB/Stack10/11/20  
TEST REPORT ISSUE DATE: 24.11.2020**TEST REPORT OF STACK EMISSIONS\***

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Date of Monitoring : 13.11.2020  
Sample Collected by : Mr. Maan Singh  
Source of Emission : Cement Mill Emission  
Sampling Method : IS: 11255  
Instrument Used : Stack Monitoring Kit

**Details of Stack**

Material of Construction : M.S.  
Stack Attached to : Cement Mill -1 (Unit -I)  
Stack Height (m) : 36.0  
Stack Top : Circular  
Inside Diameter of Stack (m) : 0.96  
(at sampling point)  
Cross Sectional Area of Duct/Stack (m<sup>2</sup>) : 0.72  
Ambient Air (°C) : 29.0  
Flue Gas Temperature (°C) : 90.0  
Exit Velocity of Gas (m/sec.) : 6.92  
Flow Rate (Nm<sup>3</sup>/ sec.) : 3.99  
APCD if any : Bag House

Sl. No.	Tests Conducted	Method	Pollutant Concentration
1.	Particulate Matter (PM) (mg/Nm <sup>3</sup> )	IS:11255 (Part-1)	20.30

\*The results are related only to item tested.

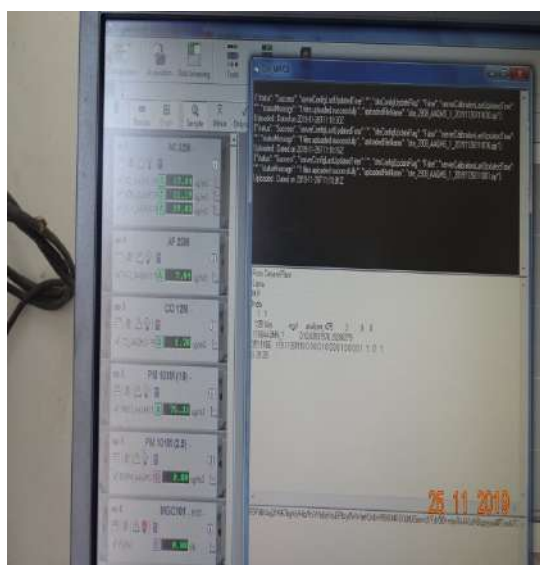
  
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Manager (Q)



AAQMS Station



AAQMS Panel



Desktop showing monitoring data



Continuous Emission Monitoring system Panel



LED Display of emission parameters at Main Gate of premises





Continuous Air Quality Monitoring Station



Continuous Stack Emission Monitoring Station





**Plantation & Concrete roads**





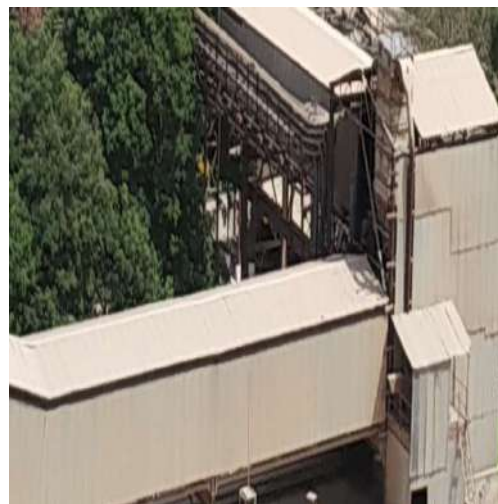




## Water Sprinkling



## Covered Conveyor Belt & Bag filters





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FORMAT NO. ECO/QS/FORMAT/10

TEST REPORT NO: ECO LAB/AAQ1/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT AIR\***

Name of the Company : M/s Prism Johnson Ltd.  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Sample Collected by : Mr. Maan Singh  
Sampling Method : IS: 5182  
Instrument Used : FDS & RDS

Sl. No.	Tests Conducted	Method	Result				Limit as per National Ambient Air Quality Standards
			L1	L2	L3	L4	
			10.11.2020	10.11.2020	10.11.2020	10.11.2020	
1	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	NAAQM guide line volume – I by CPCB	32.80	34.50	40.60	37.90	60
2	PM <sub>10</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-23)	62.10	64.80	72.20	69.20	100
3	SO <sub>2</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-2)	10.85	9.65	12.40	12.60	80
4	NO <sub>x</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-6)	14.65	17.85	17.10	19.80	80
5	CO (mg/m <sup>3</sup> )	IS:5182 (Part-10)	0.45	0.55	0.50	0.55	02

\*The results are related only to item tested.

**Note:**

L1= NearPCL Colony      L2=Near Guest House,  
L3= Near Crusher Unit-II      L4= Near Admin. Building

**Standards:**

S1 = Ambient Air Quality Standard for Residential, Industrial &amp; Rural Other Area

  
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Authorized Signatory  
Manager (Q)

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FORMAT NO. ECO/QS/FORMAT/10

TEST REPORT NO: ECO LAB/AAQ2/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT AIR**

Name of the Company : M/s Prism Johnson Ltd.  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Sample Collected by : Mr. Maan Singh  
Sampling Method : IS: 5182  
Instrument Used : FDS & RDS

Sl. No.	Tests Conducted	Method	Result				Limit as per National Ambient Air Quality Standards
			L1	L2	L3	L4	
			11.11.2020	11.11.2020	11.11.2020	11.11.2020	
1	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	NAAQM guide line volume – I by CPCB	45.80	38.40	30.50	29.70	60
2	PM <sub>10</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-23)	69.20	65.80	49.20	58.10	100
3	SO <sub>2</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-2)	10.10	14.30	13.70	14.80	80
4	NO <sub>x</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-6)	17.50	18.20	19.60	20.50	80
5	CO (mg/m <sup>3</sup> )	IS:5182 (Part-10)	0.55	0.45	0.30	0.25	02

\*The results are related only to item tested.

**Note:**

L1= Nr Mines Site Office

L2= Near Western Block Garden,

L3=Village Hinauti

L4= Village Sijahata

**Standards:**

S1 = Ambient Air Quality Standard for Residential, Industrial &amp; Rural Other Area

  
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FORMAT NO. ECO/QS/FORMAT/10

TEST REPORT NO: ECO LAB/AAQ3/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT AIR**

Name of the Company : M/s Prism Johnson Ltd.  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Sample Collected by : Mr. Maan Singh  
Sampling Method : IS: 5182  
Instrument Used : FDS & RDS

Sl. No.	Tests Conducted	Method	Result				Limit as per National Ambient Air Quality Standards
			L1	L2	L3	L4	
			11.11.2020	11.11.2020	11.11.2020	11.11.2020	
1	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	NAAQM guide line volume – I by CPCB	29.80	36.50	40.10	37.10	60
2	PM <sub>10</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-23)	54.40	50.30	55.60	68.80	100
3	SO <sub>2</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-2)	10.10	11.80	11.60	10.10	80
4	NO <sub>x</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-6)	12.85	16.20	16.80	15.80	80
5	CO (mg/m <sup>3</sup> )	IS:5182 (Part-10)	0.45	0.35	0.40	0.45	02

\*The results are related only to item tested.

**Note:**

L1= Adiwasi Tola (Nr Bagahai ML Area) L2= At BaisanTola (Nr. Bagahai ML Area),  
L3=South Side of Working Pit (Bagahai Mines) L4= Near Boundary Pillar No.64 Bagahai

**Standards:**

S1 = Ambient Air Quality Standard for Residential, Industrial &amp; Rural Other Area

  
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FORMAT NO. ECO/QS/FORMAT/10

TEST REPORT NO: ECO LAB/AAQ/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF WORK PLACE AIR MONITORING**

Name of the Company : M/s Prism Johnson Ltd.  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Sample Collected by : Mr. Maan Singh  
Sampling Method : IS: 5182  
Instrument Used : FDS & RDS

Sl. No.	Tests Conducted	Method	Result				Limit as per National Ambient Air Quality Standards
			L1	L2	L3	L4	
			12.11.2020	12.11.2020	12.11.2020	12.11.2020	
1	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	NAAQM guide line volume – I by CPCB	50.80	45.60	49.80	45.40	60
2	PM <sub>10</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-23)	79.20	82.30	80.60	78.10	100
3	SO <sub>2</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-2)	17.80	14.70	12.10	10.90	80
4	NO <sub>x</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-6)	18.20	16.30	17.90	15.40	80
5	CO (mg/m <sup>3</sup> )	IS:5182 (Part-10)	0.55	0.50	0.52	0.45	02

\*The results are related only to item tested.

**Note:**

L1= Near Cement Mill Unit –II

L2= Near Railway Yard,

L3= Near Packing Plant

L4= Kiln Unit-II

  
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Manager (Q)

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FORMAT NO. ECO/QS/FORMAT/10

TEST REPORT NO: ECO LAB/AAQ5/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT AIR**

Name of the Company : M/s Prism Johnson Ltd.  
 Address of the Company : Village Mankahari  
 Tehsil Rampur Baghelan  
 District Satna (M.P.)  
 Sample Collected by : Mr. Maan Singh  
 Sampling Method : IS: 5182  
 Instrument Used : FDS & RDS

Sl. No.	Tests Conducted	Method	Result				Limit as per National Ambient Air Quality Standards
			L1	L2	L3	L4	
			12.11.2020	12.11.2020	12.11.2020	12.11.2020	
1	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	NAAQM guide line volume – I by CPCB	30.10	33.70	29.50	27.20	60
2	PM <sub>10</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-23)	62.10	75.60	64.90	48.10	100
3	SO <sub>2</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-2)	8.95	12.40	13.10	12.20	80
4	NO <sub>x</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-6)	12.80	15.30	20.80	19.30	80
5	CO (mg/m <sup>3</sup> )	IS:5182 (Part-10)	0.50	0.45	0.40	0.45	02

\*The results are related only to item tested.

**Note:**

L1=Nr. Nar Nala Bridge,

L2= Nr. Medhi Mines Boundary Pillar No 28

L3=Nr. Medhi Mines Boundary Pillar No.23L4= Village Malgaon

**Standards:**

S1 = Ambient Air Quality Standard for Residential, Industrial &amp; Rural Other Area

  
 Analyst

  
 Authorized Signatory

  
 Manager (Q)

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FORMAT NO. ECO/QS/FORMAT/10

TEST REPORT NO: ECO LAB/AAQ6/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT AIR**

Name of the Company : M/s Prism Johnson Ltd.  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District Satna (M.P.)  
Sample Collected by : Mr. Maan Singh  
Sampling Method : IS: 5182  
Instrument Used : FDS & RDS

Sl. No.	Tests Conducted	Method	Result				Limit as per National Ambient Air Quality Standards
			L1	L2	L3	L4	
			13.11.2020	13.11.2020	13.11.2020	13.11.2020	
1	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	NAAQM guide line volume – I by CPCB	27.90	25.20	29.80	30.10	60
2	PM <sub>10</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-23)	42.50	57.20	47.50	58.30	100
3	SO <sub>2</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-2)	10.05	12.80	12.65	11.70	80
4	NO <sub>x</sub> (µg/m <sup>3</sup> )	IS:5182 (Part-6)	13.85	18.20	16.20	18.60	80
5	CO (mg/m <sup>3</sup> )	IS:5182 (Part-10)	0.25	0.40	0.35	0.30	02

\*The results are related only to item tested.

**Note:**

L1=Village Badarkha

L2= Village Hinauta

L3= Village Chulhi

L4= Village Kulhari

**Standards:**

S1 = Ambient Air Quality Standard for Residential, Industrial &amp; Rural Other Area

  
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# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)

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E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939

Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000582F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/MF/SC/966		
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2020

### 01. DUC Fitted in instrument

Name	Make	Model	Sl.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	1980 - DTC - 2011

### 02. Details of (DUC)

Name	Orifice Manometer Flow	Environmental Conditions During Calibration	
Make	Envirotech Instruments	Temperature(°C)	25 ± 10
Sl.No.	1980 - DTC - 2011	Relative Humidity (%)	45-75
Cal. Range	0.6 -1.4 m <sup>3</sup> /min	Barometric Pressure (mmHg)	745.10

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl.No./ID No.	Traceability
Top Loading Orifice Calibrator	0.6 to 1.4 m <sup>3</sup> /min	57/LES-CCL/R/15304	LES-CCL, Gr. Noida
Certificate No.	Cali. Date	Valid Up to	
LES-CCL/FF/TLC/92	10.06.2020	09.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/08

Remark : 1. Refer page 2 of 3 for Calibration Results and page 3 of 3 for Calibration Curve

2. The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration.	
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
4. This certificate shall not be reproduced, except in full without the written permission of LES-CCL Kasna, Greater Noida (U.P.)	
	SHIVSHANKER SINGH (Chief Executive Officer)







# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000582F		Page 2 of 3
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Certificate No.	LES-CCL/FF/MF/SC/966		

## 05. Calibration Results For Orifice Manometer Flow

S.No.	Test piece measured Indicated flow rate (m <sup>3</sup> /min)	Reference True measured flow rate in Calibration Curve (m <sup>3</sup> /min)	Error % (Rdg)	Expanded Uncertainty at 95 % of Confidence level ( k =2 )	
				± (m <sup>3</sup> /min)	(% Rdg)
1	1.300	1.376	-5.523	0.035	2.52
2	1.24	1.274	-2.669	0.032	2.52
3	1.17	1.134	3.175	0.029	2.52
4	0.93	0.886	4.966	0.029	2.52
5	0.700	0.684	2.339	0.017	2.52

( Curve Enclosed )

### Uncertainty Contributing Factors :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments used for Flow measurement
3. Uncertainty of master instruments used for Temp. Measurement (Temp. & RH Indicator)
4. Uncertainty of master instruments used for Atm. Pressure Measurement (Barometer)
5. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor k = 2 , for degrees of freedom = ∞ and C.L is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna ,(Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration .
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
4. This certificate shall not be reproduced, except in full without the written permission of LES-CCL Kasna, Greater Noida (U.P.)

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SHIVSHANKER SINGH  
(Chief Executive Officer)





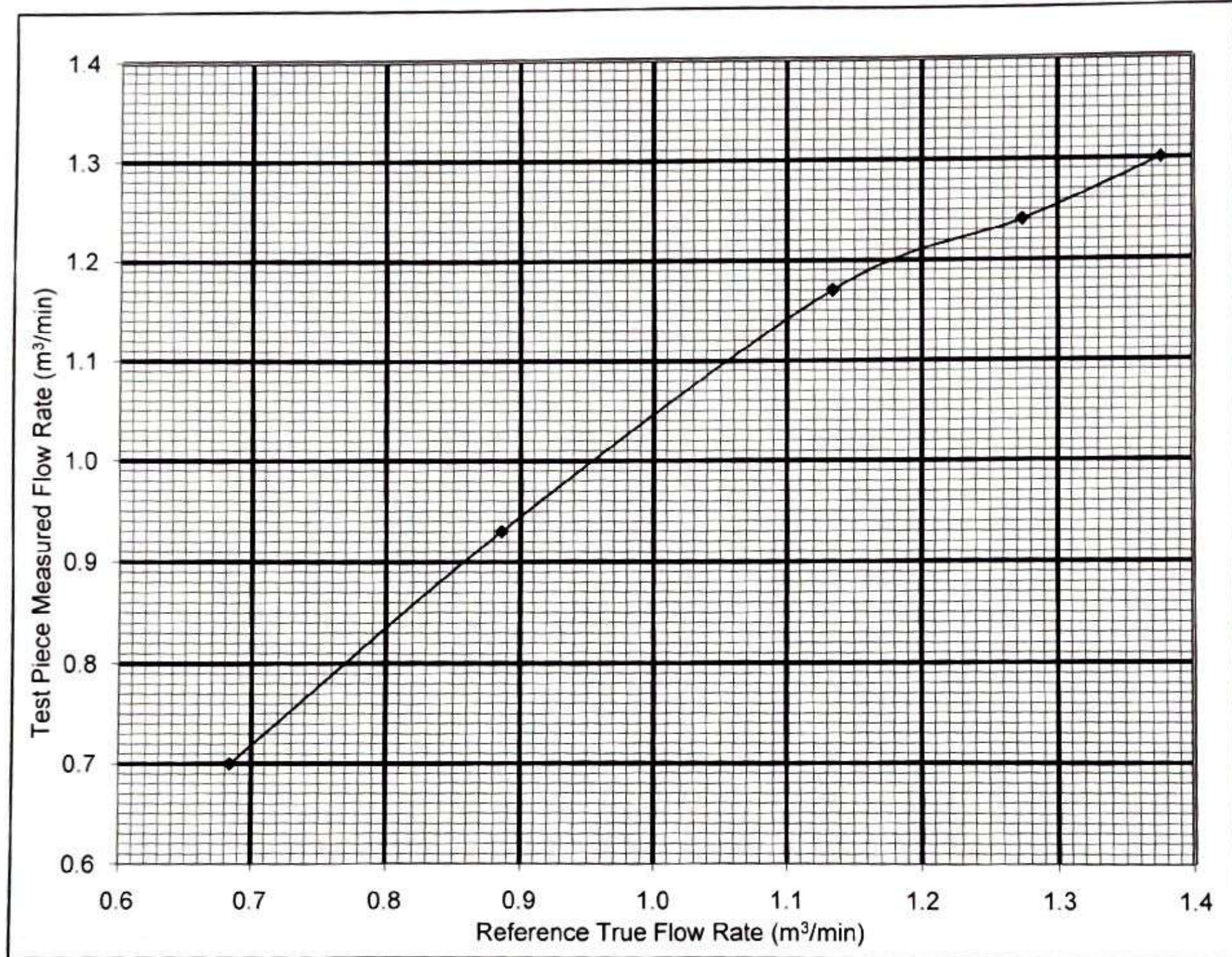


ULR No. CC225321000000582F  
Date of Calibration:- 03.02.2021



## CALIBRATION CURVE FOR ORIFICE MANOMETER FLOW

Page 3 of 3



Sl.No.	Reference True Flow Rate (m³/min)	Test Piece Measured Flow Rate (m³/min)	Name of the Instrument	Respirable Dust Sampler
			Sl.No. of the Instruments	1980 - DTC - 2011
			Name of the unit calibrated	Orifice Manometer Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.684	0.700		
2	0.886	0.93		
3	1.134	1.17		
4	1.274	1.24		
5	1.376	1.300		

### Notes :-

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SHIVSHANKER SINGH  
(Chief Executive Officer)







# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)

K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)  
E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939  
Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000583	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2107		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	1980 - DTC - 2011

### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration	
SI.No.	T - 1980	Temperature (°C)	25 ± 3
		Relative Humidity (%)	45 - 75
		B. Pressure (mmHg)	746.60

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.	Calibration Date	Valid Up to	
CCTPL/TM/0170/01	30.10.2020	29.10.2021	

### 04. Calibration Procedure LES-CCL/WI/31/ET/01

### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 3083.97 hrs)	15.0066	-0.04	± 3.329 %

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

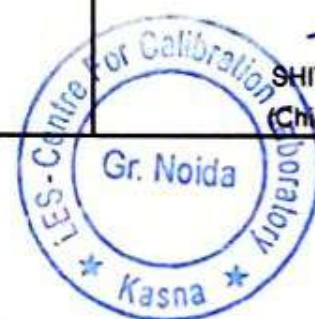
The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
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(Chief Executive Officer)







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E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939

Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000581F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2106		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	1977 - DTC - 2011

### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration
SI.No.	T - 1977	Temperature (°C)
		25 ± 3
		Relative Humidity (%)
		45 - 75
		B. Pressure (mmHg)
		746.60

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.	Calibration Date	Valid Up to	
CCTPL/TM/0170/01	30.10.2020	29.10.2021	

### 04. Calibration Procedure LES-CCL/WI/31/ET/01

### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 1619.90 hrs)	15.0066	-0.04	± 3.329 %

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000580F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/MF/SC/965		
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2020

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	1977 - DTC - 2011

### 02. Details of (DUC)

Name	Orifice Manometer Flow	Environmental Conditions During Calibration	
Make	Envirotech Instruments	Temperature(°C)	25 ± 10
SI.No.	1977 - DTC - 2011	Relative Humidity (%)	45-75
Cal. Range	0.6 -1.4 m <sup>3</sup> /min	Barometric Pressure (mmHg)	745.10

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./ID No.	Traceability
Top Loading Orifice Calibrator	0.6 to 1.4 m <sup>3</sup> /min	57/LES-CCL/R/15304	LES-CCL, Gr. Noida
Certificate No.	Cali. Date	Valid Up to	
LES-CCL/FF/TLC/92	10.06.2020	09.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/08

Remark : 1. Refer page 2 of 3 for Calibration Results and page 3 of 3 for Calibration Curve

2. The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration .	
2. Results reported are valid at the time of and under the stated conditions of measurement	
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000580F		Page 2 of 3
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Certificate No.	LES-CCL/FF/MF/SC/965		

## 05. Calibration Results For Orifice Manometer Flow

S.No.	Test piece measured Indicated flow rate (m <sup>3</sup> /min)	Reference True measured flow rate in Calibration Curve (m <sup>3</sup> /min)	Error % (Rdg)	Expanded Uncertainty at 95 % of Confidence level ( k =2 )	
				± (m <sup>3</sup> /min)	(% Rdg)
1	1.210	1.208	0.166	0.030	2.52
2	1.14	1.144	-0.350	0.029	2.52
3	1.10	1.084	1.476	0.027	2.52
4	1.02	0.974	4.723	0.027	2.52
5	0.740	0.724	2.210	0.018	2.52

( Curve Enclosed )

### Uncertainty Contributing Factors :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments used for Flow measurement
3. Uncertainty of master instruments used for Temp.Measurement (Temp. & RH Indicator)
4. Uncertainty of master instruments used for Atm.Pressure Measurement (Barometer)
5. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage

factor k = 2 , for degrees of freedom = ∞ and C.L is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna ,(Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration .
2. Results reported are valid at the time of and under the stated conditions of measurement
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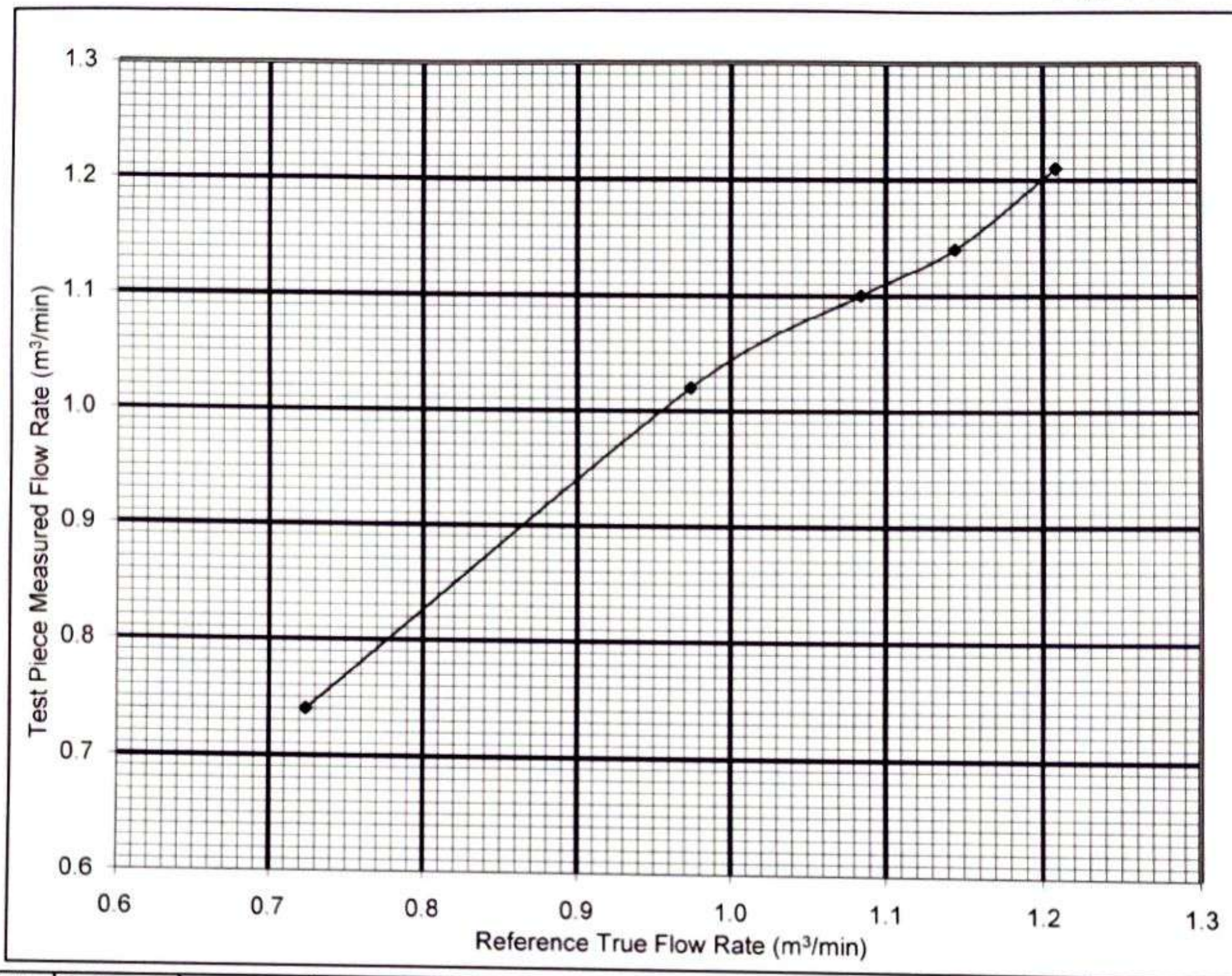
ULR No. CC225321000000580F

Date of Calibration:- 03.02.2021



## CALIBRATION CURVE FOR ORIFICE MANOMETER FLOW

Page 3 of 3



Sl.No.	Reference True Flow Rate (m³/min)	Test Piece Measured Flow Rate (m³/min)	Name of the Instrument	Respirable Dust Sampler
			Sl.No. of the Instruments	1977 - DTC - 2011
			Name of the unit calibrated	Orifice Manometer Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.724	0.740		
2	0.974	1.02		
3	1.084	1.10		
4	1.144	1.14		
5	1.208	1.210		

## Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000579F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2105		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	Sl.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	1981 - DTC - 2011

### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration	
Sl.No.	T - 1981	Temperature (°C)	25 ± 3
		Relative Humidity (%)	45 - 75
		B. Pressure (mmHg)	746.60

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.		Calibration Date	Valid Up to
CCTPL/TM/0170/01		30.10.2020	29.10.2021

### 04. Calibration Procedure LES-CCL/WI/31/ET/01

### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 1742.58 hrs)	15.0076	-0.05	± 3.329 %

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000578F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/MF/SC/963		
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :-	23.06.2020
		Date of Issue:-	06.02.2020

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	1981 - DTC - 2011

### 02. Details of (DUC)

Name	Orifice Manometer Flow	Environmental Conditions During Calibration	
Make	Envirotech Instruments	Temperature(°C)	25 ± 10
SI.No.	1981 - DTC - 2011	Relative Humidity (%)	45-75
Cal. Range	0.6 -1.4 m <sup>3</sup> /min	Barometric Pressure (mmHg)	745.10

### 03. Standard Equipment used for calibration

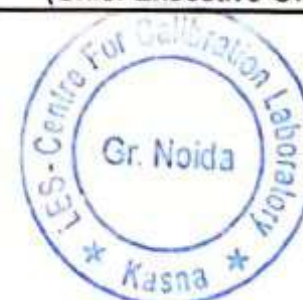
Standard Equipment Name	Range	SI.No./ID No.	Traceability
Top Loading Orifice Calibrator	0.6 to 1.4 m <sup>3</sup> /min	57/LES-CCL/R/15304	LES-CCL, Gr. Noida
Certificate No.	Cali. Date	Valid Up to	
LES-CCL/FF/TLC/92	10.06.2020	09.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/08

Remark : 1. Refer page 2 of 3 for Calibration Results and page 3 of 3 for Calibration Curve

2. The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000578F		Page 2 of 3
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Certificate No.	LES-CCL/FF/MF/SC/963		

## 05. Calibration Results For Orifice Manometer Flow

S.No.	Test piece measured Indicated flow rate (m <sup>3</sup> /min)	Reference True measured flow rate in Calibration Curve (m <sup>3</sup> /min)	Error % (Rdg)	Expanded Uncertainty at 95 % of Confidence level ( k =2 )	
				± (m <sup>3</sup> /min)	(% Rdg)
1	1.250	1.204	3.821	0.030	2.52
2	1.16	1.156	0.346	0.029	2.52
3	1.06	1.034	2.515	0.026	2.52
4	0.94	0.936	0.427	0.026	2.52
5	0.750	0.726	3.306	0.018	2.52

( Curve Enclosed )

### Uncertainty Contributing Factors :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments used for Flow measurement
3. Uncertainty of master instruments used for Temp. Measurement (Temp. & RH Indicator)
4. Uncertainty of master instruments used for Atm. Pressure Measurement (Barometer)
5. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor k = 2 , for degrees of freedom = ∞ and C.L is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna ,(Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration .
2. Results reported are valid at the time of and under the stated conditions of measurement
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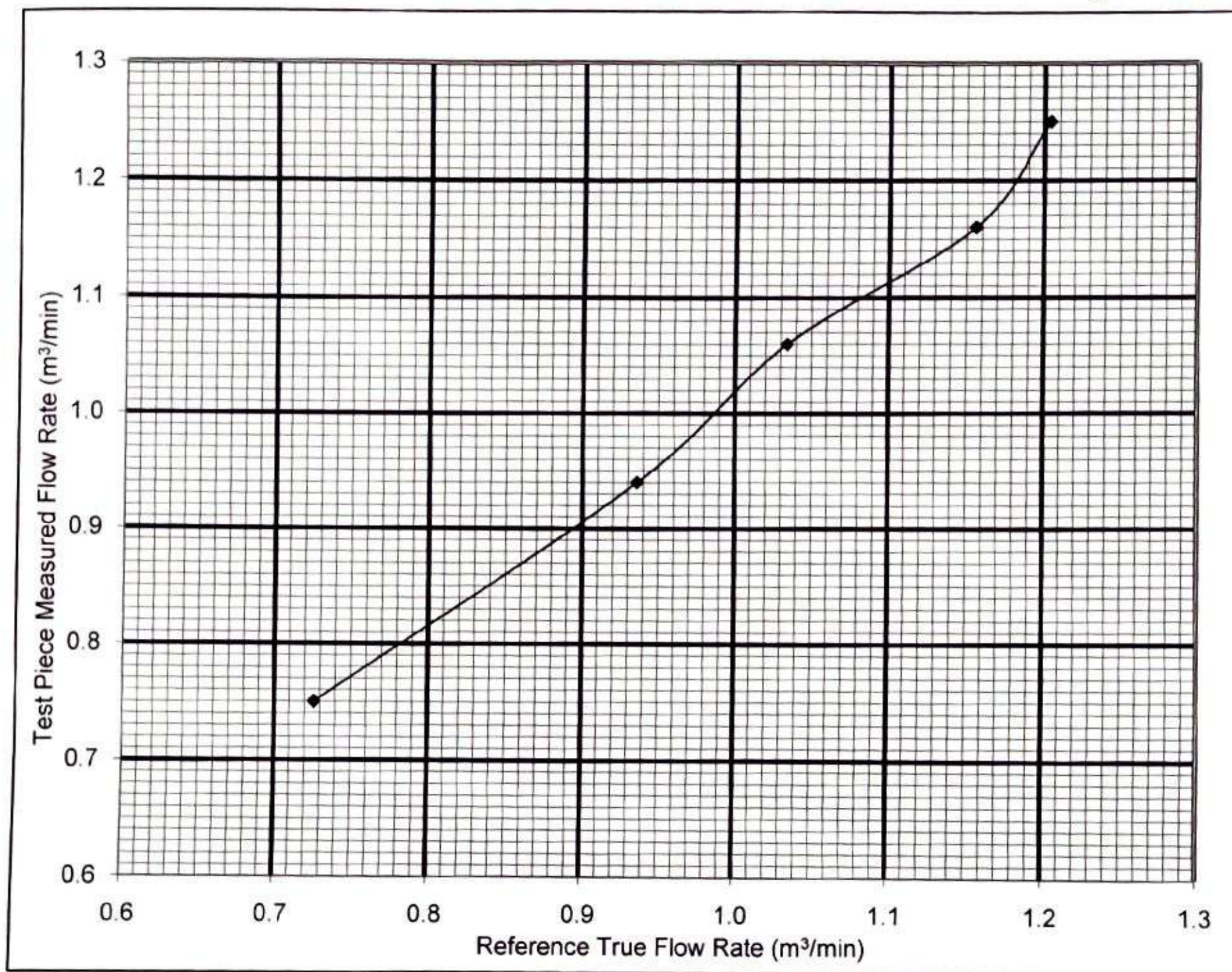
ULR No. CC225321000000578F

Date of Calibration:- 03.02.2021



## CALIBRATION CURVE FOR ORIFICE MANOMETER FLOW

Page 3 of 3



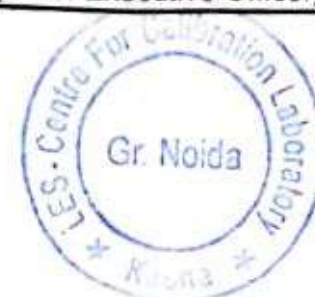
Sl.No.	Reference True Flow Rate (m³/min)	Test Piece Measured Flow Rate (m³/min)	Name of the Instrument	Respirable Dust Sampler
			Sl.No. of the Instruments	1981 - DTC - 2011
			Name of the unit calibrated	Orifice Manometer Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.726	0.750		
2	0.936	0.94		
3	1.034	1.06		
4	1.156	1.16		
5	1.204	1.250		

## Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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Authorized By

*Shivshanker Singh*  
SHIVSHANKER SINGH  
(Chief Executive Officer)







# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

## (A Division of Lata Envirotech Services)



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Website : www.lescccllab.com

CC-2253

### CALIBRATION CERTIFICATE

ULR No.	CC225321000000577F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2104		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

#### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	1976 - DTC - 2011

#### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration	
SI.No.	T - 1976	Temperature (°C)	25 ± 3
		Relative Humidity (%)	45 - 75
		B. Pressure (mmHg)	746.60

#### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.	Calibration Date	Valid Up to	
CCTPL/TM/0170/01	30.10.2020	29.10.2021	

#### 04. Calibration Procedure LES-CCL/WI/31/ET/01

#### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 2087.51 hrs)	15.0066	-0.04	± 3.33 %

#### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

#### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated
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#### Authorized By

SHIVSHANKER SINGH  
(Chief Executive Officer)







# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)

K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)  
E-mail : lesccl307@gmail.com, lesccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939  
Website : www.lesccllab.com



## CALIBRATION CERTIFICATE

ULR No.	CC225321000000576F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/MF/SC/963		
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2020

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	1976 - DTC - 2011

### 02. Details of (DUC)

Name	Orifice Manometer Flow	Environmental Conditions During Calibration	
Make	Envirotech Instruments	Temperature(°C)	25 ± 10
SI.No.	1976 - DTC - 2011	Relative Humidity (%)	45-75
Cal. Range	0.6 -1.4 m <sup>3</sup> /min	Barometric Pressure (mmHg)	745.10

### 03. Standard Equipment used for calibration

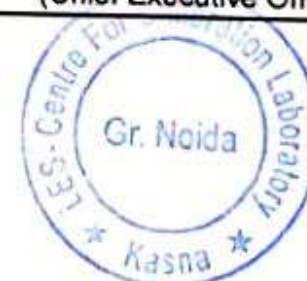
Standard Equipment Name	Range	SI.No./ID No.	Traceability
Top Loading Orifice Calibrator	0.6 to 1.4 m <sup>3</sup> /min	57/LES-CCL/R/15304	LES-CCL, Gr. Noida
Certificate No.	Cali. Date	Valid Up to	
LES-CCL/FF/TLC/92	10.06.2020	09.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/08

Remark : 1. Refer page 2 of 3 for Calibration Results and page 3 of 3 for Calibration Curve

2. The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration .	
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000576F		Page 2 of 3
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Certificate No.	LES-CCL/FF/MF/SC/963		

## 05. Calibration Results For Orifice Manometer Flow

S.No.	Test piece measured Indicated flow rate (m <sup>3</sup> /min)	Reference True measured flow rate in Calibration Curve (m <sup>3</sup> /min)	Error % (Rdg)	Expanded Uncertainty at 95 % of Confidence level ( k =2 )	
				± (m <sup>3</sup> /min)	(% Rdg)
1	1.250	1.204	3.821	0.030	2.52
2	1.16	1.156	0.346	0.029	2.52
3	1.06	1.034	2.515	0.026	2.52
4	0.94	0.936	0.427	0.026	2.52
5	0.750	0.726	3.306	0.018	2.52

( Curve Enclosed )

### Uncertainty Contributing Factors :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments used for Flow measurement
3. Uncertainty of master instruments used for Temp. Measurement (Temp. & RH Indicator)
4. Uncertainty of master instruments used for Atm. Pressure Measurement (Barometer)
5. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor k = 2 , for degrees of freedom = ∞ and C.L is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna ,(Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration .
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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### Authorized By

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(Chief Executive Officer)







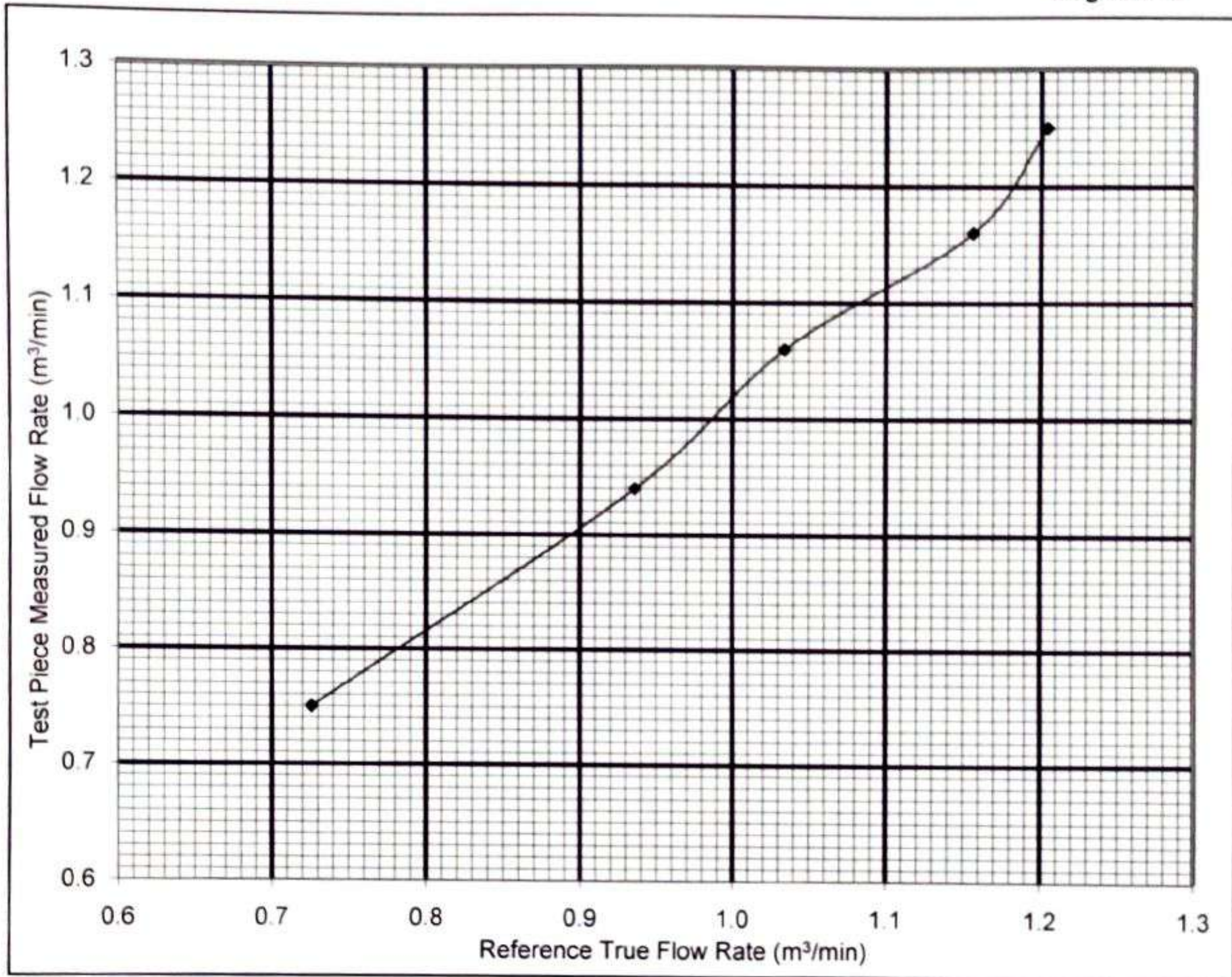
ULR No. CC225321000000576F

Date of Calibration:- 03.02.2021



## CALIBRATION CURVE FOR ORIFICE MANOMETER FLOW

Page 3 of 3



Sl.No.	Reference True Flow Rate (m³/min)	Test Piece Measured Flow Rate (m³/min)	Name of the Instrument	Respirable Dust Sampler
			Sl.No. of the Instruments	1976 - DTC - 2011
			Name of the unit calibrated	Orifice Manometer Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.726	0.750		
2	0.936	0.94		
3	1.034	1.06		
4	1.156	1.16		
5	1.204	1.250		

Notes :-	Authorized By
	 SHIVSHANKER SINGH (Chief Executive Officer)
1. Reference used are directly traceable to national standard through unbroken chain of calibration.	
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
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E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939  
Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000584F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/MF/SC/962		
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :-	23.06.2020
		Date of Issue:-	06.02.2020

### 01. DUC Fitted in instrument

Name	Make	Model	Sl.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	900 - DATE - C - 2000

### 02. Details of (DUC)

Name	Orifice Manometer Flow	Environmental Conditions During Calibration
Make	Envirotech Instruments	Temperature(°C)
Sl.No.	900 - DATE - C - 2000	Relative Humidity (%)
Cal. Range	0.6 -1.4 m <sup>3</sup> /min	Barometric Pressure (mmHg)
		25 ± 10
		45-75
		745.10

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl.No./ID No.	Traceability
Top Loading Orifice Calibrator	0.6 to 1.4 m <sup>3</sup> /min	57/LES-CCL/R/15304	LES-CCL, Gr. Noida
Certificate No.	Cali. Date	Valid Up to	
LES-CCL/FF/TLC/92	10.06.2020	09.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/08

Remark : 1. Refer page 2 of 3 for Calibration Results and page 3 of 3 for Calibration Curve

2. The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration .	
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
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	SHIVSHANKER SINGH (Chief Executive Officer)







# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000584F		Page 2 of 3
Calibration Date	03.02.2021	Suggested Date of Next Calibration	02.02.2022
Certificate No.	LES-CCL/FF/MF/SC/962		

## 05. Calibration Results For Orifice Manometer Flow

S.No.	Test piece measured Indicated flow rate (m <sup>3</sup> /min)	Reference True measured flow rate in Calibration Curve (m <sup>3</sup> /min)	Error % (Rdg)	Expanded Uncertainty at 95 % of Confidence level ( k =2 )	
				± (m <sup>3</sup> /min)	(% Rdg)
1	1.220	1.192	2.349	0.030	2.52
2	1.16	1.130	2.655	0.028	2.52
3	1.08	1.026	5.263	0.026	2.52
4	0.95	0.934	1.713	0.026	2.52
5	0.775	0.744	4.167	0.019	2.52

( Curve Enclosed )

### Uncertainty Contributing Factors :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments used for Flow measurement
3. Uncertainty of master instruments used for Temp. Measurement (Temp. & RH Indicator)
4. Uncertainty of master instruments used for Atm. Pressure Measurement (Barometer)
5. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage

factor k = 2 , for degrees of freedom = ∞ and C.L is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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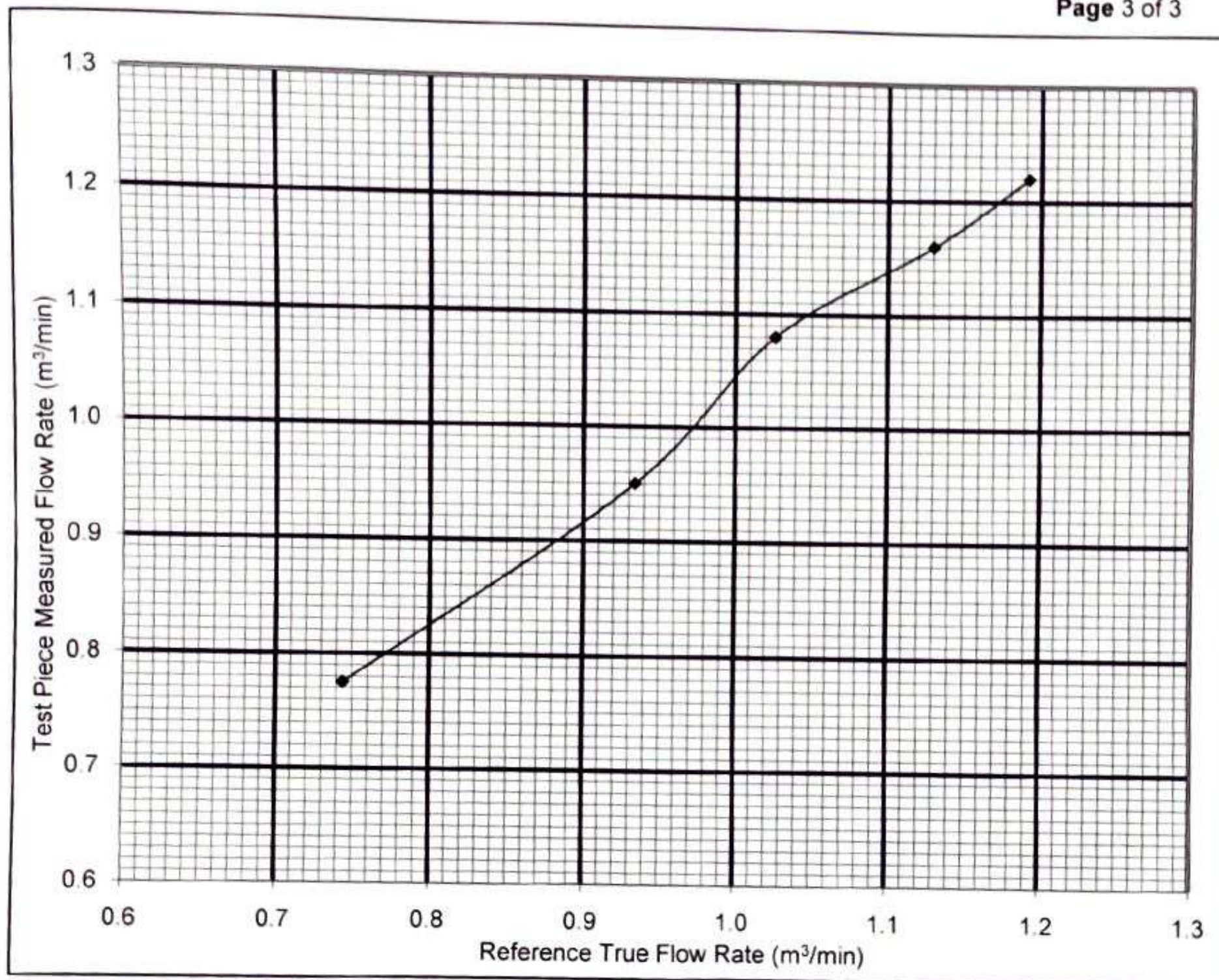
ULR No. CC225321000000584F

Date of Calibration:- 03.02.2021



## CALIBRATION CURVE FOR ORIFICE MANOMETER FLOW

Page 3 of 3



SI.No.	Reference True Flow Rate (m³/min)	Test Piece Measured Flow Rate (m³/min)	Name of the Instrument	Respirable Dust Sampler
			SI.No. of the Instruments	900 - DATE - C - 2000
			Name of the unit calibrated	Orifice Manometer Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.744	0.775		
2	0.934	0.95		
3	1.026	1.08		
4	1.130	1.16		
5	1.192	1.220		

## Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration.
- Results reported are valid at the time of and under the stated conditions of measurement.
- This Certificate refers only to the particular item calibrated.
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000585F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2103		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Respirable Dust Sampler	Envirotech Instruments	APM -460 BL	900 - DATE - C - 2000

### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration	
SI.No.	T - 900	Temperature (°C)	25 ± 3
		Relative Humidity (%)	45 - 75
		B. Pressure (mmHg)	745.60

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.		Calibration Date	Valid Up to
CCTPL/TM/0170/01		30.10.2020	29.10.2021

### 04. Calibration Procedure LES-CCL/WI/31/ET/01

### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 184.70 hrs)	15.0074	-0.05	± 3.329 %

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement.
3. This Certificate refers only to the particular item calibrated.
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000568F	Calibration Field - Mechanical	Page 1 of 1
Certificate No.	LES-CCL/MECH/SLM/289		
Calibration Date	05.02.2020	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/1065	Date :- 26.11.2020	Date of Issue: - 28.11.2020

### 01. Details of (DUC)

Name	Sound Level Meter	Environmental Condition of During Calibration	
Make / Model	Lutron / 2001	Temperature (°C)	25 ± 3
Sl.No.	A0905 - 276	Relative Humidity (%)	45 - 75
Range	30 - 130 dB	Barometric Pressure (mmHg)	746.45

### 02. Standard Equipment used for calibration

Standard Equipment Name	Range		Traceability
Sound Level Calibrator	94 dB, 114 dB	I.164109	IDEMI, MUMBAI
Certificate No.	Calibration Date		Valid Up to
CC/ECL/0835/20-21	09.11.2020		NM

### 03. Calibration Procedure :- LES-CCL/WI/31/MECH/03

### 04. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC (dB)	Reference Value (dB)	Error (%Rdg)	Expanded Uncertainty at 95 % of Confidence level ( k =2 )
1	93.4	94.6	-1.27	± 0.51 dB
2	113.5	114.3	-0.70	± 0.51 dB

Remark : The reading of DUC represent the Average, of five reading measurements.

Uncertainty Contributing Factor :- 1. Repeatability (based on five measurement) 2. Uncertainty of master instruments

3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration.	
2. Results reported are valid at the time of and under the stated conditions of measurement	
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000567F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/RF/SC/2844		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :-	23.06.2020
		Date of Issue:-	06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	Sl. No.
Gaseous Sampling Attachment	Envirotech Instruments	APM-411	516 - DTE - 97

### 02. Details of DUC

Name	Rotameter	Environmental Conditions During Calibration	
Make/Trade Mark	S S Flow	Temperature(°C)	25±10
Sl.No.	09/0239	Relative Humidity (%)	45-75
Cal. Range	0 -3 lpm	B. Pressure (mmHg)	742.50

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl. No.	Traceability
Gas Flow Calibrator	0.5 -50 lpm	3319	LES-CCL, Gr. Noida (U.P.)
Certificate No.	Calibration Date	Valid Up to	
LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC-07

Remark 1.Refer page 2 of 3 for Calibration Results and 3 of 3 for Calibration Curve

2 The Flow Rate has been Referenced to Standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration.
- Results reported are valid at the time of and under the stated conditions of measurement.
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( Chief Executive Officer )







# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000567F		Page 2 of 3
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/RF/SC/2844		

## 05. Calibration Results for Flow of Rotameter

S.No.	(DUC) Indicated reading (lpm)	Reference True Flow rate (lpm)	Error (%) FS	Calibration factor
1	0.5	0.481	0.633	0.962
2	0.5	0.483	0.567	0.966
3	0.5	0.485	0.500	0.970
4	0.5	0.486	0.467	0.972
5	0.5	0.487	0.433	0.974
6	1.0	0.994	0.200	0.994
7	1.5	1.544	-1.467	1.029
8	2.0	1.975	0.833	0.988
9	2.5	2.465	1.167	0.986
10	3.0	2.982	0.600	0.994
11	3.0	2.985	0.500	0.995
12	3.0	2.987	0.433	0.996
13	3.0	2.988	0.400	0.996
14	3.0	2.989	0.367	0.996

(Curve Enclosed)

### Type A standard Uncertainty

- I. for repeated data (1-5)  $\pm$  0.0010 lpm  
 II. for repeated data (10-14)  $\pm$  0.0012 lpm

### Expanded uncertainty in Actual flow

measurement at 95% as a coverage factor  $k=2$

- I. 0.5 lpm  $\pm$  14.01 % Rdg or 2.16 %FS  
 II. 3.0 lpm  $\pm$  2.33 % Rdg or 6.15 %FS

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments
3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,

for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
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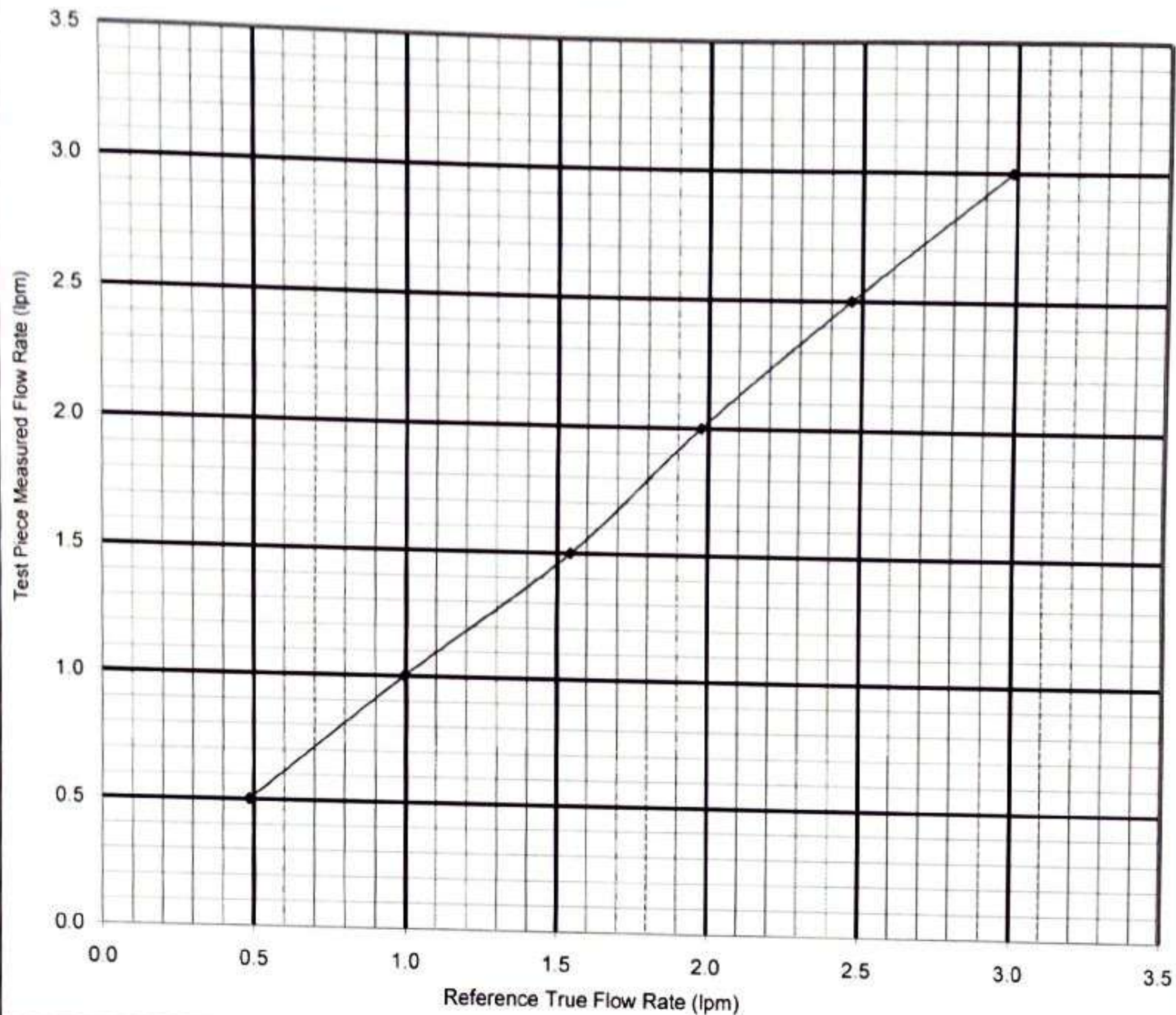


ULR No. CC225321000000567F

Date of Calibration:- 04.02.2021

CALIBRATION CURVE FOR ROTAMETER

Page 3 of 3



Sl.No.	Reference True Flow Rate (lpm)	Test Piece Measured Flow Rate (lpm)	Name of the Instrument	Rotameter
			Sl.No. of the Instrument	09/0239
			Make	S S Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.484	0.5		
2	0.994	1.0		
3	1.544	1.5		
4	1.975	2.0		
5	2.465	2.5		
6	2.986	3.0		

**Notes :-**

- Reference used are directly traceable to national standard through unbroken chain of calibration.
- Results reported are valid at the time of and under the stated conditions of measurement.
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000586F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/RF/SC/2847		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :-	23.06.2020
		Date of Issue:-	06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	Sl. No.
Gaseous Sampling Atteachment	Envirotech Instruments	APM-411	1366 - DATE - G - 2000

### 02. Details of DUC

Name	Rotameter	Environmental Conditions During Calibration	
Make/Trade Mark	S S Flow	Temperature(°C)	25±10
Sl.No.	09/0232	Relative Humidity (%)	45-75
Cal. Range	0 -3 lpm	B. Pressure (mmHg)	742.50

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl. No.	Traceability
Gas Flow Calibrator	0.5 -50 lpm	3319	LES-CCL, Gr. Noida (U.P)
Certificate No.	Calibration Date		Valid Up to
LES-CCL/FF/RF/2216	28.07.2020		27.07.2021

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC-07

Remark 1.Refer page 2 of 3 for Calibration Results and 3 of 3 for Calibration Curve

2.The Flow Rate has been Referenced to Standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
- This Certificate refers only to the particular item calibrated.
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### Authorized By

SHIVSHANKER SINGH  
( Chief Executive Officer )







# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000586F		Page 2 of 3
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/RF/SC/2847		

## 05. Calibration Results for Flow of Rotameter

S.No.	(DUC) Indicated reading (lpm)	Reference True Flow rate (lpm)	Error (%) FS	Calibration factor
1	0.5	0.455	1.500	0.910
2	0.5	0.456	1.467	0.912
3	0.5	0.457	1.433	0.914
4	0.5	0.459	1.367	0.918
5	0.5	0.460	1.333	0.920
6	1.0	0.944	1.867	0.944
7	1.5	1.458	1.400	0.972
8	2.0	1.975	0.833	0.988
9	2.5	2.579	-2.633	1.032
10	3.0	2.978	0.733	0.993
11	3.0	2.977	0.767	0.992
12	3.0	2.981	0.633	0.994
13	3.0	2.984	0.533	0.995
14	3.0	2.985	0.500	0.995

(Curve Enclosed)

### Type A standard Uncertainty

- I. for repeated data (1-5)  $\pm$  0.0009 lpm  
 II. for repeated data (10-14)  $\pm$  0.0015 lpm

Expanded uncertainty in Actual flow  
 measurement at 95% as a coverage factor k=2

- I. 0.5 lpm  $\pm$  14.84 % Rdg or 2.16 %FS  
 II. 3.0 lpm  $\pm$  2.33 % Rdg or 6.15 %FS

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments
3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,  
 for degrees of freedom  $=\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna ,(Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration .
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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Authorized By

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 (Chief Executive Officer)







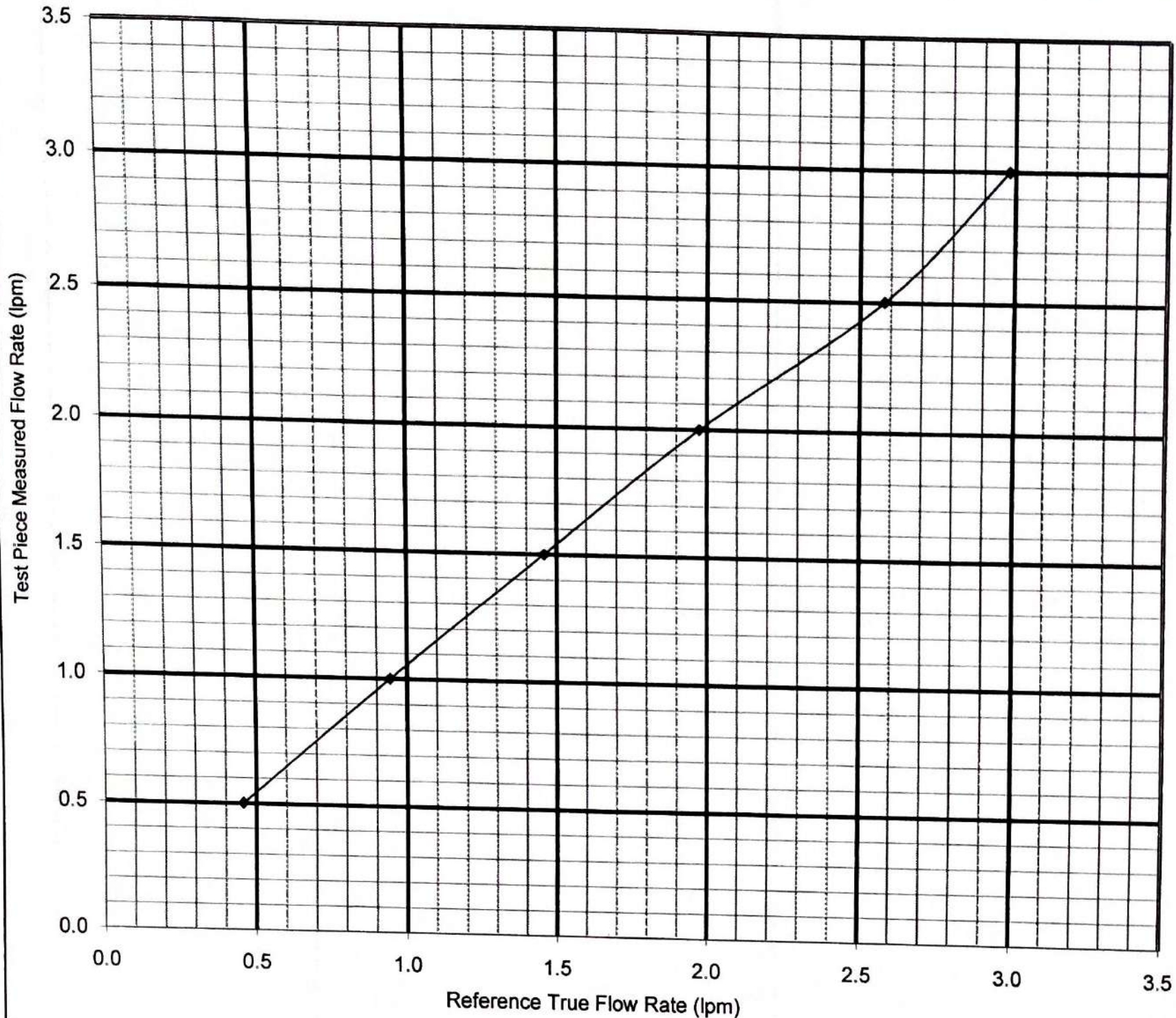
ULR No. CC225321000000586F

Date of Calibration:- 04.02.2021



**CALIBRATION CURVE FOR ROTAMETER**

Page 3 of 3



Sl.No.	Reference True Flow Rate (lpm)	Test Piece Measured Flow Rate (lpm)	Name of the Instrument	Rotameter
			Sl.No. of the Instrument	09/0232
			Make	S S Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.457	0.5		
2	0.944	1.0		
3	1.458	1.5		
4	1.975	2.0		
5	2.579	2.5		
6	2.981	3.0		

**Notes :-**

1. Reference used are directly traceable to national standard through unbroken chain of calibration .
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(Chief Executive Officer)





# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)

K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)

E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939

Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000566F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/RF/SC/566		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :-	23.06.2020
		Date of Issue:-	06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI. No.
Gaseous Sampling Atteachment	Envirotech Instruments	APM-411	4299 - DTC - 2011

### 02. Details of DUC

Name	Rotameter	Environmental Conditions During Calibration	
Make/Trade Mark	S S Flow	Temperature(°C)	25±10
SI.No.	2000/820	Relative Humidity (%)	45-75
Cal. Range	0 -3 lpm	B. Pressure (mmHg)	742.50

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI. No.	Traceability
Gas Flow Calibrator	0.5 -50 lpm	3319	LES-CCL, Gr. Noida (U.P)
Certificate No.	Calibration Date	Valid Up to	
LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC-07

Remark 1.Refer page 2 of 3 for Calibration Results and 3 of 3 for Calibration Curve

2.The Flow Rate has been Referenced to Standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
- This Certificate refers only to the particular item calibrated.
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### Authorized By

SHIVSHANKER SINGH  
( Chief Executive Officer )







# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000566F		Page 2 of 3
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/RF/SC/566		

## 05. Calibration Results for Flow of Rotameter

S.No.	(DUC) Indicated reading (lpm)	Reference True Flow rate (lpm)	Error (%) FS	Calibration factor
1	0.5	0.473	0.900	0.946
2	0.5	0.475	0.833	0.950
3	0.5	0.476	0.800	0.952
4	0.5	0.477	0.767	0.954
5	0.5	0.478	0.733	0.956
6	1.0	0.966	1.133	0.966
7	1.5	1.458	1.400	0.972
8	2.0	1.988	0.400	0.994
9	2.5	2.475	0.833	0.990
10	3.0	2.951	1.633	0.984
11	3.0	2.952	1.600	0.984
12	3.0	2.955	1.500	0.985
13	3.0	2.956	1.467	0.985
14	3.0	2.957	1.433	0.986

(Curve Enclosed)

### Type A standard Uncertainty

- I. for repeated data (1-5)  $\pm$  0.0008 lpm  
 II. for repeated data (10-14)  $\pm$  0.0011 lpm

Expanded uncertainty in Actual flow  
 measurement at 95% as a coverage factor  $k=2$

- I. 0.5 lpm  $\pm$  14.27 % Rdg or 2.16 %FS  
 II. 3.0 lpm  $\pm$  2.33 % Rdg or 6.15 %FS

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments
3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,

for degrees of freedom  $=\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

### Notes :-

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2. Results reported are valid at the time of and under the stated conditions of measurement
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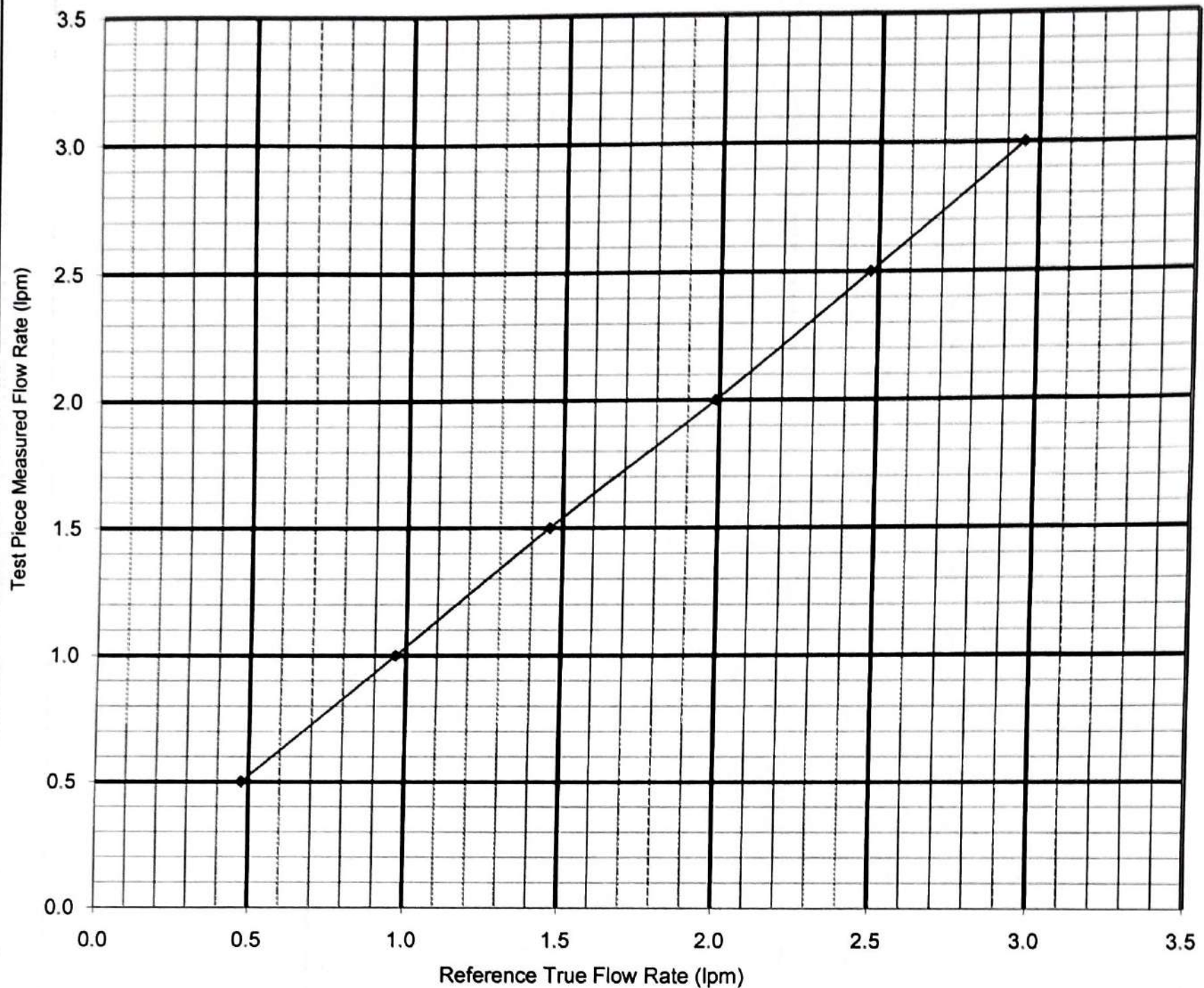


ULR No. CC225321000000566F

Date of Calibration:- 04.02.2021

**CALIBRATION CURVE FOR ROTAMETER**

Page 3 of 3



Sl.No.	Reference True Flow Rate (lpm)	Test Piece Measured Flow Rate (lpm)	Name of the Instrument	Rotameter
			Sl.No. of the Instrument	2000/820
			Make	S S Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.476	0.5		
2	0.966	1.0		
3	1.458	1.5		
4	1.988	2.0		
5	2.475	2.5		
6	2.954	3.0		

**Notes :-**

- Reference used are directly traceable to national standard through unbroken chain of calibration.
- Results reported are valid at the time of and under the stated conditions of measurement
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Authorized By

SHIVSHANKER SINGH  
(Chief Executive Officer)





# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)

K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)  
E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939  
Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000565F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/RF/SC/563		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :-	23.06.2020
		Date of Issue:-	06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	Sl. No.
Gaseous Sampling Attechment	Envirotech Instruments	APM-411	4297 - DTC - 2011

### 02. Details of DUC

Name	Rotameter	Environmental Conditions During Calibration	
Make/Trade Mark	S S Flow	Temperature(°C)	25±10
Sl.No.	10/0911	Relative Humidity (%)	45-75
Cal. Range	0 -3 lpm	B. Presure (mmHg)	742.50

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl. No.	Traceability
Gas Flow Calibrator	0.5 -50 lpm	3319	LES-CCL, Gr. Noida (U.P)
Certificate No.	Calibration Date	Valid Up to	
LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC-07

Remark 1.Refer page 2 of 3 for Calibration Results and 3 of 3 for Calibration Curve

2.The Flow Rate has been Referenced to Standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration .	 SHIVSHANKER SINGH ( Chief Executive Officer )
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000565F		Page 2 of 3
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/RF/SC/563		

## 05. Calibration Results for Flow of Rotameter

S.No.	(DUC) Indicated reading (lpm)	Reference True Flow rate (lpm)	Error (%) FS	Calibration factor
1	0.5	0.551	-1.700	1.102
2	0.5	0.552	-1.733	1.104
3	0.5	0.553	-1.767	1.106
4	0.5	0.554	-1.800	1.108
5	0.5	0.555	-1.833	1.110
6	1.0	0.957	1.433	0.957
7	1.5	1.465	1.167	0.977
8	2.0	1.976	0.800	0.988
9	2.5	2.577	-2.567	1.031
10	3.0	2.963	1.233	0.988
11	3.0	2.965	1.167	0.988
12	3.0	2.966	1.133	0.989
13	3.0	2.670	11.000	0.890
14	3.0	2.000	33.333	0.667

(Curve Enclosed)

### Type A standard Uncertainty

I. for repeated data (1-5)  $\pm$  0.0007 lpm

II. for repeated data (10-14)  $\pm$  0.1784 lpm

### Expanded uncertainty in Actual flow

measurement at 95% as a coverage factor  $k=2$

I. 0.5 lpm  $\pm$  12.27 % Rdg or 2.16 %FS

II. 3.0 lpm  $\pm$  2.33 % Rdg or 13.39 %FS

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurements)

2. Uncertainty of master instruments

3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,

for degrees of freedom  $=\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration.
- Results reported are valid at the time of and under the stated conditions of measurement
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(Chief Executive Officer)





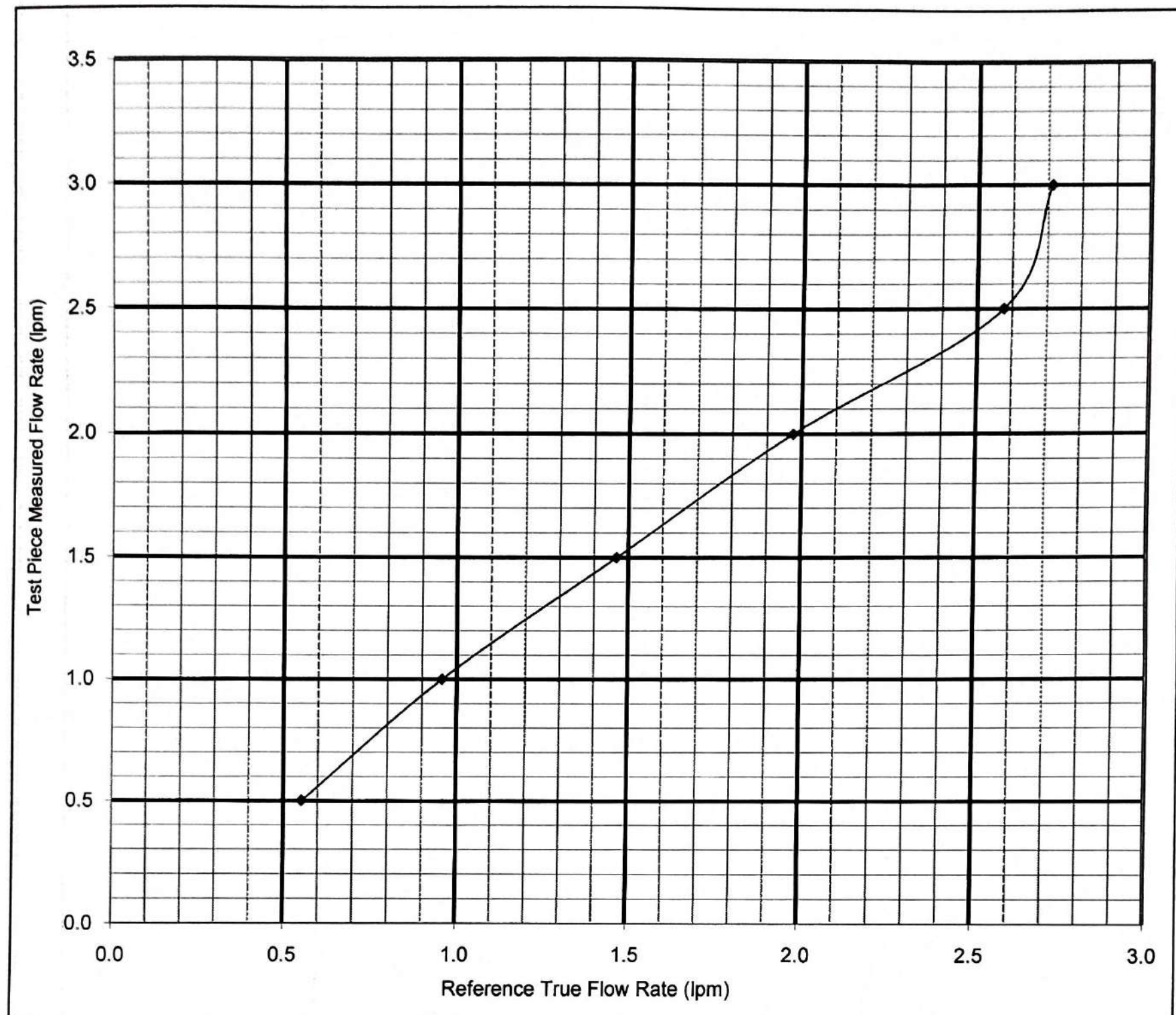


ULR No. CC225321000000565F

Date of Calibration:- 04.02.2021



Page 3 of 3

CALIBRATION CURVE FOR ROTAMETER

Sl.No.	Reference True Flow Rate (lpm)	Test Piece Measured Flow Rate (lpm)	Name of the Instrument	Rotameter
			Sl.No. of the Instrument	10/0911
			Make	S S Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.553	0.5		
2	0.957	1.0		
3	1.465	1.5		
4	1.976	2.0		
5	2.577	2.5		
6	2.713	3.0		

**Notes :-**

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E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939  
Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000564F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/RF/SC/2841		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :-	23.06.2020
		Date of Issue:-	06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	Sl. No.
Gaseous Sampling Atteachment	Envirotech Instruments	APM-411	4298 -DTC - 2011

### 02. Details of DUC

Name	Rotameter	Environmental Conditions During Calibration
Make/Trade Mark	S S Flow	Temperature(°C)
Sl.No.	09/0228	Relative Humidity (%)
Cal. Range	0 -3 lpm	B. Presure (mmHg)
		25±10
		45-75
		742.50

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl. No.	Traceability
Gas Flow Calibrator	0.5 -50 lpm	3319	LES-CCL, Gr. Noida (U.P)
Certificate No.	Calibration Date	Valid Up to	
LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC-07

Remark 1.Refer page 2 of 3 for Calibration Results and 3 of 3 for Calibration Curve

2. The Flow Rate has been Referenced to Standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000564F		Page 2 of 3
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/RF/SC/2841		

## 05. Calibration Results for Flow of Rotameter

S.No.	(DUC) Indicated reading (lpm)	Reference True Flow rate (lpm)	Error (%) FS	Calibration factor
1	0.5	0.481	0.633	0.962
2	0.5	0.482	0.600	0.964
3	0.5	0.485	0.500	0.970
4	0.5	0.486	0.467	0.972
5	0.5	0.487	0.433	0.974
6	1.0	0.955	1.500	0.955
7	1.5	1.554	-1.800	1.036
8	2.0	1.985	0.500	0.993
9	2.5	2.477	0.767	0.991
10	3.0	2.941	1.967	0.980
11	3.0	2.942	1.933	0.981
12	3.0	2.945	1.833	0.982
13	3.0	2.946	1.800	0.982
14	3.0	2.947	1.767	0.982

(Curve Enclosed)

### Type A standard Uncertainty

- I. for repeated data (1-5)  $\pm$  0.0011 lpm  
 II. for repeated data (10-14)  $\pm$  0.0011 lpm

### Expanded uncertainty in Actual flow

measurement at 95% as a coverage factor  $k=2$

- I. 0.5 lpm  $\pm$  14.02 % Rdg or 2.16 %FS  
 II. 3.0 lpm  $\pm$  2.33 % Rdg or 6.15 %FS

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments
3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,  
 for degrees of freedom  $=\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
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### Authorized By

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(Chief Executive Officer)





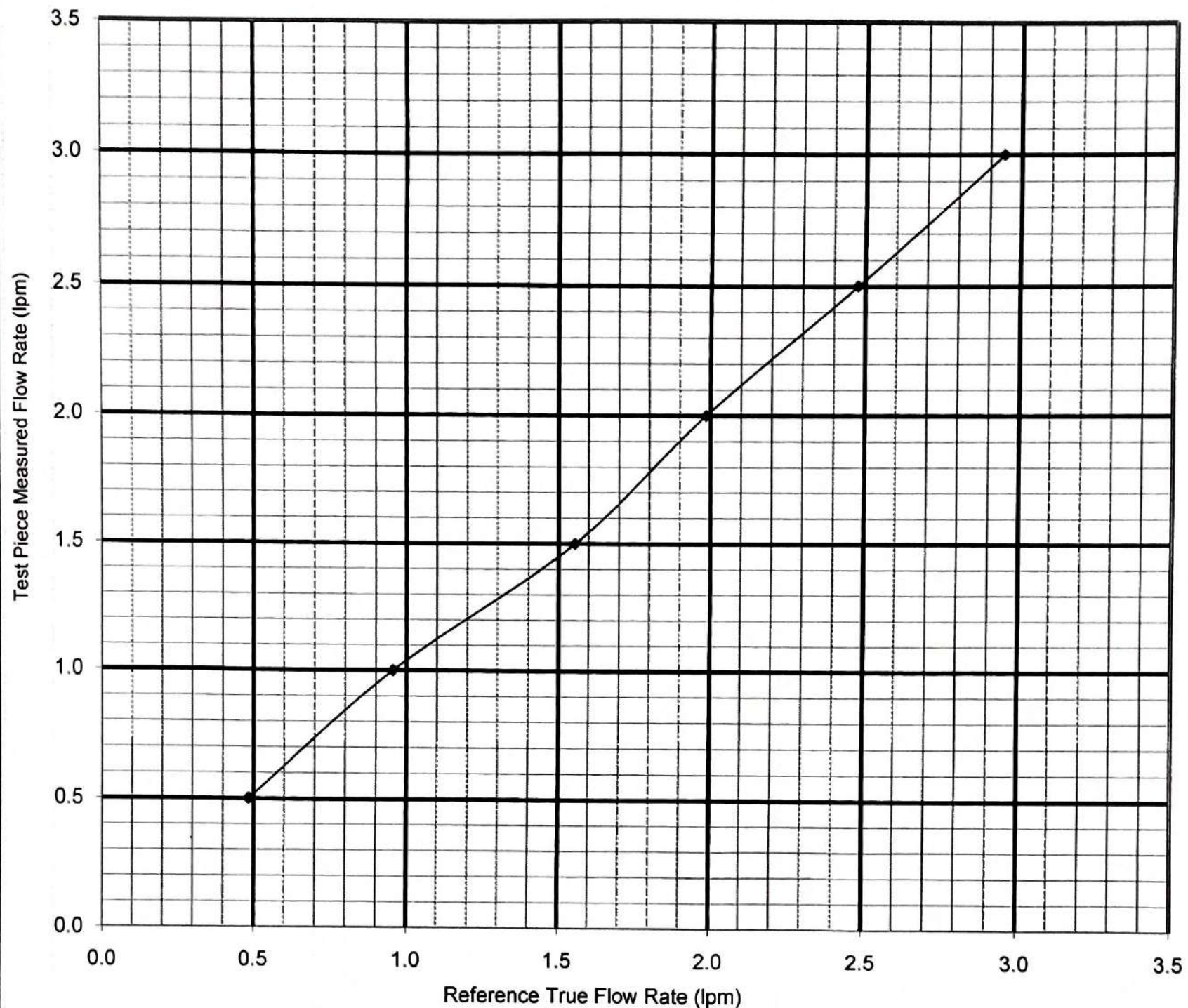


ULR No. CC225321000000564F

Date of Calibration:- 04.02.2021

CALIBRATION CURVE FOR ROTAMETER

Page 3 of 3



Sl.No.	Reference True Flow Rate (lpm)	Test Piece Measured Flow Rate (lpm)	Name of the Instrument	Rotameter
			Sl.No. of the Instrument	09/0228
			Make	S S Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.484	0.5		
2	0.955	1.0		
3	1.554	1.5		
4	1.985	2.0		
5	2.477	2.5		
6	2.944	3.0		

**Notes :-**

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
- This Certificate refers only to the particular item calibrated.
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SHIVSHANKER SINGH  
(Chief Executive Officer)





# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

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K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)

E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939

Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000563F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/RF/SC/563		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :-	23.06.2020
		Date of Issue:-	06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI. No.
Gaseous Sampling Atteachment	Envirotech Instruments	APM-411	1367 - DATE - 2000

### 02. Details of DUC

Name	Rotameter	Environmental Conditions During Calibration
Make/Trade Mark	S S Flow	Temperature(°C)
SI.No.	2004/1046	Relative Humidity (%)
Cal. Range	0 -3 lpm	B. Presure (mmHg)
		25±10
		45-75
		742.50

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI. No.	Traceability
Gas Flow Calibrator	0.5 -50 lpm	3319	LES-CCL, Gr. Noida (U.P)
Certificate No.	Calibration Date	Valid Up to	
LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC-07

Remark 1.Refer page 2 of 3 for Calibration Results and 3 of 3 for Calibration Curve

2. The Flow Rate has been Referenced to Standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
- This Certificate refers only to the particular item calibrated.
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### Authorized By

SHIVSHANKER SINGH  
( Chief Executive Officer )







# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000563F		Page 2 of 3
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/RF/SC/563		

## 05. Calibration Results for Flow of Rotameter

S.No.	(DUC) Indicated reading (lpm)	Reference True Flow rate (lpm)	Error (%) FS	Calibration factor
1	0.5	0.461	1.300	0.922
2	0.5	0.462	1.267	0.924
3	0.5	0.465	1.167	0.930
4	0.5	0.466	1.133	0.932
5	0.5	0.467	1.100	0.934
6	1.0	0.958	1.400	0.958
7	1.5	1.577	-2.567	1.051
8	2.0	1.966	1.133	0.983
9	2.5	2.455	1.500	0.982
10	3.0	2.986	0.467	0.995
11	3.0	2.987	0.433	0.996
12	3.0	2.988	0.400	0.996
13	3.0	2.986	0.467	0.995
14	3.0	2.989	0.367	0.996

(Curve Enclosed)

### Type A standard Uncertainty

I. for repeated data (1-5)	±	0.0011 lpm
II. for repeated data (10-14)	±	0.0006 lpm

### Expanded uncertainty in Actual flow

measurement at 95% as a coverage factor k=2

I. 0.5 lpm	±	14.63 % Rdg	or	2.16 %FS
II. 3.0 lpm	±	2.33 % Rdg	or	6.15 %FS

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments
3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,  
for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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(Chief Executive Officer)





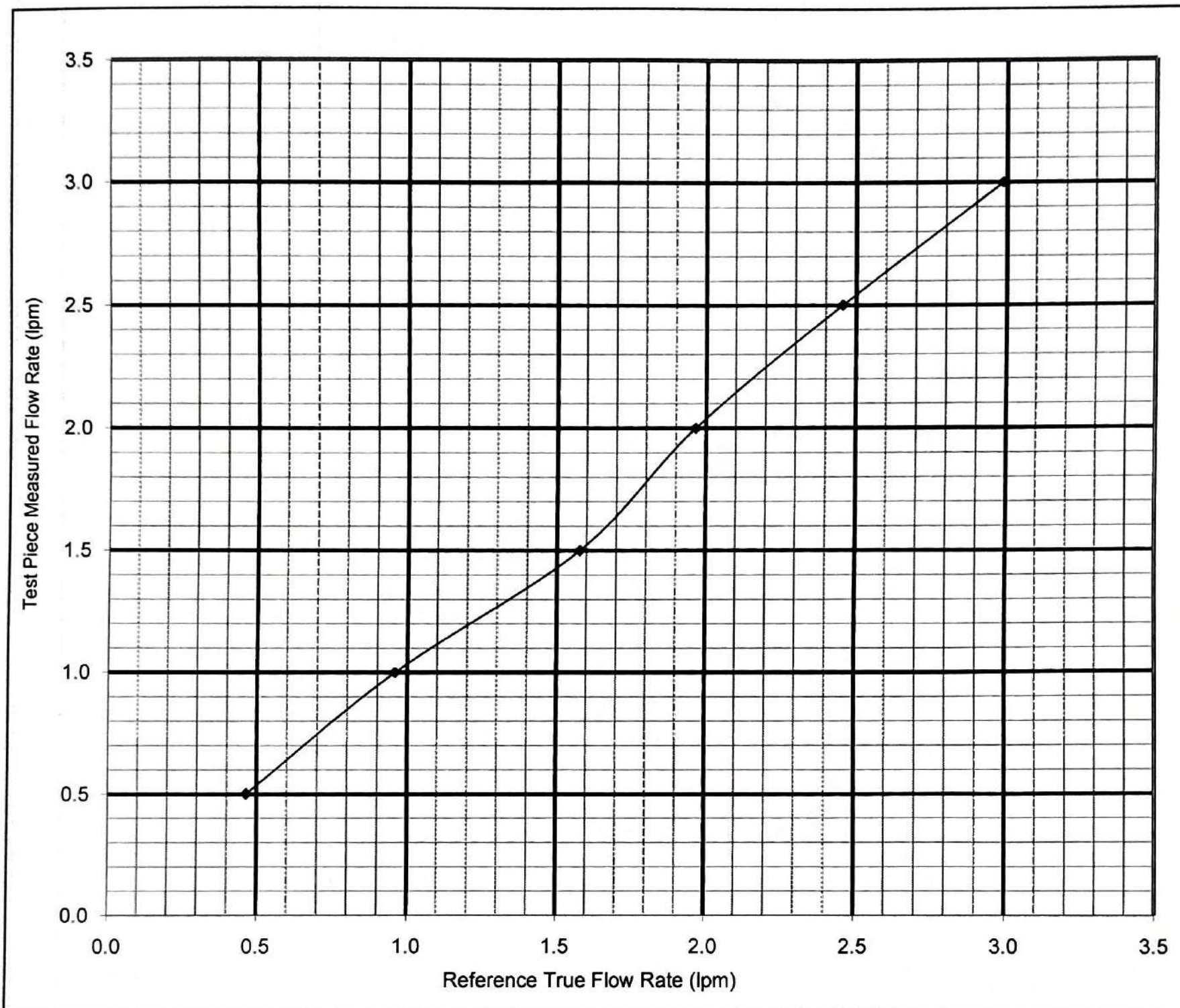


ULR No. CC225321000000563F

Date of Calibration:- 04.02.2021

**CALIBRATION CURVE FOR ROTAMETER**

Page 3 of 3



Sl.No.	Reference True Flow Rate (lpm)	Test Piece Measured Flow Rate (lpm)	Name of the Instrument	Rotameter
			Sl.No. of the Instrument	2004/1046
			Make	S S Flow
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.464	0.5		
2	0.958	1.0		
3	1.577	1.5		
4	1.966	2.0		
5	2.455	2.5		
6	2.987	3.0		

**Notes :-**

- Reference used are directly traceable to national standard through unbroken chain of calibration.
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(Chief Executive Officer)





# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)



K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)  
E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939  
Website : www.lescccllab.com

CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000562F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2102		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :-	M/s Prism Johnson Limited		
Address :-	(Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Fine Particulate Sampler	Envirotech Instruments	APM - 550	724 - DTC - 2011

### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration	
Make/Trade Mark	CE Germany	Temperature (°C)	25 ± 3
SI.No.	T - 724	Relative Humidity (%)	45 - 75
		B. Pressure (mmHg)	746.70

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.		Calibration Date	Valid Up to
CCTPL/TM/0170/01		30.10.2020	29.10.2021

### 04. Calibration Procedure LES-CCL/WI/31/ET/01

### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 1233.92 hrs)	15.0076	-0.05	± 3.329 %

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

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E-mail : lescc1307@gmail.com, lescc1lab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939

Website : www.lescc1lab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC22532100000561F	Calib. Field - Fluid Flow	Page 1 of 2
Certificate No.	LES-CCL/FF/PM/SC/958		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Fine Particulate Sampler	Envirotech Instruments	APM - 550	724 - DTC - 2011

### 02. Details of DUC

Name	Dry Gas Meter	Environmental Conditions During Calibration	
Make/Model	Ittron / G1.6	Temperature (°C)	25 ± 10
SI.No.	110121348	Relative Humidity (%)	45-75
Cal. Range	16.67 lpm (±5%)	Barometric Pressure (mmHg)	746.10

### 03. Standard Equipment used for calibration

SI.No.	Standard Equipment Name	Range	SI.No. / ID.No.	Traceability
1	Gas Flow Calibrator	0.5 -50 lpm	3319 / LES-CCL/R/4902	LES - CCL, Gr. Noida
2	Digital Stop Watch	10 Sec. - 59 min	LES-CCL/R/14510	LES - CCL, Gr. Noida
SI.No.	Certificate No.	Calibration Date	Valid Up to	
1	LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	
2	LES-CCL/ET/SW/404	28.09.2020	27.09.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/07

Remark : 1.Refer page 2 of 2 for Calibration Results

2.The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration .	
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
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	SHIVSHANKER SINGH (Chief Executive Officer)







# LES-Centre for Calibration Laboratory



ULR No.	CC22532100000561F		Page 2 of 2
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/PM/SC/958		

## 05. Calibration Results for Flow of Dry Gas Meter

S.No.	Test meter (DUC) Measured Flow (lpm)	Reference True flow rate (lpm)	Error (%)
1	16.78	16.541	1.445
2	16.79	16.546	1.475
3	16.84	16.571	1.623
4	16.77	16.531	1.446
5	16.77	16.525	1.483

Type A standard Uncertainty  
for repeated data (1-5)

$\pm 0.0076$  lpm

Expanded uncertainty in Actual flow  
measurement, U ( $k=2$ )

$\pm 0.9007$  lpm  $\pm 5.72$  % Rdg

**Final Readings of Dry Gas Meter at the end of Calibration: 529.4840 m<sup>3</sup>**

Uncertainty Contributing factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,  
for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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(Chief Executive Officer)





# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)



K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)  
E-mail : lescc1307@gmail.com, lescc1lab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939

Website : www.lescc1lab.com

CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000560F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2101		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	Sl.No.
Fine Particulate Sampler	Envirotech Instruments	APM - 550	722 - DTC - 2011

### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration	
Make/Trade Mark	CE Germany	Temperature (°C)	25 ± 3
Sl.No.	T - 722	Relative Humidity (%)	45 - 75
		B. Pressure (mmHg)	746.70

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.	Calibration Date	Valid Up to	
CCTPL/TM/0170/01	30.10.2020	29.10.2021	

### 04. Calibration Procedure LES-CCL/WI/31/ET/01

### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 1167.99 hrs)	15.0076	-0.05	± 3.329 %

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000559F	Calib. Field - Fluid Flow	Page 1 of 2
Certificate No.	LES-CCL/FF/PM/SC/957		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Fine Particulate Sampler	Envirotech Instruments	APM - 550	722 - DTC - 2011

### 02. Details of DUC

Name	Dry Gas Meter	Environmental Conditions During Calibration	
Make/Model	Ittron / G1.6	Temperature (°C)	25 ± 10
SI.No.	110121364	Relative Humidity (%)	45-75
Cal. Range	16.67 lpm (±5%)	Barometric Pressure (mmHg)	746.10

### 03. Standard Equipment used for calibration

SI.No.	Standard Equipment Name	Range	SI.No. / ID.No.	Traceability
1	Gas Flow Calibrator	0.5 -50 lpm	3319 / LES-CCL/R/4902	LES - CCL, Gr. Noida
2	Digital Stop Watch	10 Sec. - 59 min	LES-CCL/R/14510	LES - CCL, Gr. Noida
SI.No.	Certificate No.	Calibration Date	Valid Up to	
1	LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	
2	LES-CCL/ET/SW/404	28.09.2020	27.09.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/07

Remark : 1.Refer page 2 of 2 for Calibration Results

2.The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

#### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000559F		Page 2 of 2
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/PM/SC/957		

## 05. Calibration Results for Flow of Dry Gas Meter

S.No.	Test meter (DUC) Measured Flow (lpm)	Reference True flow rate (lpm)	Error (%)
1	16.45	16.891	-2.611
2	16.44	16.860	-2.491
3	16.49	16.863	-2.212
4	16.52	16.840	-1.900
5	16.44	16.850	-2.433

Type A standard Uncertainty  
for repeated data (1-5)

$\pm 0.0082$  lpm

Expanded uncertainty in Actual flow  
measurement, U ( $k=2$ )

$\pm 0.9180$  lpm  $\pm 5.72$  % Rdg

**Final Readings of Dry Gas Meter at the end of Calibration: 656.4740 m<sup>3</sup>**

Uncertainty Contributing factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,  
for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)

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E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939

Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000558F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2100		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Fine Particulate Sampler	Envirotech Instruments	APM - 550	721 - DTC - 2011

### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration	
Make/Trade Mark	CE Germany	Temperature (°C)	25 ± 3
SI.No.	T - 721	Relative Humidity (%)	45 - 75
		B. Pressure (mmHg)	746.70

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.		Calibration Date	Valid Up to
CCTPL/TM/0170/01		30.10.2020	29.10.2021

### 04. Calibration Procedure LES-CCL/WI/31/ET/01

### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 937.05 hrs)	15.0076	-0.05	± 3.329 %

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement.
3. This Certificate refers only to the particular item calibrated.
4. This certificate shall not be reproduced, except in full without the written permission of LES-CCL, Kasna, Greater Noida (U.P.)



### Authorized By

SHIVSHANKER SINGH  
(Chief Executive Officer)



# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000557F	Calib. Field - Fluid Flow	Page 1 of 2
Certificate No.	LES-CCL/FF/PM/SC/956		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	Sl.No.
Fine Particulate Sampler	Envirotech Instruments	APM - 550	721 - DTC - 2011

### 02. Details of DUC

Name	Dry Gas Meter	Environmental Conditions During Calibration	
Make/Model	Ittron / G1.6	Temperature (°C)	25 ± 10
Sl.No.	110121362	Relative Humidity (%)	45-75
Cal. Range	16.67 lpm (±5%)	Barometric Pressure (mmHg)	746.10

### 03. Standard Equipment used for calibration

Sl.No.	Standard Equipment Name	Range	Sl.No. / ID.No.	Traceability
1	Gas Flow Calibrator	0.5 -50 lpm	3319 / LES-CCL/R/4902	LES - CCL, Gr. Noida
2	Digital Stop Watch	10 Sec. - 59 min	LES-CCL/R/14510	LES - CCL, Gr. Noida
Sl.No.	Certificate No.	Calibration Date	Valid Up to	
1	LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	
2	LES-CCL/ET/SW/404	28.09.2020	27.09.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/07

Remark : 1.Refer page 2 of 2 for Calibration Results

2.The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration .	 SHIVSHANKER SINGH (Chief Executive Officer)
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000557F		Page 2 of 2
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/PM/SC/956		

## 05. Calibration Results for Flow of Dry Gas Meter

S.No.	Test meter (DUC) Measured Flow (lpm)	Reference True flow rate (lpm)	Error (%)
1	16.71	16.681	0.174
2	16.69	16.670	0.120
3	16.76	16.675	0.510
4	16.77	16.672	0.588
5	16.71	16.662	0.288

Type A standard Uncertainty  
for repeated data (1-5)

$\pm 0.0030$  lpm

Expanded uncertainty in Actual flow  
measurement, U (k=2)

$\pm 0.9077$  lpm  $\pm 5.72$  % Rdg

Final Readings of Dry Gas Meter at the end of Calibration: 1179.2540 m<sup>3</sup>

Uncertainty Contributing factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,  
for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna, (Madhya Pradesh)

<b>Notes :-</b> 1. Reference used are directly traceable to national standard through unbroken chain of calibration . 2. Results reported are valid at the time of and under the stated conditions of measurement 3. This Certificate refers only to the particular item calibrated. 4. This certificate shall not be reproduced, except in full without the written permission of LES-CCL, Kasna, Greater Noida (U.P.)	Authorized By
	 SHIVSHANKER SINGH (Chief Executive Officer)





# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)

K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)

E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939

Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000556F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/TT/2099		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :-	M/s Prism Johnson Limited		
Address :-	(Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :-	S.R.F No.: - 2020/929	Date: - 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Fine Particulate Sampler	Envirotech Instruments	APM - 550	723 - DTC - 2011

### 02. Details of (DUC)

Name	Time Totalizer	Environmental Conditions During Calibration	
Make/Trade Mark	CE Germany	Temperature (°C)	25 ± 3
SI.No.	T - 723	Relative Humidity (%)	45 - 75
		B. Pressure (mmHg)	746.70

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.		Calibration Date	Valid Up to
CCTPL/TM/0170/01		30.10.2020	29.10.2021

### 04. Calibration Procedure LES-CCL/WI/31/ET/01

### 05. Calibration Results :

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC Hrs(Min)	Reference Time (Min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k = 2 ) (%)
1	0.25 (15.0 Min) (Final Readings of TTR at the end of Calibration: 1254.60 hrs)	15.0016	-0.01	± 3.329 %

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement.
3. This Certificate refers only to the particular item calibrated.
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000555F	Calib. Field - Fluid Flow	Page 1 of 2
Certificate No.	LES-CCL/FF/PM/SC/955		
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No. -	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Fine Particulate Sampler	Envirotech Instruments	APM - 550	723 - DTC - 2011

### 02. Details of DUC

Name	Dry Gas Meter	Environmental Conditions During Calibration	
Make/Model	Ittron / G1.6	Temperature (°C)	25 ± 10
SI.No.	110121361	Relative Humidity (%)	45-75
Cal. Range	16.67 lpm (±5%)	Barometric Pressure (mmHg)	746.10

### 03. Standard Equipment used for calibration

SI.No.	Standard Equipment Name	Range	SI.No. / ID.No.	Traceability
1	Gas Flow Calibrator	0.5 -50 lpm	3319 / LES-CCL/R/4902	LES - CCL, Gr. Noida
2	Digital Stop Watch	10 Sec. - 59 min	LES-CCL/R/14510	LES - CCL, Gr. Noida
SI.No.	Certificate No.	Calibration Date	Valid Up to	
1	LES-CCL/FF/RF/2216	28.07.2020	27.07.2021	
2	LES-CCL/ET/SW/404	28.09.2020	27.09.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/SC/07

Remark : 1.Refer page 2 of 2 for Calibration Results

2.The Flowrate has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

#### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
- This Certificate refers only to the particular item calibrated.
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000555F		Page 2 of 2
Calibration Date	04.02.2021	Suggested Date of Next Calibration	03.02.2022
Certificate No.	LES-CCL/FF/PM/SC/955		

## 05. Calibration Results for Flow of Dry Gas Meter

S.No.	Test meter (DUC) Measured Flow (lpm)	Reference True flow rate (lpm)	Error (%)
1	16.24	16.420	-1.096
2	16.25	16.422	-1.047
3	16.24	16.440	-1.217
4	16.24	16.450	-1.277
5	16.18	16.456	-1.677

Type A standard Uncertainty  
for repeated data (1-5)

$\pm 0.0069$  lpm

Expanded uncertainty in Actual flow  
measurement, U (k=2)

$\pm 0.8931$  lpm  $\pm 5.72$  % Rdg

**Final Readings of Dry Gas Meter at the end of Calibration: 1041.700 m<sup>3</sup>**

### Uncertainty Contributing factor :-

1. Repeatability (based on five measurement)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,

for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

Calibration Place: Calibration done at M/s Prism Johnson Limited in workshop Tehsil - Rampur Baghelan, Distt. Satna ,(Madhya Pradesh)

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000575F	Calib. Field - Fluid Flow	Page 1 of 2
Certificate No.	LES-CCL/FF/PT/693		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O. Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 21.01.2021	Date of Issue:- 08.02.2021

### 01. Details of DUC

Name	S -TYPE PITOT TUBE	Environmental Conditions During Calibration	
Length	0.6 mtr. + Extn.	Temperature (°C)	25 ± 3
SI.No.	V - 102	Relative Humidity (%)	45-75
Cal. Range	3 - 20 m/sec	Barometric Pressure (mmHg)	746.45

### 02. Standard Equipment used for calibration

SI.No.	Standard Equipment Name	Range	SI.No./ID.No.	Traceability
1	S Type Pitot Tube	3 to 25 m/s	V626 / LES-CCL/R/12101	FCRI, Palakkad
2	Digital Manometer	0 - 500 mmwc	VEMN1612014 / LES-CCL/R/2514	LES-CCL, Gr. Noida
3	Dig.Temp.Indicator With Sensor	0 - 50 °C	T- 01 /LES -CCL/R/15301	BELZ, Faridabad
	Certificate No.	Calibration Date	Valid Up to	
1	CAW 648 2009 070	15.09.2020		NM
2	LES-CCL/MECH/PI/471	30.01.2021		29.01.2022
3	30023673	18.06.2020		17.06.2021

### 03. Calibration Procedure :- LES-CCL/WI/31/FF/06

Remark 1. Refer page 2 of 2 for Calibration Results.

2.The Velocity has been Referenced to standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration .	
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000575F	Page 2 of 2
Calibration Date	05.02.2021	Suggested Date of Next Calibration 04.02.2022
Certificate No.	LES-CCL/FF/PT/693	

## 04. CALIBRATION OBSERVATIONS AND RESULTS FOR S - TYPE PITOT TUBE

S.No.	Standard 'S' Type Pitot Tube K = 0.8826		'S' Type Pitot Tube (DUC)	
	Dynamic Pressure (mmwc)	Air Velocity (m/s)	Dynamic Pressure (mmwc)	Factor K
1	0.87	3.321	0.8	0.9441
2a	6.21	8.918	5.7	0.9163
2b	6.22		5.8	
2c	6.24		5.7	
2d	6.26		5.9	
2e	6.28		5.8	
2f	6.29		5.9	
3	12.77	12.746	12.7	0.8861
4	23.26	17.204	22.7	0.8928
5	30.77	19.787	30.4	0.8879
Averaged Coefficient (K)				<b>0.9054</b>

Remark : The reading of dynamic pressure represents the mean of 6 reading.

Type A standard Uncertainty Repeted Data Srial No. (2a to 2f)

± 0.0095 m/s

Expanded uncertainty in Actual flow

measurement at 95 % calibration at a coverage factor (k=2)

± 0.1988 m/s or ± 2.6 % Rdg

Uncertainty Contributing factor :-

1.Repeatability (based on three measurement)

2.Uncertainty of master instruments

3.Resulation Of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,

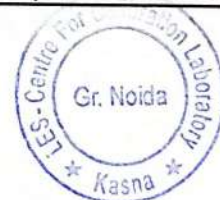
for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
- This Certificate refers only to the particular item calibrated.
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Website : www.lescc1lab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000574F	Calibration Field - Thermal	Page 1 of 2
Certificate No.	LES-CCL/TH/TP/420		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O. Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 25.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in Instrument

Name	Make	Model	SI.No.
Stack Sampler	Vayubodhan	VSS - 1	623 - DTG - 09

### 02. Details of DUC

Name	Thermocouple with Temperature Indicator	Environmental Conditions During Calibration	
Make/Trade Mark	Audiotronics	Temperature(°C)	25 ± 3
SI.No.	TP - 623	Relative Humidity %	45 - 75
Cal. Range	50 - 600 °C	B. pressure (mmHg)	746.45

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No.	Traceability
Digital Thermometer with R - Type T/C	0 - 1600 °C	YD5002383	BELZ, Faridabad
Dry Block Furnance	50 - 650 °C	1/952-14	BELZ, Faridabad
Certificate No.	Calibration Date	Valid Up to	
30023671	18.06.2020	17.06.2021	
6160982	25.05.2016	NM	

### 04. Calibration Procedure :- LES-CCL/WI/31/TH/01

Remark : Refer page 2 of 2 for Calibration Results.

### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
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ULR No.	CC225321000000574F		Page 2 of 2
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Certificate No.	LES-CCL/TH/TP/420		

## 05. Corrected Calibration Results for Thermocouple with Temperature Indicator

S.No.	Device Under Calibration (°C)	Std. Reading (°C)	Error FS (%)	Calibration Factor	Expanded Uncertainty at 95 % of Confidence level (k =2) (°C)
1	46	49.0	-0.50	1.065	± 1.34
2	95	98.2	-0.53	1.033	± 1.07
3	194	199.8	-0.96	1.030	± 1.07
4	296	301.0	-0.83	1.017	± 2.13
5	395	399.5	-0.74	1.011	± 2.65
6	494	500.8	-1.13	1.014	± 3.21
7	594	597.0	-0.50	1.005	± 3.21

Remark :The Reported value is Average of ten readings.

### Uncertainty Contributing Factor :-

- 1.Repeatability (based on ten measurement)
- 2.Uncertainty of Master Instruments
- 3.Resolution of DUC
- 4.Drift of Master Thermocouple

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$  , for degrees of freedom  $=\infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration .
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000573F	Calibration Field - Mechanical	Page 1 of 2
Certificate No.	LES-CCL/MECH/VG/422		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O. Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/1075	Date :- 12.12.2020	Date of Issue:- 13.01.2021

### 01. DUC Fitted in Instrument

Name	Make	Model	SI.No.
Stack Sampler	Vayubodhan	VSS - 1	623 - DTG - 09

### 02. Details of DUC

Name	Vacuum Gauge (GAS) / (SPM)	Environmental Conditions During Calibration	
Make	Manometer	Temperature(°C)	25 ± 3
SI.No.	GVG - 623 / SVG - 623	Relative Humidity (%)	45 -75
Cal. Range	80 -500 mmHg	B. Pressure (mmHg)	746.45

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No. / ID.No.	Traceability
Digital Vacuum Gauge	-1.0 to 2 bar	VEM1503079 / LES-CCL/R/2504	BELZ, Faridabad
Certificate No.	Calibration Date	Valid Up to	
40039019	16.06.2020	15.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/MECH/02

Remark : Refer page 2 of 2 for Calibration Results

Notes :-	Authorized By
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3. This Certificate refers only to the particular item calibrated.	
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## LES - Centre For Calibration Laboratory

ULR No.	CC225321000000573F		Page 2 of 2
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Certificate No.	LES-CCL/MECH/VG/422		

### 05. Corrected Calibration Results for Vacuum Gauge (Sl. No. SVG- 623)

Set DUC Value (mmHg)	CYCLE 1		CYCLE 2		CYCLE 3		Standard Avg. Reading (mmHg)	Error % FS	Ue. $\pm$ (bar)
	UP (mmHg)	DOWN (mmHg)	UP (mmHg)	DOWN (mmHg)	UP (mmHg)	DOWN (mmHg)			
80	73.0	73.1	74.6	74.9	74.6	73.7	74.0	1.01	0.060
100	92.3	92.0	96.8	94.6	94.6	97.3	94.9	0.67	0.060
200	182.2	182.1	181.9	182.2	182.9	183.7	182.5	2.31	0.060
300	297.2	298.7	297.4	298.4	299.9	298.4	298.3	0.22	0.060
400	396.6	396.3	396.9	396.3	396.3	396.9	396.5	0.45	0.060
480	497.3	500.0	500.2	499.5	501.5	498.2	499.4	-2.56	0.060

### 06. Corrected Calibration Results for Vacuum Gauge (Sl. No. GVG - 623)


Set DUC Value (mmHg)	CYCLE 1		CYCLE 2		CYCLE 3		Standard Avg. Reading (mmHg)	Error % FS	Ue. $\pm$ (bar)
	UP (mmHg)	DOWN (mmHg)	UP (mmHg)	DOWN (mmHg)	UP (mmHg)	DOWN (mmHg)			
80	73.2	73.1	73.0	72.4	74.6	74.8	73.3	1.11	0.060
100	83.8	83.7	86.0	84.6	89.0	87.5	94.9	0.85	0.060
200	193.9	195.5	193.6	191.1	195.4	87.5	194.0	1.01	0.060
300	296.9	295.7	297.7	297.0	195.4	293.9	295.9	0.53	0.060
400	406.5	406.2	408.9	475.1	479.5	407.0	407.3	-0.96	0.060
480	480.3	480.8	479.5	475.1	479.5	475.8	478.5	0.25	0.060

Remark : The reading of vacuum represents the Average of five reading

Uncertainty Contributing Factor 1. Repeatability (based on 3 Cycle) 2. Uncertainty of master instruments

3. Uncertainty due to resolution of DUC 4. Uncertainty due to hysteresis,

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

Notes :-	Authorized By
1. Reference used are directly traceable to national standard through unbroken chain of calibration .	 SHIV SHANKAR SINGH ( Chief Executive Officer )
2. Results reported are valid at the time of and under the stated conditions of measurement	
3. This Certificate refers only to the particular item calibrated.	
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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000572F	Calib. Field - Mechanical	Page 1 of 2
Certificate No.	LES-CCL/MECH/PI/468		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :-	M/s Prism Johnson Limited		
Address :-	(Cement Division: Unit - II)		
	Village - Mankahari, P.O. Bathia,		
	Tehsil - Rampur Baghelan, Distt. Satna - 485111		
	(Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in Instrument

Name	Make	Model	SI.No.
Stack Sampler	Vayubodhan	VSS - 1	623 - DTG - 09

### 02. Details of DUC

Name	Pressure Indicator	Environmental Conditions During Calibration	
Make	Testo	Temperature (°C)	25 ± 3
Model	Testo- 510	Relative Humidity (%)	45-75
SI.No.	PI - 623	Barometric Pressure (mmHg)	746.45
Cal. Range	0 - 1000 mmH <sub>2</sub> O		

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	SI.No./I.D.No.	Traceability
1. Digital Pressure Gauge	0 - 2000 mmWC	VEM1503080/LES-CCL/R/2503	BELZ, Faridabad
Certificate No.	Calibration Date	Valid Up to	
40039020	16.06.2020	15.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/MECH/ 01

Remark : Refer page 2 of 2 for Calibration Results

#### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration.
- Results reported are valid at the time of and under the stated conditions of measurement
- This Certificate refers only to the particular item calibrated.
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#### Authorized By

SHIVSHANKER SINGH  
(Chief Executive Officer)





# LES-CENTRE FOR CALIBRATION LABORATORY



ULR No.	CC225321000000572F		Page 2 of 2
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Certificate No.	LES-CCL/MECH/PI/468		

## 05. Corrected Calibration Results for Pressure Indicator

Set (DUC) Value (mmH <sub>2</sub> O)	CYCLE 1		CYCLE 2		CYCLE 3		Standard Avg.Rdg. (mmH <sub>2</sub> O)	Error % (FS)	Expanded ± Uncertainty	
	UP (mmH <sub>2</sub> O)	DOWN (mmH <sub>2</sub> O)	UP (mmH <sub>2</sub> O)	DOWN (mmH <sub>2</sub> O)	UP (mmH <sub>2</sub> O)	DOWN (mmH <sub>2</sub> O)			(Pa)	(mmH <sub>2</sub> O)
1.0	1.0	1.4	1.2	1.1	1.4	1.3	1.2	-0.02	10.9	1.11
10.0	9.4	9.3	9.3	9.4	9.4	9.3	9.4	0.06	10.9	1.11
100.0	101.7	101.8	101.7	101.9	101.9	101.9	101.8	-0.18	10.9	1.11
200.0	199.7	200.0	199.9	199.7	199.8	199.8	199.8	0.02	10.9	1.11
400.0	399.2	398.7	399.1	398.7	398.7	398.7	399.0	0.10	10.9	1.11
800.0	800.7	801.0	801.1	800.9	800.9	800.9	800.9	-0.09	10.9	1.11
1000.0	999.4	999.2	999.3	999.1	999.2	998.5	998.6	0.15	10.9	1.11

Remark : The reading of Pressure represents the mean of six reading

### Uncertainty Contributing Factors:-

1. Repeatability (based on 3 Cycles)
2. Uncertainty of master instruments
3. Uncertainty due to resolution of DUC
4. Uncertainty due to hysteresis

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
3. This Certificate refers only to the particular item calibrated.
4. This certificate shall not be reproduced, except in full without the written permission of LES-CCL, Kasna, Greater Noida (U.P.)

### Authorized By

SHIVSHANKER SINGH  
(Chief Executive Officer)







# LATA ENVIROTECH SERVICES - CENTRE FOR CALIBRATION LABORATORY

(A Division of Lata Envirotech Services)

K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)

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Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000571F	Calib. Field - Electro-Technical	Page 1 of 1
Certificate No.	LES-CCL/ET/SW/508		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O. Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in the Instruments

Name	Make	Model	Sl.No.
Stack Sampler	Vayubodhan	VSS - 1	623 - DTG - 09

### 02. Details of DUC

Name	Stop watch	Environmental Conditions During Calibration	
Sl.No.	SW - 623	Temperature (°C)	25 ± 3
Cal. Range	0 -15 min.	Relative Humidity (%)	45 - 75
		Barometric Pressure (mmHg)	746.45

### 03. Standard Equipment used for calibration

Standard Equipment Name	Range	Sl.No./ID.No.	Traceability
Digital Automatic Timer	10 Sec - 4 hrs	LES-CCL/R/2507	CCTPL, Noida (U.P)
Calibration Certificate No.	Calibration Date	Valid Up to	
CCTPL/TM/0170/01	30.10.2020	29.10.2021	

### 04. Calibration Procedure : LES-CCL/WI/31/ET/02

### 05. Calibration Results :-

DUC has been calibrated for following Parameter (S) ranges (S)

S.No.	Displayed Value on DUC (min)	Standard reading Average five Measurements Time (min)	Error (%)	Expanded Uncertainty at 95 % of Confidence level ( k =2 ) (%)
1	15.003	15.0084	-0.036	± 2.40

Uncertainty Contributing Factors :- 1. Repeatability (based on five measurements)

2. Uncertainty of master instruments 3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ , for degrees of freedom  $= \infty$  and confidence level is 95 % for Normal distribution.

#### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration.
- Results reported are valid at the time of and under the stated conditions of measurement
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(A Division of Lata Envirotech Services)



K-307, UPSIDC Industrial Area, Site-5, Kasna, Greater Noida, Gautam Budh Nagar-201310 (U.P.)  
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Website : www.lescc1lab.com

CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000570F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/RF/2846		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O. Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Stack Sampler	Vayubodhan	VSS - 1	623 - DTG - 09

### 02. Details of DUC

Name	Rotameter	Environmental Conditions During Calibration	
Resolution	1.0 lpm	Temperature(°C)	25 ± 3
SI.No.	E9B090	Relative Humidity (%)	45 -75
Cal. Range	0 - 30 lpm	B. Pressure (mmHg)	746.45

### 03. Standard Equipment used for calibration

SI.No.	Standard Equipment Name	Range	Sr.No. / ID. No.	Traceability
1	Air Flow Calibrator	0.1 - 10.0 lpm	002-DTD-2015	CSIR, NPL, New Delhi
2	Digital Vacuum Indicator	0 - 75 mmHg	Sr. No. 03	LES-CCL, Gr. Noida
3	Digital Temp. Indicator	0-50°C	T- 02	BELZ, Faridabad
4	Orifice Flow Calibrator	11 to 100 lpm	001-DTD-2015	LES - CCL, Gr. Noida
SI.No.	Certificate No.	Calibration Date	Valid Up to	
1	20100656/DI.08/C-044	14.10.2020	14.10.2021	
2	LES-CCL/MECH/PI/395	30.10.2020	29.10.2021	
3	30023672	18.06.2020	17.06.2021	
4	LES-CCL/FF/RF/1832	10.06.2020	09.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/03 & 04

Remark : 1.Refer page 2 of 3 for Calibration Results and 3 of 3 for calibration curve

2.The Flowrate has been Referenced to Standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

#### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
- This Certificate refers only to the particular item calibrated.
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( Chief Executive Officer )





ULR No.	CC225321000000570F		Page 2 of 3
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Certificate No.	LES-CCL/FF/RF/2846		

**05. Calibration Results for Flow Rate of Rotameter**

S.No.	Measured Flow Rate ( DUC ) lpm	Reference True Flow Rate (lpm)	Error FS (%)	Calibration Factor
1	5.0	4.881	0.397	0.976
2	5.0	4.883	0.390	0.977
3	5.0	4.885	0.383	0.977
4	5.0	4.886	0.380	0.977
5	5.0	4.887	0.377	0.977
6	10.0	9.956	0.147	0.996
7	15.0	14.6	1.333	0.973
8	20.0	19.7	1.000	0.985
9	25.0	24.6	1.333	0.984
10	30.0	29.7	1.000	0.990
11	30.0	29.8	0.667	0.993
12	30.0	29.6	1.333	0.987
13	30.0	29.9	0.333	0.997
14	30.0	29.7	1.000	0.990

(Curve Enclosed)

**A. Type A standard Uncertainty**

- I. for repeated data (1-5) - 5 lpm  $\pm 0.0097$  lpm  
II. for repeated data (10-14) - 30 lpm  $\pm 0.0495$  lpm

**B. Expanded uncertainty in Actual flow**

measurement at 95% as a coverage factor  $k=2$

- I. For 5 lpm  $\pm 11.74$  %Rdg  
II. For 30 lpm  $\pm 3.1$  %Rdg

**Uncertainty Contributing Factor :-**

- 1.Repeatability (based on five measurements)
- 2.Uncertainty of master instruments,
- 3.Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$  ,  
for degrees of freedom  $=\infty$  and confidence level is 95 % for Normal distribution.

**Notes :-**

1. Reference used are directly traceable to national standard through unbroken chain of calibration .
2. Results reported are valid at the time of and under the stated conditions of measurement
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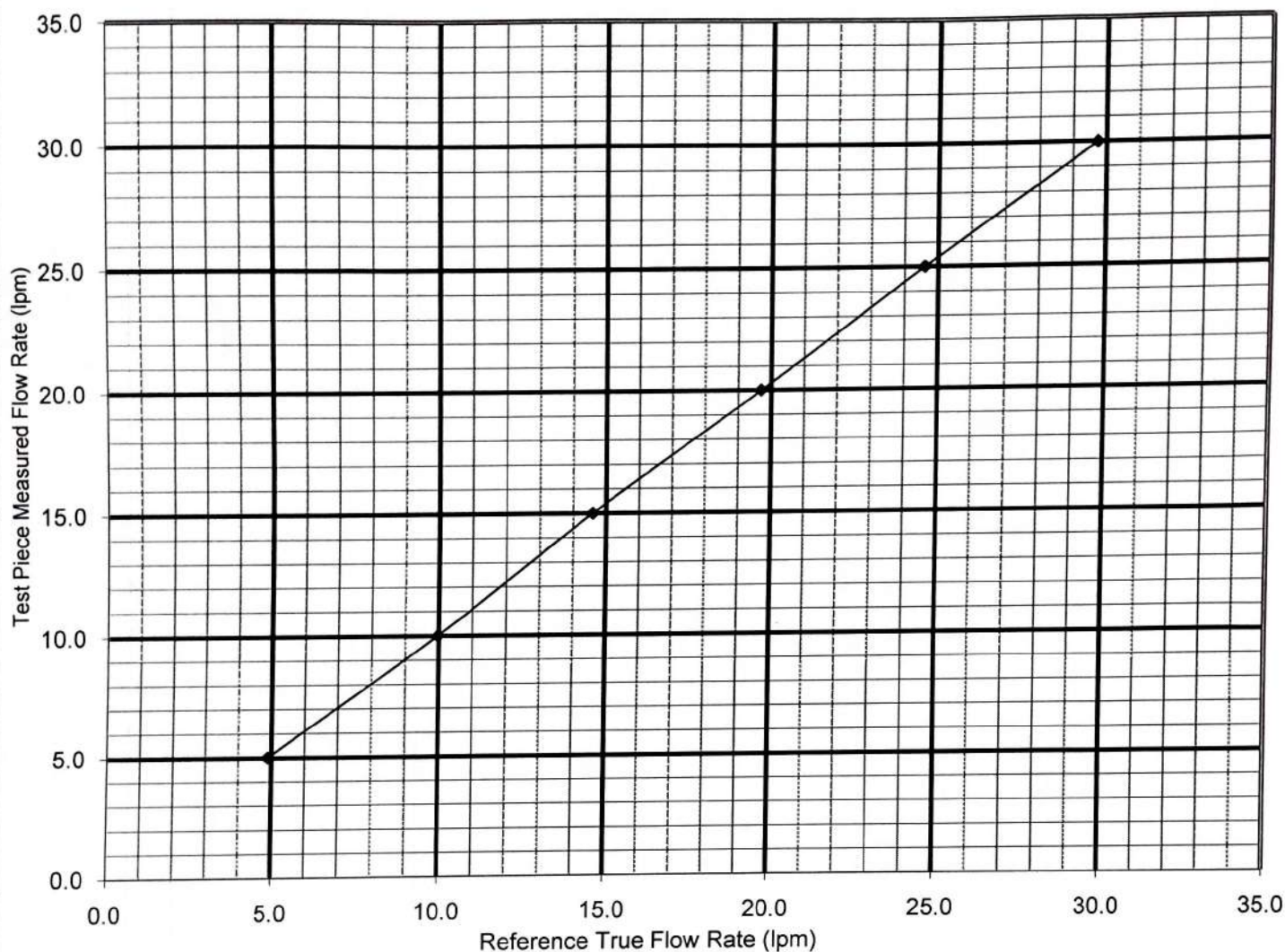


ULR No. CC225321000000570F  
Calibration Date 05.02.2021



**CALIBRATION CURVE FOR ROTAMETER**

Page 3 of 3



Sl.No.	Reference True Flow Rate (lpm)	Test Piece Measured Flow Rate (lpm)	Name of the Instrument	Rotameter
			SI.No. of the Instrument	E9B090
			Make	-
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O. Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	4.884	5.0		
2	9.956	10.0		
3	14.6	15.0		
4	19.7	20.0		
5	24.6	25.0		
6	29.7	30.0		

**Notes :-**

- Reference used are directly traceable to national standard through unbroken chain of calibration.
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E-mail : lescccl307@gmail.com, lescccllab@gmail.com, Cell No. 9821735177, 9821735178, 9355384939  
Website : www.lescccllab.com



CC-2253

## CALIBRATION CERTIFICATE

ULR No.	CC225321000000569F	Calib. Field - Fluid Flow	Page 1 of 3
Certificate No.	LES-CCL/FF/RF/2845		
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Customer Name :- Address :-	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O. Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)		
Reference :- S.R.F. No.	2020/929	Date :- 23.06.2020	Date of Issue:- 06.02.2021

### 01. DUC Fitted in instrument

Name	Make	Model	SI.No.
Stack Sampler	Vayubodhan	VSS - 1	623 - DTG - 09

### 02. Details of DUC

Name	Rotameter	Environmental Conditions During Calibration	
Resolution	0.1 lpm	Temperature(°C)	25±3
SI.No.	E9B078	Relative Humidity (%)	45-75
Cal. Range	0 - 3 lpm	B. Pressure (mmHg)	746.45

### 03. Standard Equipment used for calibration

SI.No.	Standard Equipment Name	Range	SI.No.	Traceability
1	Air Flow Calibrator	0.1 - 10.0 lpm	002-DTD-2015	CSIR, NPL, New Delhi
2	Digital Vacuum Indicator	0 - 75 mmHg	Sr. No. 03	LES-CCL, Gr. Noida
3	Digital Temp. Indicator	0 -50°C	T- 02	BELZ, Faridabad
SI.No.	Certificate No.	Calibration Date	Valid Up to	
1	20100656/DI.08/C-044	14.10.2020	14.10.2021	
2	LES-CCL/MECH/PI/395	30.10.2020	29.10.2021	
3	30023672	18.06.2020	17.06.2021	

### 04. Calibration Procedure :- LES-CCL/WI/31/FF/04

Remark 1.Refer page 2 of 3 for Calibration Results and 3 of 3 for Calibration Curve

2.The Flowrate has been Referenced to Standard Temperature (20 °C) and Pressure (760 mmHg Absolute) Condition.

#### Notes :-

- Reference used are directly traceable to national standard through unbroken chain of calibration .
- Results reported are valid at the time of and under the stated conditions of measurement
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# LES-Centre for Calibration Laboratory



ULR No.	CC225321000000569F		Page 2 of 3
Calibration Date	05.02.2021	Suggested Date of Next Calibration	04.02.2022
Certificate No.	LES-CCL/FF/RF/2845		

## 05. Calibration Results for Flow of Rotameter

S.No.	(DUC) Indicated reading (lpm)	Reference True Flow rate (lpm)	Error (%) FS	Calibration factor
1	0.5	0.471	0.967	0.942
2	0.5	0.473	0.900	0.946
3	0.5	0.475	0.833	0.950
4	0.5	0.476	0.800	0.952
5	0.5	0.477	0.767	0.954
6	1.0	0.967	1.100	0.967
7	1.5	1.458	1.400	0.972
8	2.0	1.984	0.533	0.992
9	2.5	2.476	0.800	0.990
10	3.0	2.951	1.633	0.984
11	3.0	2.953	1.567	0.984
12	3.0	2.954	1.533	0.985
13	3.0	2.955	1.500	0.985
14	3.0	2.956	1.467	0.985

(Curve Enclosed)

### Type A standard Uncertainty

I. for repeated data (1-5)  $\pm 0.3009$  lpm

II. for repeated data (10 - 14)  $\pm 0.0634$  lpm

### Expanded uncertainty in Actual flow

measurement at 95% as a coverage factor  $k=2$

I. 0.5 lpm  $\pm 11.11$  % Rdg

II. 3.0 lpm  $\pm 5.84$  % Rdg

### Uncertainty Contributing Factor :-

1. Repeatability (based on five measurements)
2. Uncertainty of master instruments
3. Resolution of DUC

The evaluated Expanded Uncertainty in calibration at a coverage factor  $k = 2$ ,  
for degrees of freedom  $\infty$  and confidence level is 95 % for Normal distribution.

### Notes :-

1. Reference used are directly traceable to national standard through unbroken chain of calibration.
2. Results reported are valid at the time of and under the stated conditions of measurement
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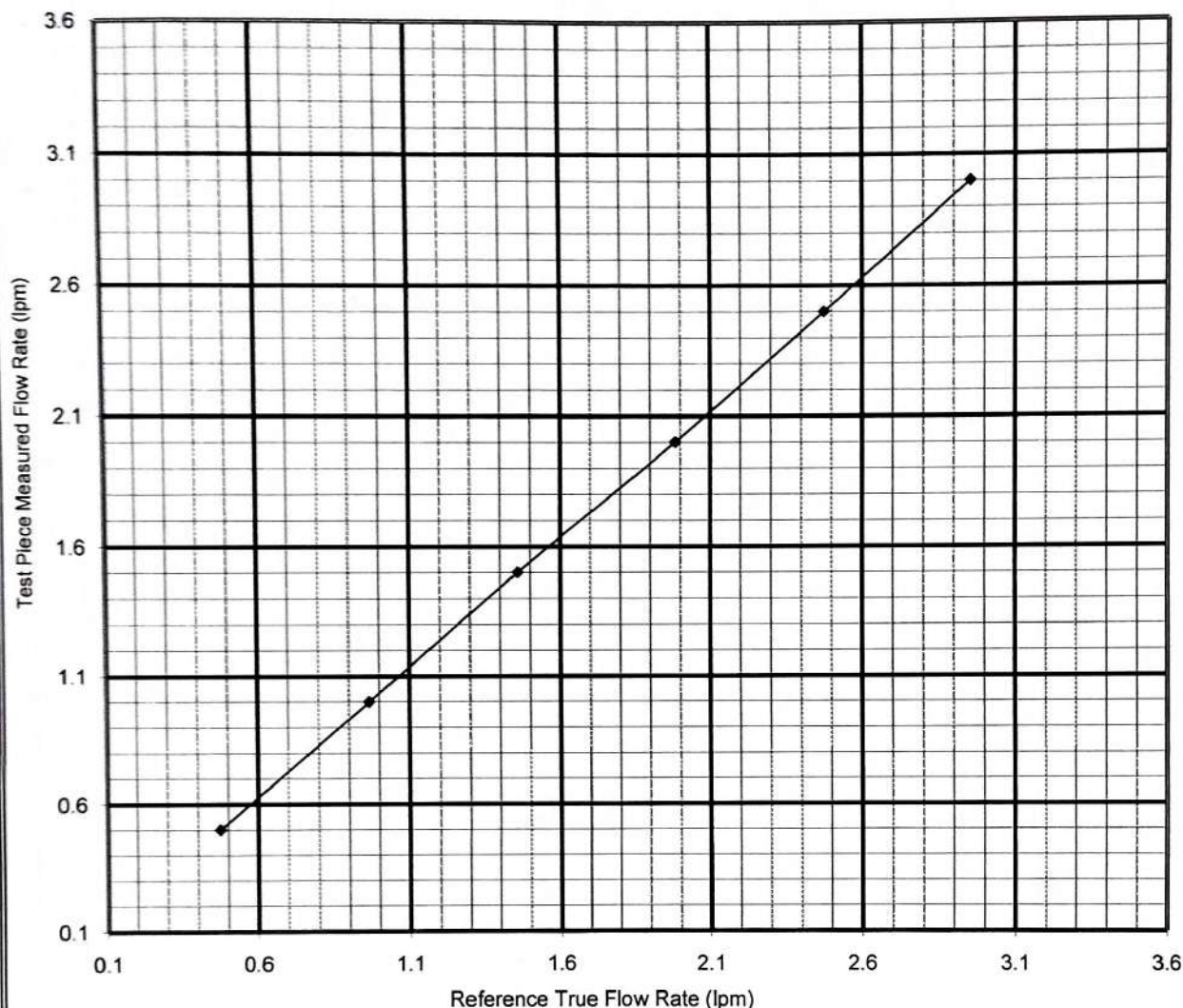


ULR No. CC225321000000569F  
Calibration Date 05.02.2021



**CALIBRATION CURVE FOR ROTAMETER**

Page 3 of 3



Sl.No.	Reference True Flow Rate (lpm)	Test Piece Measured Flow Rate (lpm)	Name of the Instrument	Rotameter
			Sl.No. of the Instrument	E9B078
			Name of the Party	M/s Prism Johnson Limited (Cement Division: Unit - II) Village - Mankahari, P.O. Bathia, Tehsil - Rampur Baghelan, Distt. Satna - 485111 (Madhya Pradesh)
1	0.474	0.5		
2	0.967	1.0		
3	1.458	1.5		
4	1.984	2.0		
5	2.476	2.5		
6	2.954	3.0		

**Notes :-**

- Reference used are directly traceable to national standard through unbroken chain of calibration.
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**ECOMEN LABORATORIES PVT. LTD.**

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LABORATORIES PVT LTD.

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/13

TEST REPORT NO: ECO LAB/AN1/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT NOISE LEVEL**

Name of the Company : **M/s Prism Johnson Ltd.**  
 Address of the Company : Village Mankahari  
 Tehsil Rampur Baghelan  
 District- Satna (M.P.)  
 Sample Collected by : Mr. Maan Singh  
 Date of Monitoring : 11.11.2020 to 13.11.2020  
 Instrument Description : Noise Meter (Make:HTC)  
 Test Method : IS: 4412, Part-1 & 2, 1991

Sl. No.	Locations	Day Time Leq Value in dB(A)	Night Time Leq Value in dB(A)
1.	Near PCL Colony	44.80	40.20
2.	Near Guest House	47.50	42.60
3.	Near Crusher Unit-II	60.10	51.70
4.	Near Admin. Building	55.90	49.30


**Noise (Ambient Standard)**

Area Code	Category of area	Limit in dB (A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

**Note:**

- Day time is reckoned in between 6:00 AM and 10:00 PM.
- Night time is reckoned in between 10:00 PM and 6:00 AM
- Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
- Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.

  
 Analyst

  
 Authorized Signatory

  
 Manager (Q)

Ecomen Laboratories Pvt. Ltd.  
 Flat No.8 Second Floor Arif Chamber  
 Sector-H, Aliganj, Lucknow-226024  
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E-mail: ravi.bhargava@gmail.com, Website: www.ecomen.in, CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1

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LABORATORIES PVT LTD.

FORMAT NO. ECO/QS/FORMAT/13

TEST REPORT NO: ECO LAB/AN2/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT NOISE LEVEL**

Name of the Company : **M/s Prism Johnson Ltd.**  
Hinauti- Sijahata &  
Mankahari Limestone mines

Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District- Satna (M.P.)

Sample Collected by : Mr. Maan Singh

Date of Monitoring : 11.11.2020 to 13.11.2020

Instrument Description : Noise Meter (Make-HTC)

Test Method : IS: 4412, Part-1 & 2, 1991

Sl. No.	Locations	Day Time Leq Value in dB(A)	Night Time Leq Value in dB(A)
1.	At Mines site Office	60.85	52.90
2.	Near Western Block Garden	56.10	51.40
3.	Village Hinauti	44.85	38.10
4.	Village Sijahata	46.60	36.80

**Noise (Ambient Standard)**

Area Code	Category of area	Limit in dB (A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

**Note:**

- Day time is reckoned in between 6:00 AM and 10:00 PM.
- Night time is reckoned in between 10:00 PM and 6:00 AM
- Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
- Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.

  
Analyst

  
Authorized Signatory

  
Manager (Q)

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LABORATORIES PVT LTD.

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/13

TEST REPORT NO: ECO LAB/AN3/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT NOISE LEVEL**

Name of the Company : **M/s Prism Johnson Ltd.**  
 Medhi Limestone mines  
 Address of the Company : Village Mankahari  
 Tehsil Rampur Baghelan  
 District- Satna(M.P.)  
 Sample Collected by : Mr. Maan Singh  
 Date of Monitoring : 11.11.2020 to 13.11.2020  
 Instrument Description : Noise Meter (Make-HTC)  
 Test Method : IS: 4412, Part-1 & 2, 1991

Sl. No.	Locations	Day Time Leq Value in dB(A)	Night Time Leq Value in dB(A)
1.	Near Nar Nala Bridge	44.80	38.20
2.	Near Medhi Mines Boundary Pillar No28	50.60	41.60
3.	Near Medhi Mines Boundary Pillar No23	54.30	48.20
4.	Village Malgaon	45.90	42.40


**Noise (Ambient Standard)**

Area Code	Category of area	Limit in dB (A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

**Note:**

1. Day time is reckoned in between 6:00 AM and 10:00 PM.
2. Night time is reckoned in between 10:00 PM and 6:00 AM
3. Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
4. Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.

  
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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/13

TEST REPORT NO: ECO LAB/AN4/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT NOISE LEVEL**

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District- Satna(M.P.)  
Sample Collected by : Mr. Maan Singh  
Date of Monitoring : 11.11.2020 to 13.11.2020  
Instrument Description : Noise Meter (Make:HTC)  
Test Method : IS: 4412, Part-1 & 2, 1991

Sl. No.	Locations	Day Time Leq Value in dB(A)	Night Time Leq Value in dB(A)
1.	At AdiwasiTola	50.80	43.10
2.	At BaisanTola	47.50	37.80
3.	South Site of Working Pit	54.60	50.90
4.	Near Boundary Pillar No.64	55.30	49.50

**Noise (Ambient Standard)**

Area Code	Category of area	Limit in dB (A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

**Note:**

1. Day time is reckoned in between 6:00 AM and 10:00 PM.
2. Night time is reckoned in between 10:00 PM and 6:00 AM
3. Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
4. Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.

  
Analyst  
Authorized Signatory

Ecomen Laboratories Pvt. Ltd.  
Flat No. 8 Second Floor Arif Chamber  
Sector-H, Aliganj, Lucknow-226024  
Ph: 2746282 Fax-2745726

  
Manager (Q)

**ECOMEN LABORATORIES PVT. LTD.**

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FORMAT NO. ECO/QS/FORMAT/13

TEST REPORT NO: ECO LAB/AN5/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT NOISE LEVEL**

Name of the Company : **M/s Prism Johnson Ltd.**  
 Address of the Company : Village Mankahari  
 Tehsil Rampur Baghelan  
 District- Satna(M.P.)  
 Sample Collected by : Mr. Maan Singh  
 Date of Monitoring : 12.11.2020 to 13.11.2020  
 Instrument Description : Noise Meter (Make:HTC)  
 Test Method : IS: 4412, Part-1 & 2, 1991

Sl. No.	Locations	Day Time Leq Value in dB(A)	Night Time Leq Value in dB(A)
1.	Village Badarkha	45.10	40.90
2.	Village Hinauta	48.60	37.90
3.	Village Chulhi	44.90	40.40
4.	Village Kulhari	44.30	38.50

**Noise (Ambient Standard)**

Area Code	Category of area	Limit in dB (A) Leq	
		Day Time	Night Time
A	Industrial Area	75	70
B	Commercial Area	65	55
C	Residential Area	55	45
D	Silence Zone	50	40

**Note:**

1. Day time is reckoned in between 6:00 AM and 10:00 PM.
2. Night time is reckoned in between 10:00 PM and 6:00 AM
3. Silence zone is defined as area up to 100m around such premises as hospitals, educational institutions & courts. The silence zones are to be declared by a competent authority.
4. Mixed categories of areas should be declared as one of the four above-mentioned categories by the competent authority and the corresponding standard shall apply.

  
 Analyst

  
 Authorized Signatory

  
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FORMAT NO. ECO/QS/FORMAT/13

TEST REPORT NO: ECO LAB/AN6/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF WORK PLACE NOISE LEVEL**

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District- Satna (M.P.)  
Sample Collected by : Mr. Maan Singh  
Date of Monitoring : 11.11.2020 to 13.11.2020  
Instrument Description : Noise Meter (Make:HTC)  
Test Method : IS: 4412, Part-1 & 2, 1991

Sl. No.	Locations	Noise Level dB(A)
1.	Kiln Unit-II	78.50
2.	Cement Mill Unit -II	72.60
3.	Near Railway Yard,	77.10
4.	Near Packing Plant	82.35

  
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FORMAT NO. ECO/QS/FORMAT/13

TEST REPORT NO: ECO LAB/AN7/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF AMBIENT NOISE LEVEL**

Name of the Company : **M/s Prism Johnson Ltd.**  
Address of the Company : Village Mankahari  
Tehsil Rampur Baghelan  
District- Satna(M.P.)  
Sample Collected by : Mr. Maan Singh  
Date of Monitoring : 11.11.2020 to 13.11.2020  
Instrument Description : Noise Meter (Make:HTC)  
Test Method : IS: 4412, Part-1 & 2, 1991

Sl. No.	Locations	Day Time Leq Value in dB(A)	Night Time Leq Value in dB(A)
1.	Near Site Office	55.80	43.35
2.	North side of mines pit	52.40	47.15
3.	South side of pit	49.60	44.20
4.	East side of pit.	44.70	40.80

  
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Authorized SignatoryEcomen Laboratories Pvt. Ltd.  
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FORMAT NO. ECO/QS/FORMAT/13

TEST REPORT NO: ECO LAB/AN1/11/20

TEST REPORT ISSUE DATE: 24.11.2020

**TEST REPORT OF NOISE LEVEL SURVEY**

Name of the Customer : **M/s Prism Johnson Ltd.**  
 Address of the Customer : Village Mankahari  
 Tehsil Rampur Baghelan  
 District- Satna (M.P.)  
 Sample Collected by : Mr. Maan Singh  
 Date of Monitoring : 11.11.2020 to 13.11.2020  
 Instrument Description : Noise Meter (Maske:HTC)

Sl. No.	Locations	Leq Value in dB(A)	Protective Measures Adopted
<b>Dozer-155 A</b>			
1	Operator's cabin idle running	64.8	Ear muff provided
2	Operator's Cabin running on load	81.6	Ear muff provided
<b>Poclain 300 CK</b>			
3	Operator's cabin idle running	73.8	Ear muff provided
4	Operator's Cabin while loading	76.3	Ear muff provided
<b>HAULPAK-PH 40</b>			
5	Operator's Cabin while being loaded	72.4	Ear muff provided
6	Operator's Cabin while hauling	74.5	Ear muff provided
7	Operator's Cabin unloading in the hopper of crusher	88.6 (For 20 Second)	Ear muff provided
8	Alarm (while Reversing of dumper)	102.0	Short Duration
<b>ATLASCOPCODRILL</b>			
9	Operator's point while drilling	82.8	Ear muff provided
<b>ROCKBREAKER</b>			
10	Operator's Cabin	73.5	Ear muff provided
<b>HEAVY BLASTING (INSTANTANEOUS)</b>			
11	Blasting shelter	102.2	Momentary
12	At safe zone	84.9	
<b>AMBIENT NOISE LEVEL DURING WORKING HOURS</b>			
13	Office Campus, Mines workshop, Outfield (Haul Road)	72.8	-
14	Office Campus, Mines Workshop, Outfield (Haul Road) (at Night)	60.2	-

  
 Analyst

  
 Authorized Signatory

  
 Manager (Q)

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<b>Water consumption FY 20-21</b>
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Month	Unit II	
	Ground Water	Mines Pit
UOM	KL	KL
Oct-20	0	18340
Nov-20	1667	19849
Dec-20	2640	23505
Jan-21	1007	32850
Feb-21	441	22317
Mar-21	959	29422



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FORMAT NO. ECO/QS/FORMAT/07

TEST REPORT NO: ECO LAB/WW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

**TEST REPORT OF WASTE WATER\***

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari,  
Tehsil Rampur Baghelan  
Distt.Satna ( M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr.Maam Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : STP Inlet  
**Sample ID Code** : ELW-12577

Sl. No.	TESTS	PROTOCOL	RESULT	Limits of Detection
1	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	6.82	2-12
2	Total Suspended Solids(mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-D	153.2	5.0-1000
3	Oil & Grease as O & G (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 5520 A+B+D	BDL	5.0-600
4	Biochemical Oxygen Demand as BOD (mg/l) 3days at 27°C	APHA, 23 <sup>rd</sup> Ed. 2017, 5210 A+B	40.0	5-10000
5	Chemical Oxygen Demand as COD (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 5220 A+C	152.0	5-50000

\*The result are related only to item tested.

BDL = Below Detection Limit

  
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**ecoMen**  
LABORATORIES PVT LTD.

FORMAT NO. ECO/QS/FORMAT/07

TEST REPORT NO: ECO LAB/WW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

**TEST REPORT OF WASTE WATER\***

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari,  
 Tehsil Rampur Baghelan  
 Distt.Satna ( M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr.Maana Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : STP Outlet  
**Sample ID Code** : ELW-12578

Sl. No.	TESTS	PROTOCOL	RESULT	Limits of Detection	G.S.R 1265 (E)
1	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	6.92	2-12	6.5-9.0
2	Total Suspended Solids (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-D	18.0	5.0-1000	<100.0
3	Oil & Grease as O & G (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 5520 A+B+D	BDL	5.0-600	-
4	Biochemical Oxygen Demand as BOD (mg/l) 3days at 27°C	APHA, 23 <sup>rd</sup> Ed. 2017, 5210 A+B	6.5	5-10000	30.0
5	Chemical Oxygen Demand as COD (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 5220 A+C	34.0	5-50000	-
6.	Fecal Coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 A + E	166.0	-	<1000

\*The result are related only to item tested.

BDL = Below Detection Limit

  
 Analyst

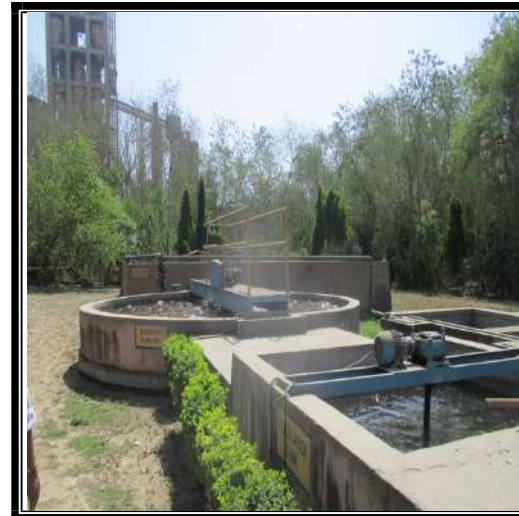
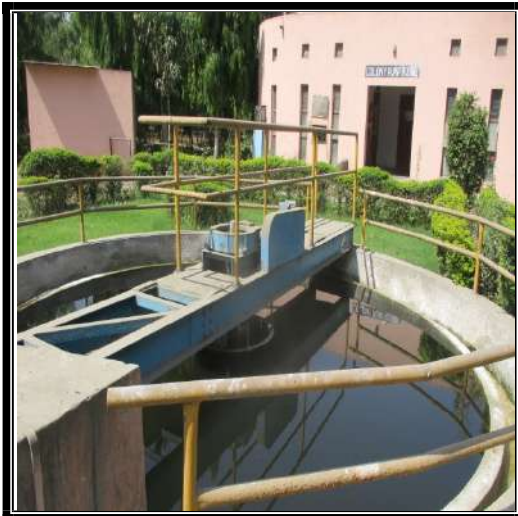
  
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 Manager (Q)

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 Sector-H, Aliganj, Lucknow-226024  
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**Sewage Treatment Plant**  
**Capacity : 600 KLD**



## Green Belt development

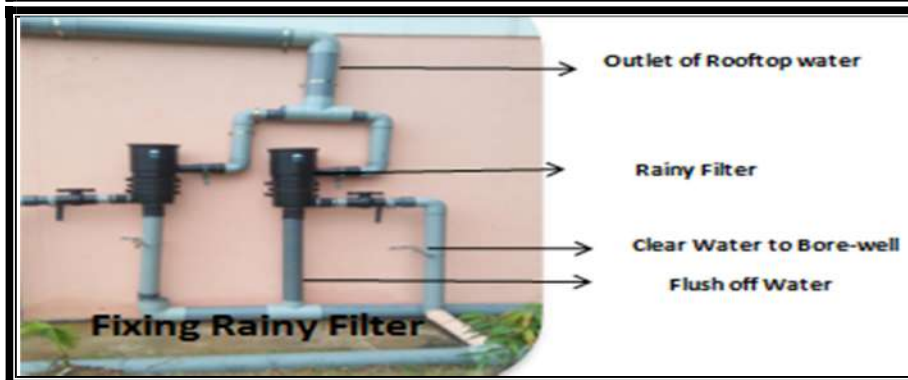




1. Rain water harvesting pond in Mines



2. Roof top Rain water harvesting Structures:-





*3. Recharge Shaft with Abandoned bore-wells: Pits of size 3 X 3 X 3 M has been made around three abandoned bore- well inside plant premises to augment the ground water level as the rainwater is directly injected into ground water table, after filtration.*



*4. Construction of Percolation Tank with Bore Holes: A big percolation tank of size 46.5 X 3.5 X 1.5 Meter is made with four numbers of boreholes. Perforations made in the casing inside recharge structure and wrapped with fine net. Excavated pit has been filled with conventional filters.*





*5. Recharge Bore Hole for Recharging the Ground Water:*



*5. Deeping of Ponds and construction of water harvesting structure in nearby villages:*



6. *Construction of water reservoir at Baghai village for water conservation:*





Rainwater harvesting measures action plan (Plant, colony & mine sites)					
S. No.	Land use type	Area M2	Rainfall	Runoff Coefficient (As per CGWB Guidelines)	Quantity of Rainfall Runoff Generated (Available for Harvesting / Artificial Recharge)
			<b>2020 - 21</b>		<b>2020 - 21</b>
1	Roof - Project office	386	1.209	0.85	396.6729
2	Roof - School	1150	1.209	0.85	1181.7975
3	Roof of MRSS	1900	1.209	0.85	1952.535
4	Roof of Cement Mill Load Center U2	1100	1.209	0.85	1130.415
5	Roof General Store	2000	1.209	0.85	2055.3
6	Cooler Load Centre U1	1100	1.209	0.85	1130.415
7	Cooler Load Centre U2	1000	1.209	0.85	1027.65
8	Runoff Water Harvesting Structure Near Guest House	30000	1.209	0.3	10881
9	Groundwater Recharge with Abandoned Bore well - 1	10000	1.209	0.3	3627
10	Groundwater Recharge with Abandoned Bore well - 2	10000	1.209	0.3	3627
11	Groundwater Recharge with Abandoned Bore well - 3	2500	1.209	0.85	2569.125
12	Groundwater Recharge Pit	9746	1.209	0.85	10015.4769
	Connected with Storm Drain - A type	17307	1.209	0.3	6277.2489
13	Groundwater Recharge Pit	22828	1.209	0.85	23459.1942
	Connected with Storm Drain - Near	47748	1.209	0.3	17318.1996
14	Ground water recharge with abandoned bore well near steel yard	40000	1.209	0.85	41106
15	New security Barrack	10000	0.753	0.85	6400.5
16	Durtech shed	800	0.385	0.3	92.4
		30000	0.385	0.85	9817.5
					<b>144065.43</b>

भारत सरकार  
खानमंत्रालय  
भारतीय खानब्यूरो  
क्षेत्रीय खाननियंत्रक कार्यालय



GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
O/O THE REGIONAL CONTROLLER OF MINES

रजिस्टर्ड / साधारण / हाथोंहाथ

सं. MP/Satna/Limestone /M.Sch.-86/14-15 /2443

जबलपुर, दिनांक : 06/04/2015

सेवामें ✓ M/s Prism Cement Ltd. ,  
Rajdeep, Rewa Road Satna,  
District Satna(MP) Pin 485001

विषय:- म0प्र0 राज्य के सतना जिले में स्थित आपकी हिनौती एवं सिजेहटा (Hinauti & Sijhatta)  
लाइमस्टोन खान (क्षेत्र 772.067 हे0) के एमसीडीआर-1988 के नियम 12 के अंतर्गत जमा किए गए  
माइनिंग स्कीम का अनुमोदन।

- संदर्भ :- 1) आपके/आरक्यूपी के द्वारा जमा किया गया प्रक्रिया शुल्क के रसीद संख्या 42112 दि0  
01/12/2014, आपके/आरक्यूपी के पत्र क्रमांक MINE/2015-15062 दि0 18/02/2015 एवं  
MINE/2015-15091 दि0 10/03/2015।  
2) इस कार्यालय का समसंख्यक पत्र दि 29/01/2015

महोदय,

खनिज संरक्षण एवं विकास नियमावली, 1988 के नियम 12 के उपनियम (4) के द्वारा प्रदत्त शक्तियों के  
अधीन एतद् द्वारा म0प्र0 राज्य के सतना जिले में स्थित आपकी हिनौती एवं सिजेहटा (Hinauti & Sijhatta)  
लाइमस्टोन खान (क्षेत्र 772.067 हे0) की माइनिंग स्कीम का अनुमोदन प्रदान करता हूँ। यह अनुमोदन निम्नलिखित शर्तों  
के अधीन है:-

- 1 The Scheme of mining is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2 The proposals shown on the plates and/or given in the document is based on the lease map /sketch submitted by the applicant/ lessee and is applicable from the date of approval.
- 3 It is clarified that the approval of aforesaid Scheme of Mining does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957, or the Mineral Concession Rules, 1960 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- 4 Indian Bureau of mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant / lessee.
- 5 At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6 The Financial Assurance submitted by you for Rs 44,25,000 (Rs. Forty Four Lac Twenty Five Thousand only) valid upto 31/03/2020 and next Financial Assurance shall be submitted on or before 31/03/2020
- 7 This approval is restricted in respect of proposals given in the document for the period from 2015-16 to 2019-20 validity upto 31/03/2020 from the date of approval, subject to all other statutory clearances
- 8 The next scheme of mining will be due for submission on 01/12/2019.
- 9 The Environmental Monitoring Cell shall be established by the company. This Environmental Monitoring Cell of the company, shall continue monitoring ambient air quality, dust-fall rate, water quality, soil sample analysis and noise level measurements at various stations established for the purpose both in the core zone and buffer zone as per requirement of Environment Guidelines and keeping in view IBM's circular No. 3/92 & 2/93 season-wise every year or by engaging the services of an Environmental Laboratory approved by MOEF/CPCB. The data so generated shall be maintained in a bound paged register kept for the purpose and the same shall be made available to the inspecting officer, on demand
- 10 As per Madhya Pradesh State Government's order dated 10/08/2011 if there is enhancement of production proposed from that in the approved scheme of mining under such circumstances additional stamp duty has to be paid by the lessee for the enhances quantum of production and also a supplementary agreement has to be made by the lessee

संलग्न:- अनुमोदित माइनिंग स्कीम की एक प्रति के साथ।

भवदीय  
  
(एस0 आर0 रॉय)  
क्षेत्रीय खाननियंत्रक  
भारतीय खानब्यूरो



प्रतिलिपि :-

1. मान्यता प्राप्त व्यक्ति श्री रवि शंकर शुक्ला, आर०क्यू०पी० एवं उप प्रबंधक जियोलाजी में० प्रिज्म सीमेंट लि० राजदीप रीवा रोड सतना , जिला सतना (म०प्र०) 485001 को सूचनार्थ प्रेषित ।
2. मान्यता प्राप्त व्यक्ति श्री पियूष गुप्ता , आर०क्यू०पी० एवं उप प्रबंधक खान में० प्रिज्म सीमेंट लि० राजदीप रीवा रोड सतना , जिला सतना (म०प्र०) 485001 को सूचनार्थ प्रेषित ।
3. संचालक, संचालनालय भौमिकी तथा खनिकर्म, 'खनिजभवन' 29-ए, अरेरा हिल्स, भोपाल (म०प्र०) को अनुमोदित माइनिंग स्कीम की एक प्रति के साथ रजिस्टर्ड डाक द्वारा प्रेषित ।

4  
(एस० आर० रॉय)  
क्षेत्रीय खाननियंत्रक  
भारतीय खानब्यूरो

भारतसरकार  
खानमंत्रालय  
भारतीय खानब्यूरो  
क्षेत्रीय खाननियंत्रक कार्यालय



रजिस्टर्ड / साधारण डाक  
GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
O/O THE REGIONAL CONTROLLER OF MINES

No. : MP/Satna/Limestone /M.Sch-6/16-17

Jabalpur, dt. : 4/11/2016

To,

M/s Prism Cement Ltd.,  
Rajdeep, Rewa Road, Satna,  
District Satna (MP) 485001

विषय:- म0प्र0 राज्य के सतना जिले में स्थित आपकी मेंढी ( Mendhi ) लाइमस्टोन खान (क्षेत्र 117.594 हे०) के एमसीडीआर-1988 के नियम 12 के अंतर्गत जमा किए गए माइनिंग स्कीम का अनुमोदन।

- संदर्भ:- 1) आपके द्वारा जमा किया गया प्रक्रिया शुल्क के रसीद संख्या J/170 दि०- 30/05/2016, आपका पत्र क्रमांक कुछ नहीं दि० 23/05/2016 एवं 19/09/2016।  
2) इस कार्यालय का समसंख्यक पत्र दि०-12/09/2016।

महोदय,

खनिज संरक्षण एवं विकास नियमावली, 1988 के नियम 12 के उपनियम (4) के द्वारा प्रदत्त शक्तियों के अधीन एतद् द्वारा म0प्र0 राज्य के सतना जिले में स्थित आपकी मेंढी ( Mendhi ) लाइमस्टोन खान (क्षेत्र 117.594 हे०) की माइनिंग स्कीम का अनुमोदन प्रदान करता हूँ। यह अनुमोदन निम्नलिखित शर्तों के अधीन है:-

- 1 The Scheme of mining is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2 The proposals shown on the plates and/or given in the document is based on the lease map/sketch submitted by the applicant/ lessee and is applicable from the date of approval.
- 3 It is clarified that the approval of aforesaid Scheme of Mining does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957, or the Mineral Concession Rules, 1960 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- 4 Indian Bureau of mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant / lessee.
- 5 At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6 The Financial Assurance submitted by you for Rs 16,25,000 (Rs. Sixteen Lakh Twenty Five Thousand only) valid up to 31/03/2021 and next Financial Assurance shall be submitted on or before 31/03/2021.
- 7 This approval is restricted in respect of proposals given in the document for the period from 2016-17 to 2020-21 validity up to 31/03/2021 from the date of approval, subject to all other statutory clearances.
- 8 The next scheme of mining will be due for submission on 01/12/2020.
- 9 As per Madhya Pradesh State Government's order dated 10/08/2011 if there is enhancement of production proposed from that in the approved scheme of mining under such circumstances additional stamp duty has to be paid by the lessee for the enhances quantum of production and also a supplementary agreement has to be made by the lessee.
- 10 If the approval conflict with any other law or court order/direction under any statute, it shall be revoked immediately.

संलग्न:-अनुमोदित माइनिंग स्कीम की एक प्रति के साथ।

भवदीय,  
4.11.2016  
( जलजीव संरक्षक )



भारत सरकार  
खान मंत्रालय  
भारतीय खान ब्यूरो  
क्षेत्रीय खान नियंत्रक का कार्यालय



रजिस्टर्ड पार्सल द्वारा  
GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
O/O THE REGIONAL CONTROLLER OF MINES

सं. MP/Satna/Limestone /M.Sch.-35/2015-16 177

जबलपुर, दिनांक : 29/02/2016

सेवा में - **M/s Prism Cement Ltd.,**  
**Rajdeep, Rewa Road, Satna,**  
**District Satna (MP) 485001**

विषय:- म0प्र0 राज्य के सतना जिले में स्थित आपकी **बगहई (Bagahai)** लाइमस्टोन खान (क्षेत्र 512.317हे0) के एमसीडीआर-1988 के नियम 12 के अंतर्गत जमा किए गए माइनिंग स्कीम का अनुमोदन।  
संदर्भ :- 1) आपके/आरक्यूपी के द्वारा जमा किया गया प्रक्रिया शुल्क के रसीद संख्या **J/46 दि0 17/11/2015**, आपके/आरक्यूपी के पत्र क्रमांक कुछ नहीं दि0 **10/02/2016**।  
2) इस कार्यालय का समसंख्यक पत्र दि **13/01/2016**

महोदय,

खनिज संरक्षण एवं विकास नियमावली, 1988 के नियम 12 के उपनियम (4) के द्वारा प्रदत्त शक्तियों के अधीन एतद द्वारा म0प्र0 राज्य के सतना जिले में स्थित आपकी **बगहई (Bagahai)** लाइमस्टोन खान (क्षेत्र 512.317हे0) की माइनिंग स्कीम का अनुमोदन प्रदान करता हूँ। यह अनुमोदन निम्नलिखित शर्तों के अधीन है :-

- 1 The Scheme of mining is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2 The proposals shown on the plates and/or given in the document is based on the lease map /sketch submitted by the applicant/ lessee and is applicable from the date of approval.
- 3 It is clarified that the approval of aforesaid Scheme of Mining does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957, or the Mineral Concession Rules, 1960 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- 4 Indian Bureau of mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant / lessee.
- 5 At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6 The Financial Assurance submitted by you for **Rs 33,24,000/- (Rs. Thirty Three Lac Twenty Four Thousand only)** valid upto **31/03/2021** and next Financial Assurance shall be submitted on or before **31/03/2021**.
- 7 This approval is restricted in respect of proposals given in the document for the period from **2016-17 to 2020-21** validity upto **31/03/2021** from the date of approval, subject to all other statutory clearances.
- 8 The next scheme of mining will be due for submission on **01/12/2020**.
- 9 As per Madhya Pradesh State Government's order dated 10/08/2011 if there is enhancement of production proposed from that in the approved scheme of mining under such circumstances additional stamp duty has to be paid by the lessee for the enhances quantum of production and also a supplementary agreement has to be made by the lessee.
- 10 The Environmental Monitoring Cell shall be established by the company. This Environmental Monitoring Cell of the company, shall continue monitoring ambient air quality, dust-fall rate, water quality, soil sample analysis and noise level measurements at various stations established for the purpose both in the core zone and buffer zone as per requirement of Environment Guidelines and keeping in view IBM's circular No. 3/92 & 2/93 season-wise every year or by engaging the services of an Environmental Laboratory approved by MOEF/CPCB. The data so generated shall be maintained in a bound paged register kept for the purpose and the same shall be made available to the inspecting officer, on demand

संलग्न:- अनुमोदित माइनिंग स्कीम की एक प्रति के साथ।

भवदीय  
  
(एस0 आर0 रॉय)  
खान नियंत्रक एवं  
(I/C) क्षेत्रीय कार्यालय  
भारतीय खान ब्यूरो, जबलपुर

प्रतिलिपि :-

1. मान्यता प्राप्त व्यक्ति श्री संजय सिंह बघेल, मकान नं० सी-75, प्रिज्म सीमेन्ट लि० कालोनी, मनकहरी, पो०आ० बाठिया, तह० रामपुर बघेलान, जिला-सतना (म०प्र०) 485111 को सूचनार्थ प्रेषित ।
2. मान्यता प्राप्त व्यक्ति श्री विनोद कुमार गिरी, राजेन्द्र नगर, स्ट्रीट-9, सतना, जिला-सतना (म०प्र०) 485001 को सूचनार्थ प्रेषित ।
3. संचालक, संचालनालय भौमिकी तथा खनिकर्म, 'खनिजभवन' 29-ए, अरेरा हिल्स, भोपाल (म०प्र०) को अनुमोदित माइनिंग स्कीम की एक प्रति के साथ रजिस्टर्ड डाक द्वारा प्रेषित ।

(एस० आर० रॉय)  
खान नियंत्रक एवं  
(I/C) क्षेत्रीय कार्यालय  
भारतीय खान ब्यूरो, जबलपुर

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पता./ Address योजनाकमांक 11 कमलानेहरू नगर, जबलपुर 482002 (म०प्र०) Scheme No.11, Kamla Nehru Nagar, Jabalpur, 482002 (M.P.) फोन/ Phone : 2416780, 2416589, 2416231 फैक्स/Fax (0761) 2416780



भारत सरकार  
खान मंत्रालय  
भारतीय खान ब्यूरो  
क्षेत्रीय खान नियंत्रक का कार्यालय



GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
O/O THE REGIONAL CONTROLLER OF MINES

File No.- MP/Satna/Limestone /RMP-44/17-18

Jabalpur, dt.: 27/04/2017

To/

M/s Prism Cement Limited,  
Rajdeep, Rewa Road, Satna (M.P.) 485001

विषय:- मध्य प्रदेश राज्य के सतना जिले में स्थित आपकी प्रिज्म सीमेंट लाइमस्टोन खान (क्षेत्र 99.416 हे०) के एमसीआर- 2016 के नियम 17 (1) के अंतर्गत जमा किए गए खनन योजना के पुनर्विलोकन का अनुमोदन।

संदर्भ :-1) आपके द्वारा जमा किये गये प्रक्रिया शुल्क की रसीद संख्या J/427, दि० 22/03/2017, आपका/क्यू पी० का पत्र क्रमांक - कुछ नहीं, दि० 20/03/2017 एवं 19/04/2017।  
2) इस कार्यालय का समसंख्यक पत्र दि०- 13/04/2017।

महोदय,

In exercise of the powers conferred by the Clause (b) of Sub-section (2) of Section 5 of Mines and Minerals (Development and Regulation) Act, 1957 read with Government of India Order no. S.O.1857(E), dated 18/05/2016, I hereby **approve** the above said Review of Mining Plan including Progressive Mine Closure Plan submitted under Rule 17(1) of Minerals (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016. This approval is subject to the following conditions:

- 1 The Review of Mining Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2 The proposals shown on the plates and /or given in the document is based on the lease map /sketch submitted by the applicant/ lessee and is applicable from the date of approval.
- 3 It is clarified that the approval of aforesaid Review of Mining Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Amendment Act, 2015, or the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- 4 Indian Bureau of mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant / lessee.
- 5 At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6 The Financial Assurance submitted by you for Rs. 54,37,800/- (Rs. Fifty Four Lakh Thirty Seven Thousand Eight Hundred only) is valid up to 31/03/2022 (Your kind attention for enhancement of financial assurance as per rule 27 of MCDR, 2017) and next Financial Assurance shall be submitted on or before 31/03/2022.
- 7 This approval is restricted in respect of proposals given in the document for the period from 2017-18 to 2021-22 with validity up to 31/03/2022, from the date of approval, subject to all other statutory clearances.
- 8 If the approval conflicts with any other law or court order/direction under any statute, it shall be revoked immediately.
- 9 In the approved document, wherever Rule 12(3) of MCDR, 1988 is mentioned, it should be read as Rule 17(1) of Minerals (Other than Atomic and Hydrocarbon Energy Minerals) Concession Rules, 2016.
- 10 The next Review of Mining Plan will be due for submission on 01/10/2021.
- 11 This approval is restricted to Major Mineral only and any reflection of minor mineral in the document is under purview of State Government.
- 12 As per Madhya Pradesh State Government's order dated 10/08/2011 if there is enhancement of production proposed from that in the approved scheme of mining under such circumstances additional stamp duty has to be paid by the lessee for the enhances quantum of production and also a supplementary agreement has to be made by the lessee.
13. As per Undertaking dated 14/04/2017 appended with Review of Mining Plan, wherein it is stated that the boundary pillars of the remaining blocks will be erected during next six month, in this regard a Surface Plan showing all boundary pillars as well as their co-ordinates may be submitted to this office within 6(six) month of period from the date of issue of this letter.

संलग्न:-अनुमोदित पुनर्विलोकन खनन योजना की एक प्रति के साथ।

भवदीय,

27.4.2017

रजिस्टर्ड पार्सल द्वारा



भारत सरकार  
खान मंत्रालय  
भारतीय खान ब्यूरो  
क्षेत्रीय खान नियंत्रक का कार्यालय



GOVERNMENT OF INDIA  
MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
O/O THE REGIONAL CONTROLLER OF MINES

फा0 सं0 - MP/Satna/Limestone/MPLN /MOD-63/2017-18 3365 जबलपुर, दिनांक : 16/10/2017  
सेवा में,

मे0 प्रिज्म सीमेंट लिमिटेड,  
राजदीप, रीवा रोड, सतना  
जिला- सतना (म0प्र0) 485001

विषय:- म0प्र0 राज्य के सतना जिले में स्थित आपकी बगहाई लाइमस्टोन खान (क्षेत्र 512.317 हे0) के  
एमसीआर-2016 के नियम 17 (3) के अंतर्गत जमा किए गए अनुमोदित माइनिंग प्लान के लिए  
प्रस्तुत संशोधन का अनुमोदन।

संदर्भ :-1) आपके द्वारा जमा किये गये प्रक्रिया शुल्क की रसीद संख्या J/550, दि0 15/09/2017,  
आपका/क्यू0पी0 का पत्र, दि0 04/09/2017 एवं 10/10/2017।

2) इस कार्यालय का समसंख्यक पत्र दि0- 26/09/2017।

महोदय,

In exercise of the powers conferred by the Clause (b) of Sub-section (2) of Section 5 of Mines and Minerals (Development and Regulation) Act, 1957 read with Government of India Order no. S.O.1857(E), dated 18/05/2016, I hereby **approve** the above said Modification in approved Mining Plan including Progressive Mine Closure Plan submitted under Rule 17(3) of Minerals (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016. This approval is subject to the following conditions:

- 1 The Modification in approved Mining Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2 The proposals shown on the plates and /or given in the document is based on the lease map /sketch submitted by the applicant/ lessee and is applicable from the date of approval.
- 3 It is clarified that the approval of aforesaid Mining Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Amendment Act, 2015, or the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- 4 Indian Bureau of mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant / lessee.
- 5 At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6 The Financial Assurance submitted by you for Rs. 3,98,88,000/- (Rs. Three Crore Ninety Eight Lakh Eighty Eight Thousand only) is valid up to 31/03/2021 ( Your kind attention for enhancement of financial assurance as per rule 27 of MCDR, 2017 ) and next Financial Assurance shall be submitted on or before 31/03/2021.
- 7 This approval is restricted in respect of proposals given in the document for the period from 2017-18 to 2020-21 with validity up to 31/03/2021, from the date of approval, subject to all other statutory clearances.
- 8 If the approval conflicts with any other law or court order/direction under any statute, it shall be revoked immediately.
- 9 The modification in approved mining plan is approved subject to extension of period of mining lease as per Mines and Minerals (Development and Regulation) Amendment Act 2015.
- 10 This approval is restricted to Major Mineral only and any reflection of minor mineral in the document is under purview of State Government.
- 11 As per Madhya Pradesh State Government's order dated 10/08/2011 if there is enhancement of production proposed from that in the approved scheme of mining under such circumstances additional stamp duty has to be paid by the lessee for the enhances quantum of production and also a supplementary agreement has to be made by the lessee.

संलग्न:-अनुमोदित संशोधित माइनिंग प्लान की एक प्रति के साथ।

भवदीय

16th Oct, 2017

( रजनीश पुरोहित )  
क्षेत्रीय खान नियंत्रक  
भारतीय खान ब्यूरो, जबलपुर



खान मंत्रालय  
भारतीय खान ब्यूरो  
क्षेत्रीय खान नियंत्रक का कार्यालय



MINISTRY OF MINES  
INDIAN BUREAU OF MINES  
O/O THE REGIONAL CONTROLLER OF MINES

फा0 सं0 - MP/Satna/ Limestone /MPLN /MOD-30/2018-19

जबलपुर, दिनांक : 14/12/2018

प्रति,

मे0 प्रिज्म जॉनसन लिमिटेड,  
राजदीप, रीवा रोड, सतना  
जिला- सतना (म0प्र0) 485001

विषय:- म0प्र0 राज्य के सतना जिले में स्थित आपकी बगहाई (BAGAHAI) लाइमस्टोन खान  
(क्षेत्र 512.317 हे0) के एमसीआर-2016 के नियम 17(3) के अंतर्गत जमा किए गए अनुमोदित  
माइनिंग प्लान के लिए प्रस्तुत संशोधन का अनुमोदन।

संदर्भ :-1) आपका/क्यूपी0 का पत्र क्रमांक- PJJ/MINE/BG/2018/538, दि0 14/10/2018, प्रक्रिया  
शुल्क की रसीद संख्या J/838, दि0 30/10/2018।  
2) इस कार्यालय का समसंख्यक पत्र दि0- 20/11/2018।

महोदय,

In exercise of the powers conferred by the Clause (b) of Sub-section (2) of Section 5 of Mines and Minerals (Development and Regulation) Amendment Act, 2015 read with Government of India Order no. S.O.1857(E), dated 18/05/2016, I hereby **approve** the above said Modification in approved Mining Plan including Progressive Mine Closure Plan submitted under Rule 17(3) of Minerals (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016. This approval is subject to the following conditions:

- 1 The Modification in approved Mining Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2 The proposals shown on the plates and /or given in the document is based on the lease map /sketch submitted by the applicant/ lessee and is applicable from the date of approval.
- 3 It is clarified that the approval of aforesaid Modified Mining Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Amendment Act, 2015, or the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- 4 Indian Bureau of mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the applicant / lessee.
- 5 At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6 The Financial Assurance submitted by you for Rs. 3,98,88,000/- (Rs. Three Crore Ninety Eight Lakh Eighty Eight Thousand only) is valid up to 31/03/2021 and next Financial Assurance shall be submitted on or before 31/03/2021.
- 7 This approval is restricted in respect of proposals given in the document for the period 2018-19 to 2020-21 with validity up to 31/03/2021, from the date of approval, subject to all other statutory clearances.
- 8 If the approval conflicts with any other law or court order/direction under any statute, it shall be revoked immediately.
- 9 The modification in approved mining plan is approved subject to extension of period of mining lease as per Mines and Minerals (Development and Regulation) Amendment Act 2015.
- 10 As per Madhya Pradesh State Government's order dated 10/08/2011 if there is enhancement of production proposed from that in the approved scheme of mining under such circumstances additional stamp duty has to be paid by the lessee for the enhances quantum of production and also a supplementary agreement has to be made by the lessee.

संलग्न-अनुमोदित संशोधित माइनिंग प्लान की एक प्रति के साथ।

भवदीय

14<sup>th</sup> Dec, 2018  
( रजनीश पुरोहित )

**Table no. 1. ML area 772.067 Ha. (Hinauti & Sijahata)**

Present Dumps status

Dump No.	Location of Dump	Present Height of Dump (m)
S1	300E to 400E and 80N to 220N	2.0
S2	410E to 880E and 210N to 50N	6.0
S3	920E to 1010E and 320N to 360N	4.0
S4	1060E to 1220E and -60N to 320N	6.0

**Table no. 2. ML area 99.416 Ha. (Hinauti & Sijahata)**

Present Dumps status

Dump No.	Location of Dump	Present Height of Dump (m)
D1	1720E to 1810E and -1130N to -1155N	6.0
D2	1670E to 1720E and -1240N to -1120N	6.7

**Table no. 3. ML area 512.317 Ha. (Baghai)**

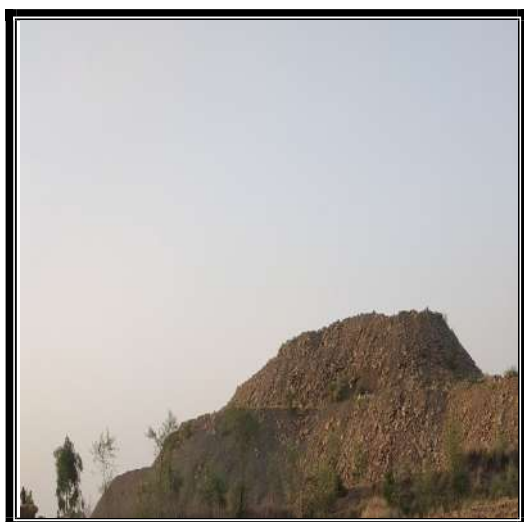
Present Dumps status

Dump No.	Location of Dump	Present Height of Dump (m)
S1	644E to 685E and 2092N to 2317N	3.5
S2	848E to 915E and 1432N to 1500N	15.0
S3	927E to 959E and 1242N to 1356N	4.0
S4	1060E to 1220E and -60N to 320N	3.5
S5	1112 E to 1162 E and 997 N to 1187 N	4.0
S6	1478 E to 1540 E and 1307 N to 1438 N	4.0
WS1	635E to 692E and 2338N to 2397N	3.0
WS2	879E to 904E and 2292N to 2323N	3.0
WS4	790E to 868E and 1477N to 1753N	13.0
WS5	1400E to 1538E and 1354N to 1531N	13.0

**Table no. 4. ML area 117.594 Ha. (Mendhi)**

Present Dumps status:-Nil

photographs of Dumps:





**PLAN FOR PROTECTION OF THE NATURAL WATER COURSE PASSING NEARBY**  
**PRISM CEMENT LIMITED LEASE AREAS**

**1. INTROCUCTION:**

The Limestone Mine of M/s. Prism Johnson Ltd. is near villages Hinauti & Sijhatta in district of Satna, Madhya Pradesh. The area is in Vindhyan Limestone/shale formations, where Limestone is bearing mined from mining lease areas of 772.067 Ha. 117.594 Ha. 512.317 Ha. 99.416 Ha., amongst other mining leases. As per the conditions of the Environment Clearance, a plan was protection of natural water courses passing nearby Prism Cement Ltd. Leases was to be prepared and submitted.

The natural water courses under the present plan comprise Tamas River, Nar Nala and Magardha Nala.

**2. LAND USE IN THE BUFFER AREA OF THE LEASES:**

**Buffer zone:**

The land use of buffer zone is given in **Table 1** based on satellite imaginary and census data.

**TABLE NO.1**  
**Land Use / Land Cover Details of Buffer Zone Area**

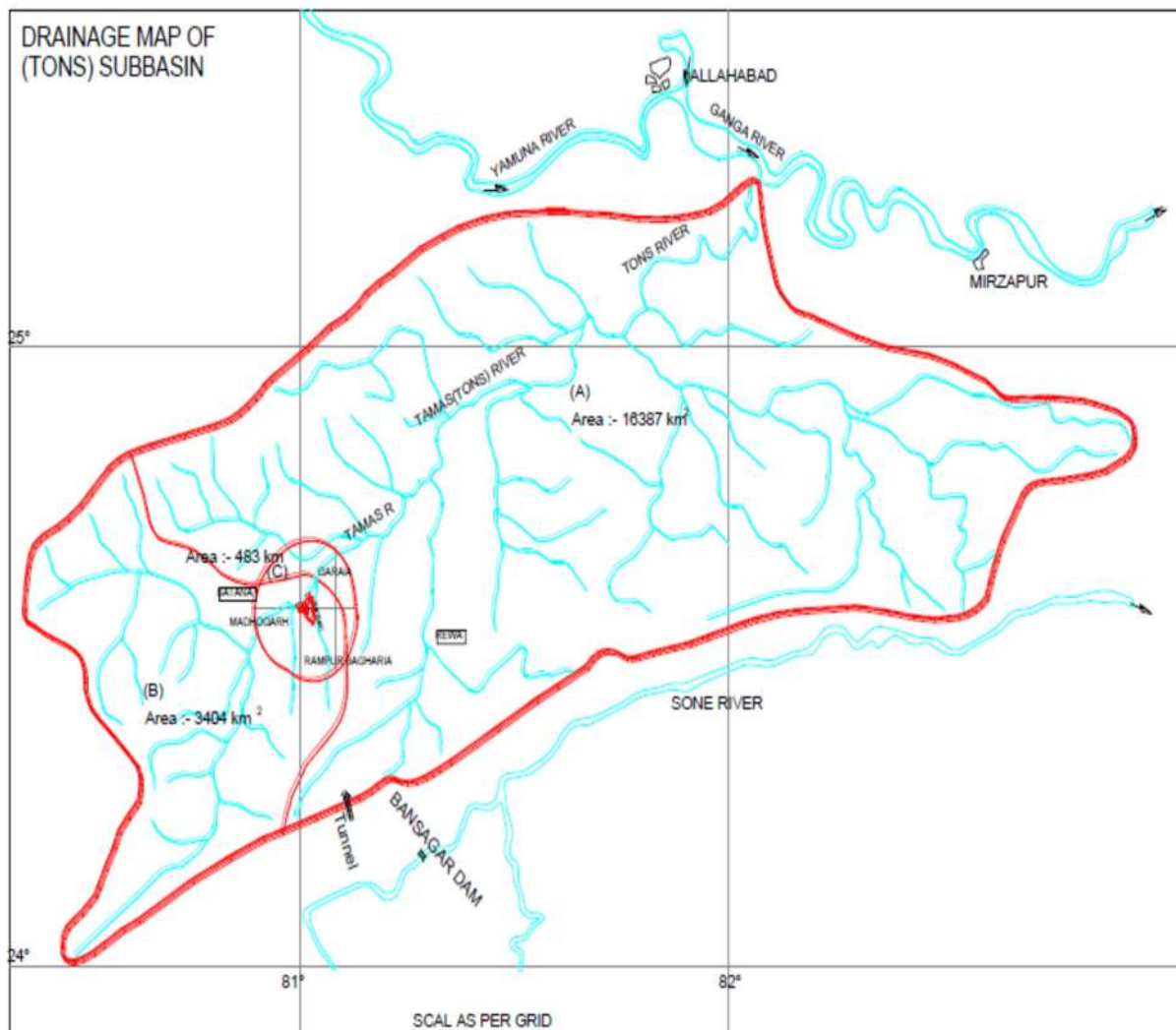
<b>LAND USE</b>	<b>AREA (in Hectares)</b>	<b>AREA (in %)</b>
River/Canal	634.71	1.32
Ponds/Reservoir	561.73	1.17
Stonsy area	144.16	0.30
Open land	441.36	0.92
Open scrub land	3737.14	7.76
Forest Land	1685.11	3.50
Plantation	2445.89	5.08
Fallow land	29729.69	61.77
Crop land	7542.87	15.67
Human Settlement	706.28	1.47
Industrial Area	75.80	0.16
Mine Quarry	425.75	0.88
<b>Total</b>	<b>48310.49</b>	<b>100</b>

(Source – EIA/EMP)

### 3. DRAINAGE:

The Tamas (Tons) River mainly controls the drainage pattern. The none seasonal nalla viz. Magardaha and Nar nala flowing on west and east of the lease area respectively flow towards north and ultimately join the Tamas River. The area is almost flat with gentle slope towards East and Northeast. A substantial part of rainfall in the area drains away as surface run-off, along streamlets towards the Northeast to the Tamas River. The drainage map of Tamas (Tons) sub basin of Ganga basin is depicted in **Figure 2**. The drainage pattern of buffer zone (part of Tamas sub basin) is also given in **Figure 3**.

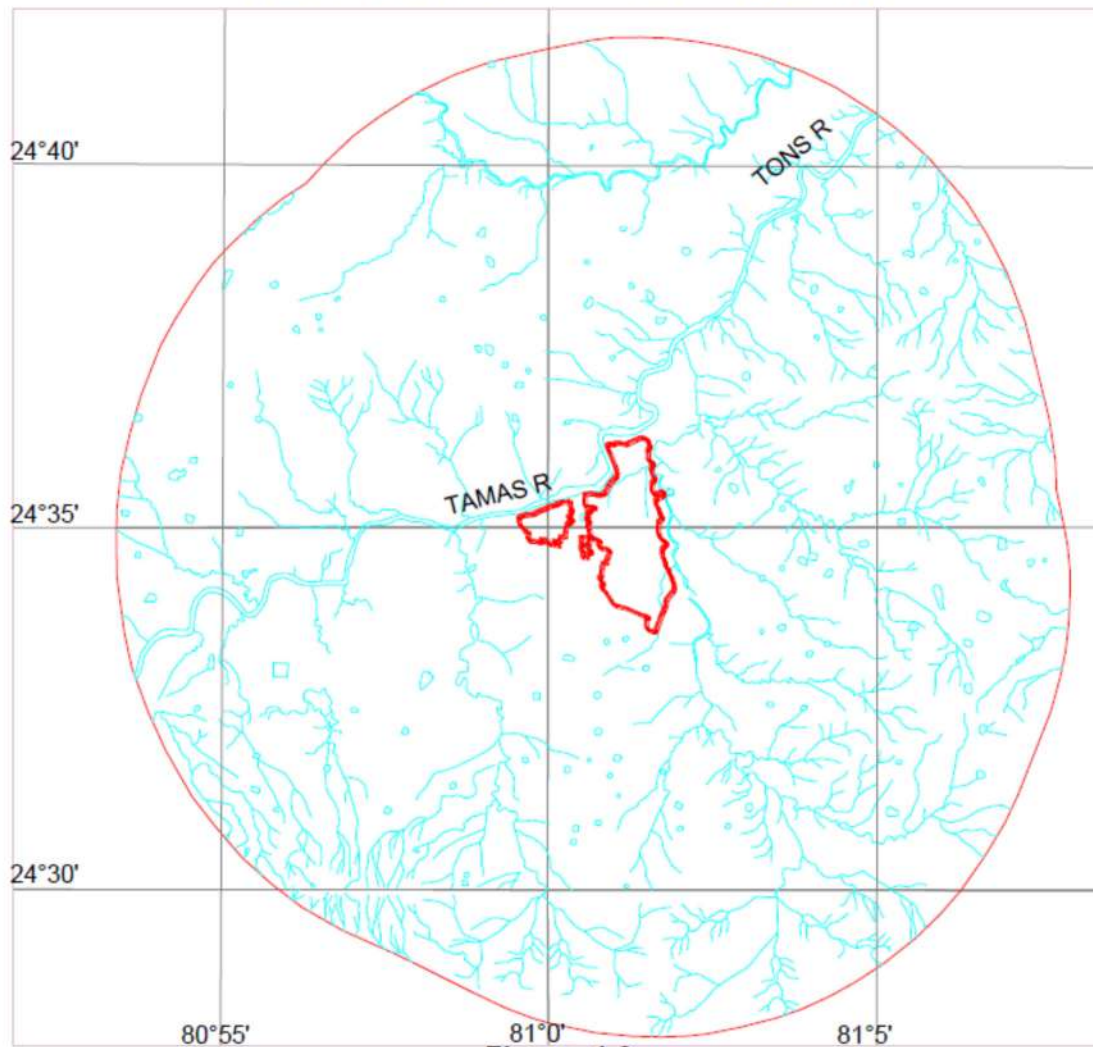
## FIGURE 2





**FIGURE-3**

**DRAINAGE MAP OF BUFFER ZONE**



**Figure 1.3**

**4. HYDROMETEROLOGY:**

Madhya Pradesh state is situated within 18° N to 25° N and 74° E to 82° E experiences tropical climate. Frontispieces gives the orographic feature of the state. Geographical location and orographic features have profound influence on the climate of area. As per IMD the year may be divided into four seasons. The winter season from January to February is followed by the summer season from March to May. The period from June to September constitutes the southwest monsoon season and the period from October to December form the post monsoon season.

4.1 **Rainfall** : Rainfall data of Mine site and Satna IMD station are collected for the project of 2008 to 2014 and given in (**Table NO. -2**).

**TABLE NO.2**

**Year wise rainfall data (2008 to 2014) : Satna and Mine Site**

Month/ Year	2008	2009		2010		2011		2012		2013		2014
	Mine Site	Mine Site	Satna	Mine Site	Satna	Mine Site	Satna	Mine Site	Satna	Mine Site	Satna	Mine Site
Jan	2.0	35.3	12.9	8.8	1.7	0.0	0.0	36.0	32.3	0.0	0.0	38.9
Feb	35.1	0.0	0.0	13.3	5.5	1.0	0.9	0.0	0.0	67.9	45.9	104.3
Mar	1.3	3.6	1.4	0.0	0.0	3.2	0.2	3.6	3.9	34.6	11.5	29.3
Apr	12.0	0.7	3.8	0.0	0.1	0.0	1.1	0.0	0.2	1.8	4.2	8.7
May	12.5	10.5	14.5	18.6	1.6	36.2	7.3	0.0	0.0	0.0	0.0	1.3
Jun	215.6	12.5	25.8	16.9	16.4	<b>313.9</b>	<b>328.6</b>	17.9	15.6	270.4	384.2	90.2
Jul	216.8	173.2	207.6	<b>283.3</b>	<b>228.1</b>	140.2	252.1	380.7	279.7	<b>576.5</b>	<b>338.6</b>	<b>305.2</b>
Aug	<b>220.2</b>	<b>214.9</b>	<b>192.5</b>	198.3	209.7	206.7	289.8	<b>435.0</b>	<b>455.1</b>	414.5	451.6	127.2
Sep	71.5	109.7	152.0	213.5	176.4	205.3	143.9	132.1	169.3	134.9	71.5	193.9
Oct	0.0	72.9	220.4	29.6	13.7	0.0	3.1	15.1	2.5	131.4	143.7	200.7
Nov	20.1	80.9	58.9	11.8	9.7	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Dec	0.0	2.6	2.9	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	21.9
<b>Total</b>	<b>807.1</b>	<b>716.7</b>	<b>892.7</b>	<b>794.0</b>	<b>662.9</b>	<b>906.5</b>	<b>1027.0</b>	<b>1020.3</b>	<b>958.6</b>	<b>1631.9</b>	<b>1451.2</b>	<b>1121.7</b>

(Source - Mine & Satana Dist.)

## 5. GEOLOGY:

The relevant portion of Geological report of the area have been adapted for present study. Part of compilation done from other references.

### 5.1 Regional Geology

Geologically, this area forms part of the Rewa Plateau belonging to the Upper Vindhyan Supergroup of rock formations in Indian stratigraphy. The Vindhyan formations are roadly classified into lower calcareous and an upper arenaceous facies.

The limestone deposit in the area of investigation belongs to the Bhandar series. The general trend of Bhandar Limestone is East - Northeast to West - Southwest having low southerly dips of less than  $5^{\circ}$ . The litho stratigraphy of Vindhyan formation is given in **Table NO.3**



**TABLE NO.3**

**Litho stratigraphy of Satna District**

<b>Supergroup</b>	<b>Group</b>	<b>Formation</b>
<b>Vindhyan Supergroup</b>	<b>Bhander Group</b>	<b>Maihar Sandstone Sirbu Shale Bhander Limestone</b>
	<b>Rewa Group</b>	<b>Sandstone and shale</b>
	<b>Kaimur Group</b>	<b>Sandstone and shale</b>
	<b>UNCONFORMITY</b>	
	<b>Semri Group</b>	<b>Rohtas Formation Khemjua Formation Porcellance Formation Basal Formation</b>
<b>UNCONFORMITY</b> <b>Bundekhand granites/Bijawar phyllites</b>		

## **5.2 Local Geology:**

The detailed geological prospecting was carried out by GEM Division of ACC to identify the geological structure in the area and association of different rock types. The lithological succession of various formations encountered in the area of investigations based on the sub-surface data generated is as follows:

**Overburden Soil**  
**Buff to pale grey magnesian limestone**  
**Upper shaly limestone**  
**Grey limestone**  
**Lower shaly limestone**  
**Grey to grayish grey shale**

## **6.0 SUGGESTED STRUCTURES FOR PROTECTION AND DEVELOPMENT OF NATURAL WATER COURSES:**

### **6.1 RAINWATER HARVESTING**

**6.1.1 General:** Rain water harvesting can be defined as activity of direct collection of Rain

water and storage of rainwater as well as other activity aimed at harvesting and conserving surface and ground water preventing loss through evaporation and seepage and other hydrological studies and engineering inventions aiming at most efficient utilization of rainwater towards best use for the humanity.

The detail project report for rainwater harvesting is given below incorporating; source, area, design of individual structure within mine lease area and outside.

### **6.1.2 Source of Water:**

The source of water available for rainwater harvesting is only surface water. The resource estimation for lease area has been done considering total lease area of 10.25 km<sup>2</sup> (7.72 km<sup>2</sup> + 2.53 km<sup>2</sup>). Monsoon normal rainfall 0.973 m and surface runoff coefficient of 0.40. The estimated surface water resource will be 3.99 MCM out of this 0.58 MCM will be used in plant & mine. The mine water discharge will be zero. It is expected that remaining estimated resource 3.41 MCM will be available for recharge to the system and future use. CGWA while granting ground water had laid condition for implementation of ground water recharge measure to the tune of 1.206 MCM/ year for augmenting the ground water resource of the area.- Source of data, Hydrological Studies Report.

### **6.1.3 Identification of area:**

The areas identified within lease area are given in **Table No.4**

**Table no. 4: Identification of area**

<b>Sr. No.</b>	<b>Identification of area</b>	<b>Unit</b>
1	Surface water reservoir in the Mined out area as recharge pond.	3 Nos
2	Check dam on Nar nadi.	8 Nos
3	Office and residential building area for Rooftop rainwater harvesting	10 Nos
4	Lease area (side of retention wall) of dump for recharge pit with shaft structure	4 Nos
5	Recharge trench in colony area.	500 m
6	In the colony area away from mine for Gravity head recharge tubewell.	10 Nos

These structures in respective areas will augment the ground water table and shall reduce load on the natural water courses for rural utility of irrigation amongst others.



In addition to the measures taken above, the area in proximity to Tamas River, Magardha Nala and Nar Nala will be provided with bunds above and beyond HFL. Safety barrier of 50 meters will be left out permanently. This barrier will be densely planted thus making the water courses totally immune from mining activities. No mine water will be discharged in the natural water courses without de-siltation in the settling ponds.

The garland drains with check dams are constructed all along the peripheries of the lease area. De-siltation of natural water ways up-stream and down-stream, will be undertaken after consultation with the authorities to keep the natural water courses healthy.

Periodical deepening of village ponds and de-siltation of the same will be carried out to augment water bodies in surrounding areas.

## **6. CONCLUSION AND RECOMMENDATION:**

The natural water ways protection plan will be updated to accommodate new ideas and government water development programs. The present plan with all implementation will keep the natural water courses safe and healthy.

**ECOMEN LABORATORIES PVT. LTD.**

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E-mail: ravi.bhargava@gmail.com, Website: www.ecomen.in, CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1

**ecoMen**  
LABORATORIES PVT LTD.

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/23 REPORT NO: ECO LAB/Piezo/GW/1243/11/20  
TEST REPORT ISSUE DATE: 25.11.2020**REPORT OF WATER LEVEL MEASUREMENT**

**Name of the Customer** : M/s. Prism Johnson Ltd.  
**Address of the Customer** : Village - Mankahari,  
Tehsil - Rampur Baghelan  
Distt.Satna (M.P.)  
**Measurement by** : Mr. Maan Singh  
**Date of Measurement** : November 12<sup>th</sup>, 2020

Sl. No.	Piezometer Name.	Water Level (meter)
1.	Colony Gate	14.5
2.	Behind B Block	6.2
3.	Behind C Block	4.8
4.	Auto Work Shop	14.3
5.	In Front Den	5.1
6.	Rose Garden near boundary	20.4
7.	Rose Garden near Road	16.3
8.	Western Block Mines	18.3
9.	Near New Magazine Mines	12.5
10.	Mankahari Mines	16.7
11.	Mines near Ramprasan	8.5
12.	Piezo No.-12	12.5
13.	Piezo Rose Garden	20.4
14.	Piezo Rose Garden Near Road	16.3

  
Analyst  
Authorized Signatory  
Manager (Q)Ecomen Laboratories Pvt. Ltd.  
Flat No.8 Second Floor Arif Chamber  
Sector-H, Aliganj, Lucknow-226024  
Ph.2746282 Fax-2745726



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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/RW/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

Name of the Company : M/s. Prism Johnson Ltd.

Address of the Company : Village Mankahari,  
Tehsil Rampur Baghelan  
Distt. Satna (M.P.)

Sampling Method : APHA/ IS: 3025

Sample Collected by : Mr. Maan Singh

Sample Quantity : As per requirement.

Date of Sampling : 12.11.2020

Date of Receiving : 15.11.2020


Date of Analysis : 15.11.2020 to 25.11.2020


Source of Sample : Raw Water (WHRS)

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991(Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	BDL	1 - 100	1.0	5.0
3.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.31	2.0 -12	6.5-8.5	No Relax.
4.	Conductivity ( $\mu$ mhos/cm)	APHA, 23 <sup>rd</sup> Ed. 2017, 2510-A + B	833.0	1-2000	-	-
5.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	411.0	5 - 5000	500	2000
6.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	108.0	5-1500	200	600
7.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	180.0	5-1500	200.0	600.0
8.	Non Carbonate as CaCO <sub>3</sub>	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	131.76	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	49.6	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	13.6	5-1000	30.0	100.0
11.	Sodium as Na (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Na, A+B	16.3	1-100	-	-
12.	Potassium as K (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 K, A+B	1.02	1-100	-	-
13.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	34.0	5-1000	250.0	1000.0
14.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	1.17	0.05-10	1.0	1.5
15.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	31.0	1.0 -250	200.0	400.0
16.	Silica as SiO <sub>2</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, (4500 SiO <sub>2</sub> -C )	18.0	0.1-50	-	-
17.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	5.20	5.0 - 100	45.0	No Relax.
18.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.32	0.02-50	0.3	No Relax.

\*The result are related only to item tested.

BDL = Below Detection Limit

  
Analyst

  
Authorized signatory  
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TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

Name of the Company : M/s. Prism Johnson Ltd.

Address of the Company : Village Mankahari, Tehsil Rampur Baghelan  
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Sampling Method : APHA/ IS: 3025

Sample Collected by : Mr. Maan Singh

Sample Quantity : As per requirement.

Date of Sampling : 12.11.2020

Date of Receiving : 15.11.2020

Date of Analysis : 15.11.2020 to 25.11.2020

Source of Sample : Baghai Lime Stone Drinking water (Mine Site Office)

Sample ID Code : ELW-12585

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	BDL	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.44	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	393.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	160.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	188.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	43.2	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	19.44	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	22.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.37	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	37.4	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	9.65	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.16	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.23	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017(3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.20	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Plant Site - Bore Well  
**Sample ID Code** : ELW-12586

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	BDL	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.29	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	532.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	128.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	192.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	48.0	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	17.49	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	36.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.35	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	92.3	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	10.23	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.11	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.25	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.15	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Bagahai Village – Hand Pump  
**Sample ID Code** : ELW-12587

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.3	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.42	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	496.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	164.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	176.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	46.4	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	14.58	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	30.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.26	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	51.5	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	12.1	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.13	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A +B	BDL	0.04-10	0.05	No Relax
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	BDL	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.20	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

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FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Prism Lime Stone Mine Drinking Water (Site Office)  
**Sample ID Code** : ELW-12588

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991(Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	BDL	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.46	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	432.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	156.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	240.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	59.2	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	22.35	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	52.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.31	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	86.3	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	7.32	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A+B	BDL	0.04-10	0.05	No Relax
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.25	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.23	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

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FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

**TEST REPORT OF DRINKING WATER\*****Name of the Company** : M/s. Prism Johnson Ltd.**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)**Sampling Method** : APHA/ IS: 3025**Sample Collected by** : Mr. Maan Singh**Sample Quantity** : As per requirement.**Date of Sampling** : 12.11.2020**Date of Receiving** : 15.11.2020**Date of Analysis** : 15.11.2020 to 25.11.2020**Source of Sample** : Medhi Village - Hand Pump**Sample ID Code** : ELW-12589

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.21	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H <sup>+</sup> A+B	7.18	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	365.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	136.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	168.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	38.4	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	17.49	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	32.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.36	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	61.5	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	8.63	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A +B	BDL	0.04-10	0.05	No Relax
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.22	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.19	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	<i>E.coli</i> (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested.

BDL = Below Detection Limit

  
Analyst


  
Authorized Signatory


  
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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Malgaon Village – Hand Pump  
**Sample ID Code** : ELW-12590

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	BDL	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.38	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	569.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	166.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	212.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	449.6	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	21.38	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	28.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.34	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	67.4	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	21.2	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.16	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	BDL	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.20	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested.

BDL = Below Detection Limit

Anand  
Analyst

Authorized Signatory

Manager (Q)

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Badarkha Village – Bore Well  
**Sample ID Code** : ELW-12591

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.43	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.11	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	571.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	152.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	204.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	52.8	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	17.49	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	24.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.20	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	93.3	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	12.3	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.21	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.26	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.12	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

Anand  
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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Mankahari Village – Hand Pump  
**Sample ID Code** : ELW-12592

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.05	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.21	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	678.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	180.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	296.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	76.8	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	25.27	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	50.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.48	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	98.0	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	13.4	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.22	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.21	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.17	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

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Analyst

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FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

**TEST REPORT OF DRINKING WATER\*****Name of the Company** : M/s. Prism Johnson Ltd.**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)**Sampling Method** : APHA/ IS: 3025**Sample Collected by** : Mr. Maan Singh**Sample Quantity** : As per requirement.**Date of Sampling** : 12.11.2020**Date of Receiving** : 15.11.2020**Date of Analysis** : 15.11.2020 to 25.11.2020**Source of Sample** : PCL Colony Supply Water – Bore Well**Sample ID Code** : ELW-12593

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.21	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	6.97	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	601.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	140.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	284.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	72.0	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	25.27	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	64.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.37	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	108.0	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	13.26	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.12	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A +B	BDL	0.04-10	0.05	No Relax
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	BDL	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.23	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	<i>E.coli</i> (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

  
Analyst


  
Authorized Signatory


  
Manager (Q)

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Mines Site Office HinautiSijatah  
**Sample ID Code** : ELW-12594

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991(Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.20	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.59	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	486.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	152.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	220.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	58.4	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	17.98	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	40.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.29	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	48.8	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	9.21	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.24	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.09	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

Anand  
Analyst

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Chullhi Village – Bore Well  
**Sample ID Code** : ELW-12595

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.03	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.28	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	431.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	158.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	266.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	54.4	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	31.59	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	78.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.39	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	105.5	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	16.1	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.20	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.22	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.17	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

**TEST REPORT OF DRINKING WATER\*****Name of the Company** : M/s. Prism Johnson Ltd.**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)**Sampling Method** : APHA/ IS: 3025**Sample Collected by** : Mr. Maan Singh**Sample Quantity** : As per requirement.**Date of Sampling** : 12.11.2020**Date of Receiving** : 15.11.2020**Date of Analysis** : 15.11.2020 to 25.11.2020**Source of Sample** : Hinauta Village – Bore Well**Sample ID Code** : ELW-12596

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.32	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.53	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	390.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	144.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	228.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	59.2	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	19.44	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	36.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.37	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	98.3	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	9.5	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.09	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.20	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.12	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

  
Analyst


  
Authorized Signatory


  
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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

**TEST REPORT OF DRINKING WATER\*****Name of the Company** : M/s. Prism Johnson Ltd.**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)**Sampling Method** : APHA/ IS: 3025**Sample Collected by** : Mr. Maan Singh**Sample Quantity** : As per requirement.**Date of Sampling** : 12.11.2020**Date of Receiving** : 15.11.2020**Date of Analysis** : 15.11.2020 to 25.11.2020**Source of Sample** : Bore well at Project Office**Sample ID Code** : ELW-12597

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.22	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.25	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	344.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	136.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	204.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	46.4	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	21.38	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	51.1	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.39	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	69.5	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	17.5	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.16	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.26	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.20	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+C	Absent	1.8	Absent	Absent
31.	<i>E.coli</i> (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

  
Analyst


  
Authorized Signatory


  
Manager (Q)

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

Name of the Company : M/s. Prism Johnson Ltd.

Address of the Company : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)

Sampling Method : APHA/ IS: 3025

Sample Collected by : Mr. Maan Singh

Sample Quantity : As per requirement.

Date of Sampling : 12.11.2020

Date of Receiving : 15.11.2020

Date of Analysis : 15.11.2020 to 25.11.2020

Source of Sample : Plant Pump House

Sample ID Code : ELW-12598

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	<1.0	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.24	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	379.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	124.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	216.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	56.0	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	18.46	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	48.02	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.30	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	43.22	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	12.6	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.17	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.27	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.10	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Packing Plant Unit-I  
**Sample ID Code** : ELW-12599

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.05	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.37	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	343.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	128.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	220.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	57.6	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	18.46	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	52.2	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.36	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	49.6	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	17.4	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.13	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.23	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.16	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+C	Absent	1.8	Absent	Absent
31.	<i>E.coli</i> (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

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An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/09

TEST REPORT NO: ECO LAB/DW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

## TEST REPORT OF DRINKING WATER\*

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari, Tehsil Rampur Baghelan  
Distt. Satna (M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr. Maan Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Sijhata Village – Bore Well  
**Sample ID Code** : ELW-12600

Sl. No.	TESTS	PROTOCOL	RESULT	Detection Range	INDIAN STANDARDS as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	Colour (Hazen unit)	APHA, 23 <sup>rd</sup> Ed. 2017, 2120 B	<5.0	5-100	5.00	15.0
2.	Odour	APHA, 23 <sup>rd</sup> Ed. 2017, 2150 B	Agreeable	Qualitative	Agreeable	Agreeable
3.	Taste	APHA, 23 <sup>rd</sup> Ed. 2017, A+B	Agreeable	Qualitative	Agreeable	Agreeable
4.	Turbidity as (NTU)	APHA, 23 <sup>rd</sup> Ed. 2017, 2130-A+B	1.28	1 - 100	1.0	5.0
5.	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.09	2.0 -12	6.5-8.5	No Relax.
6.	Total Dissolved Solids as TDS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-C	377.0	5 - 5000	500	2000
7.	Alkalinity (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2320 A+ B	140.0	5-1500	200	600
8.	Total Hardness as CaCO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2340 A+C	260.0	5-1500	200.0	600.0
9.	Calcium as Ca (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Ca A+B	60.8	5 - 1000	75.0	200.0
10.	Magnesium as Mg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Mg A+B	26.24	5-1000	30.0	100.0
11.	Chloride as Cl (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 Cl A+B	74.0	5-1000	250.0	1000.0
12.	Fluorides as F (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-C	0.37	0.05-10	1.0	1.5
13.	Sulfate as SO <sub>4</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-SO <sub>4</sub> <sup>2-</sup> E	91.1	1.0 -250	200.0	400.0
14.	Nitrate Nitrogen as NO <sub>3</sub> (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-NO <sub>3</sub> <sup>-</sup> B	8.63	5.0 - 100	45.0	No Relax.
15.	Manganese as Mn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.1-5	0.10	0.30
16.	Zinc as Zn (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	0.13	0.02-50	5.0	15
17.	Lead as Pb (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.01-2	0.01	No Relax.
18.	Cadmium as Cd (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.002-2	0.003	No Relax.
19.	Nickel as Ni (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.02-5	0.02	No Relax.
20.	Arsenic as As (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3114 C	BDL	0.01-2	0.01	0.05
21.	Total Chromium as Cr (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 - A + B	BDL	0.04-10	0.05	No Relax.
22.	Mercury as Hg (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3112 A+B	BDL	0.001-1	0.001	No Relax.
23.	Copper as Cu (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3111 A+B	BDL	0.05-5	0.05	1.5
24.	Boron as B (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 B A+C	0.26	0.2 - 10	0.5	1.0
25.	Aluminium as Al (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017 (3111-A+B)	BDL	1.0-100	0.03	0.2
26.	Free Residual Chlorine (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500-Cl B	BDL	0.5-10	0.20	1.0
27.	Sulphide as H <sub>2</sub> S (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, Reprint 2007	BDL	0.04-10	0.05	No Relax.
28.	Iodide as I (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 4500 - IB	BDL	0.1-10	-	-
29.	Iron as Fe (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 3500 Fe B	0.14	0.02-50	0.3	No Relax.
30.	Total coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 B+C	Absent	1.8	Absent	Absent
31.	E.coli (Nos/100)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221B+E	Absent	1.8	Absent	Absent

\*The result are related only to item tested. BDL = Below Detection Limit

Anand  
Analyst

Authorized Signatory

Ecomen Laboratories Pvt. Ltd.  
Flat No. 8 Second Floor Arif Chamber  
Sector-H, Aliganj, Lucknow-226024  
Ph: 2746282 Fax: 2745726

Manager (Q)

**Date/Time** Vert at 12:22:03 April 1, 2019  
**Trigger Source** Geo: 0.900 mm/s, Mic: 2.000 pa.(L)  
**Range** Geo : 254.0 mm/s  
**Record Time** 1.75 sec at 1024 sps  
**Operator/Setup:** Operator/SSB.MMB

**Serial Number** UM8131 V 10-76 Micromate ISEE  
**Battery Level** 3.8 Volts  
**Unit Calibration** February 26, 2018 by UES New Delhi  
**File Name** UM8131\_20190401122203.IDFW  
**Scaled Distance** 16.9 (100.0 m, 35.0 kg)  
**Post Event Notes**  
 Eastern block 2nd bench, No of holes -34 nos, Depth - 7 Mtrs  
 Charge/delay - 25 Kg/delay, Obsevation Distance - 200 Mtr

## Notes

Location:  
 Client:  
 User Name: PRISM:CEMENT:LTD  
 General:

## Extended Notes

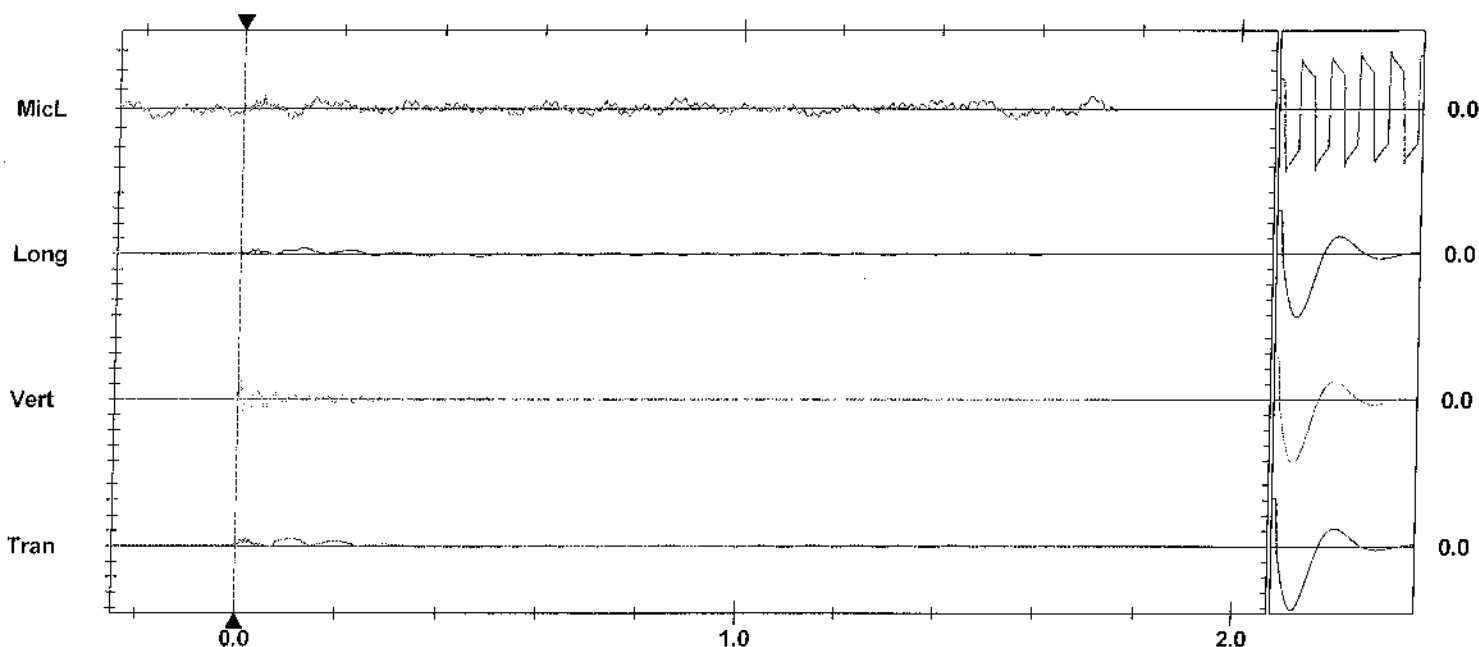
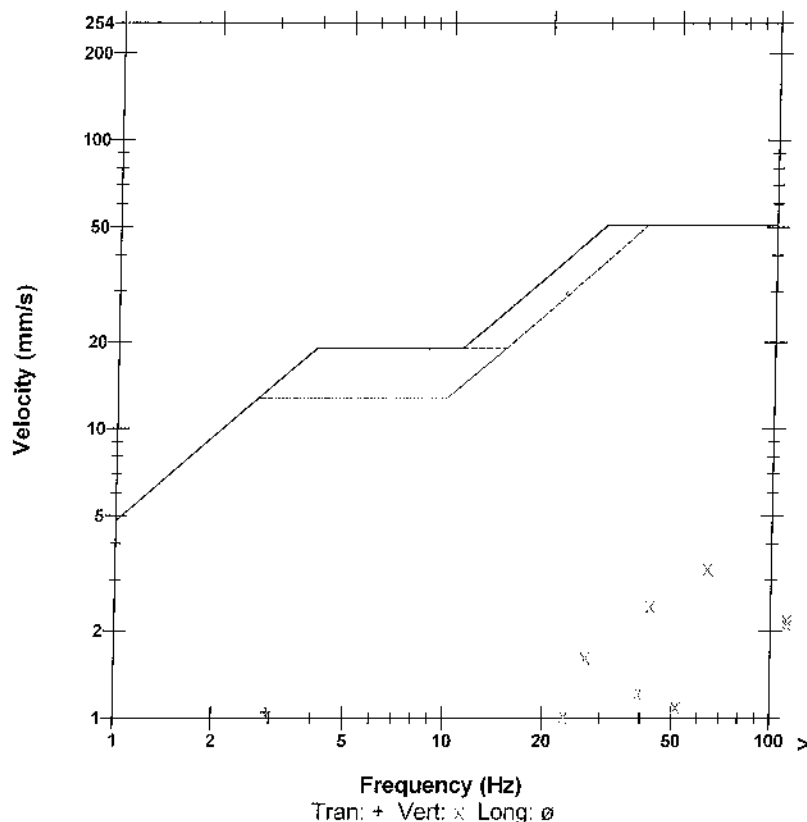
PRISM CEMENT LIMESTONE MINES

**Microphone** Linear Weighting  
**PSPL** 0.683 pa.(L) at 0.042 sec  
**ZC Freq** 20 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 1270 mv )

	Tran	Vert	Long	
PPV	1.048	3.310	0.859	mm/s
ZC Freq	2.9	64	5.3	Hz
Time (Rel. to Trig)	0.106	0.003	0.126	sec
Peak Acceleration	0.034	0.267	0.048	g
Peak Displacement	0.045	0.013	0.020	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.3	Hz
Overswing Ratio	3.5	3.3	3.6	

Peak Vector Sum 3.313 mm/s at 0.003 sec

## USBM RI8507 And OSMRE



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
 Trigger #

Sensor Check



**Date/Time** Tran at 11:46:51 April 9, 2019  
**Trigger Source** Geo: 0.900 mm/s, Mic: 2.000 pa.(L)  
**Range** Geo: 254.0 mm/s  
**Record Time** 3.75 sec at 1024 sps  
**Operator/Setup:** Operator/SSB.MMB

**Serial Number** UM8131 V 10-76 Micromate ISEE  
**Battery Level** 3.8 Volts  
**Unit Calibration** February 26, 2018 by UES New Delhi  
**File Name** UM8131\_20190409114651.IDFW  
**Scaled Distance** 16.9 (100.0 m, 35.0 kg)  
**Post Event Notes**  
 H 10 1st bench, No of holes -41 nos, Depth - 7 Mtrs  
 Charge/delay - 45.4 Kg/delay, Obsevation Distance - 200 Mtr

## Notes

Location:  
 Client:  
 User Name: PRISM:CEMENT:LTD  
 General:

## Extended Notes

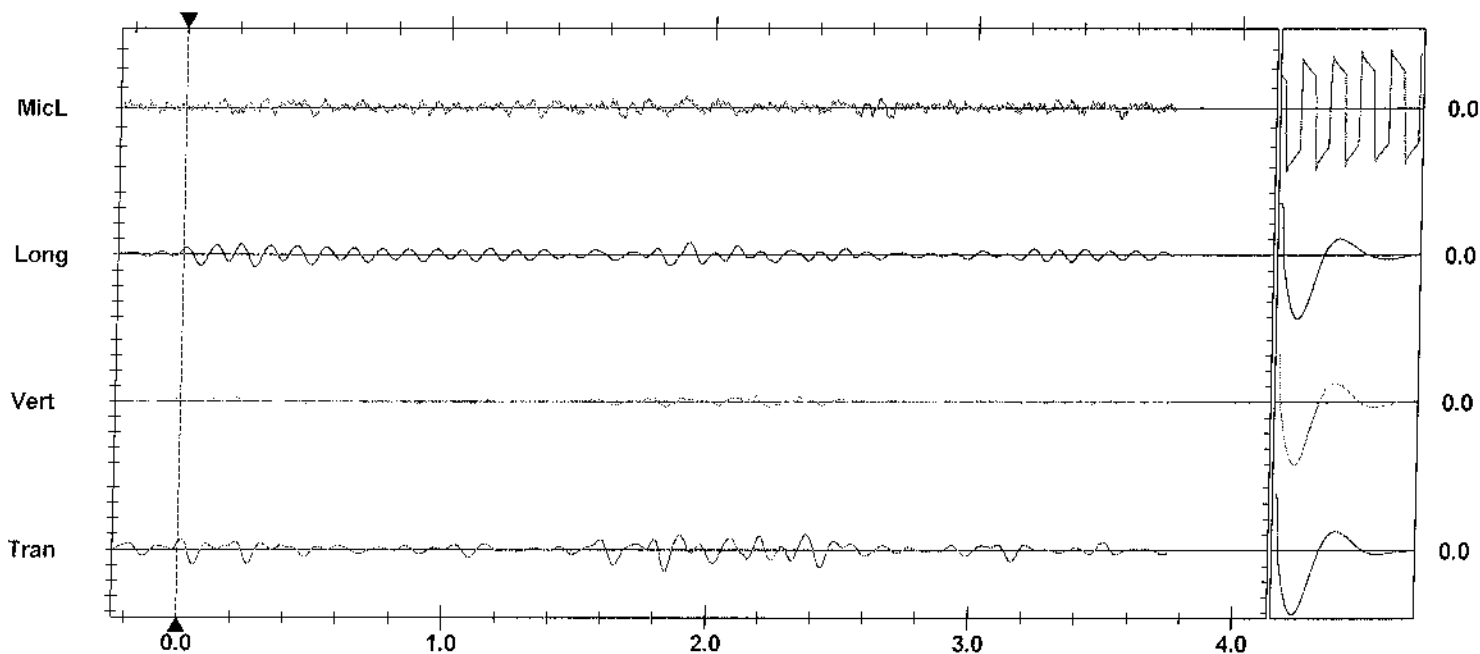
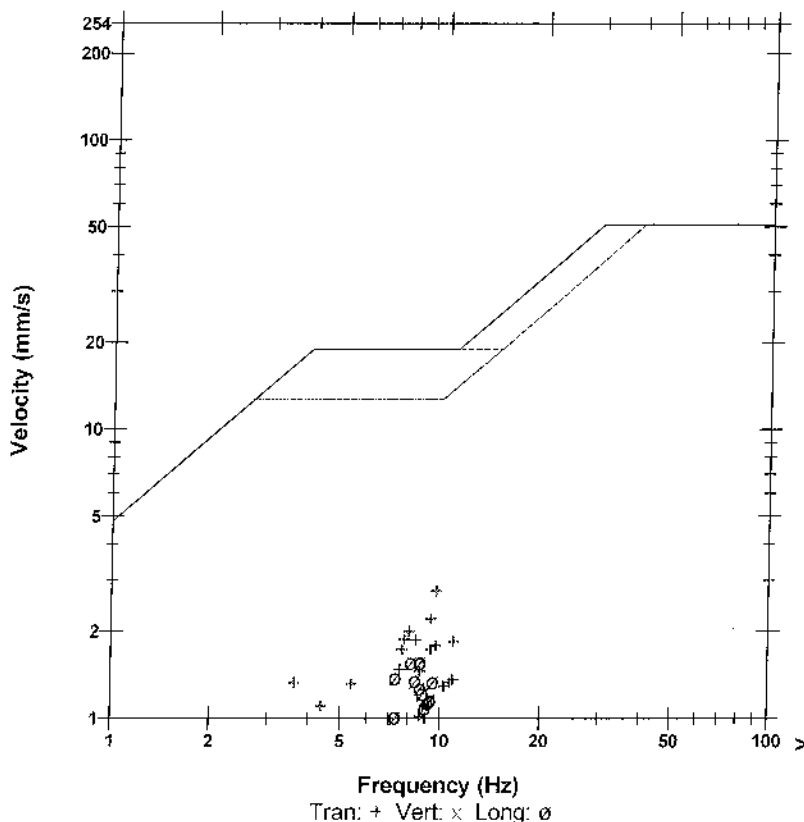
PRISM CEMENT LIMESTONE MINES


**Microphone** Linear Weighting  
**PSPL** 0.574 pa.(L) at 1.888 sec  
**ZC Freq** 6.7 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 1207 mv )

	Tran	Vert	Long	
PPV	2.759	0.749	1.576	mm/s
ZC Freq	9.7	19	8.7	Hz
Time (Rel. to Trig)	1.841	2.180	0.272	sec
Peak Acceleration	0.019	0.012	0.012	g
Peak Displacement	0.043	0.019	0.029	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.3	Hz
Overswing Ratio	3.4	3.4	3.9	

**Peak Vector Sum** 3.135 mm/s at 1.841 sec

## USBM RI8507 And OSMRE



**Time Scale:** 0.20 sec/div **Amplitude Scale:** Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
**Trigger =** 

Sensor Check

**Date/Time** Tran at 10:30:03 April 5, 2019  
**Trigger Source** Geo: 0.900 mm/s, Mic: 2.000 pa.(L)  
**Range** Geo : 254.0 mm/s  
**Record Time** 5.0 sec at 1024 sps  
**Operator/Setup:** Operator/SSB.MMB

**Serial Number** UM8131 V 10-76 Micromate ISEE  
**Battery Level** 3.8 Volts  
**Unit Calibration** February 26, 2018 by UES New Delhi  
**File Name** UM8131\_20190405103003.IDFW  
**Scaled Distance** 16.9 (100.0 m, 35.0 kg)  
**Post Event Notes**

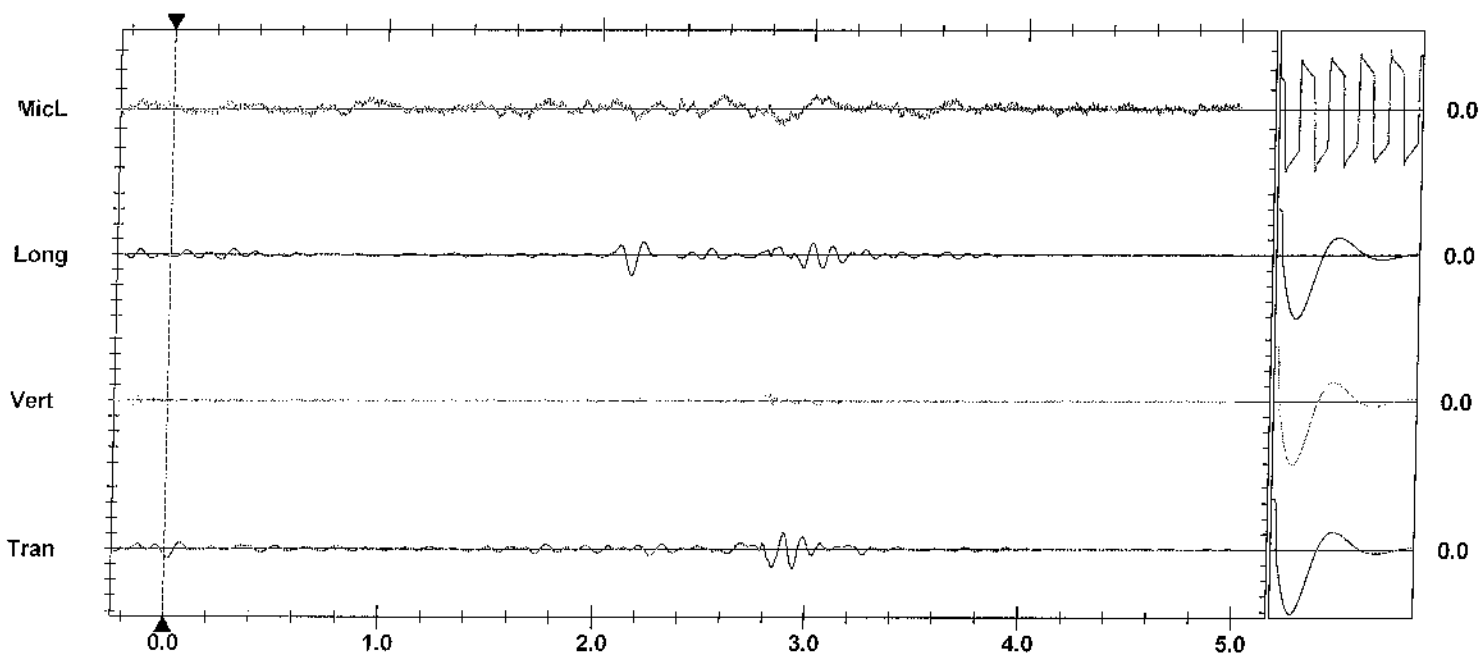
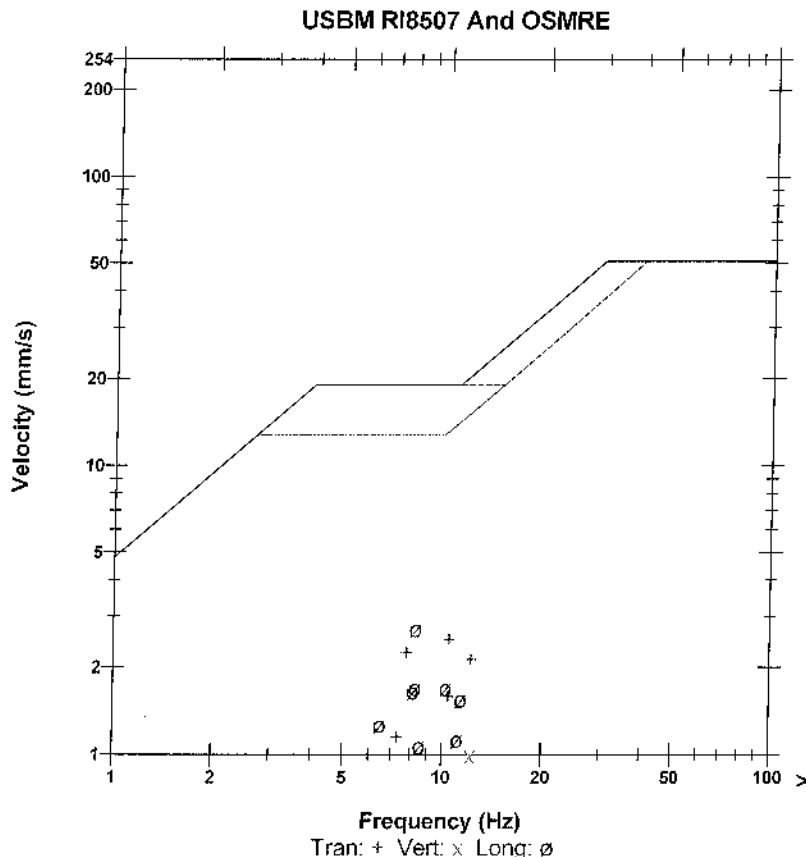
**Notes**  
 Location:  
 Client:  
 User Name: PRISM:CEMENT:LTD  
 General:

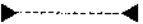
**Extended Notes**  
 PRISM CEMENT LIMESTONE MINES

**Microphone** Linear Weighting  
**PSPL** 0.822 pa.(L) at 2.860 sec  
**ZC Freq** 3.3 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 1227 mv )

	Tran	Vert	Long	
PPV	2.491	1.001	2.703	mm/s
ZC Freq	10	12	8.3	Hz
Time (Rel. to Trig)	2.941	2.795	2.154	sec
Peak Acceleration	0.024	0.037	0.016	g
Peak Displacement	0.044	0.010	0.050	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.1	Hz
Overswing Ratio	3.6	3.3	3.6	

Peak Vector Sum 2.743 mm/s at 2.155 sec



**Time Scale:** 0.20 sec/div **Amplitude Scale:** Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
**Trigger =** 

Sensor Check



**Date/Time** Vert at 11:32:31 April 5, 2019  
**Trigger Source** Geo: 0.900 mm/s, Mic: 2.000 pa.(L)  
**Range** Geo: 254.0 mm/s  
**Record Time** 5.0 sec at 1024 sps  
**Operator/Setup:** Operator/SSB.MMB

**Serial Number** UM8131 V 10-76 Micromate ISEE  
**Battery Level** 3.8 Volts  
**Unit Calibration** February 26, 2018 by UES New Delhi  
**File Name** UM8131\_20190405113231.IDFW  
**Scaled Distance** 16.9 (100.0 m, 35.0 kg)  
**Post Event Notes**  
 H 19 1st bench, No of holes -04 nos, Depth - 6 Mtrs  
 Charge/delay - 18.75 Kg/delay, Obsevation Distance - 150 Mir

## Notes

**Location:**  
**Client:**  
**User Name:** PRISM:CEMENT:LTD  
**General:**

## Extended Notes

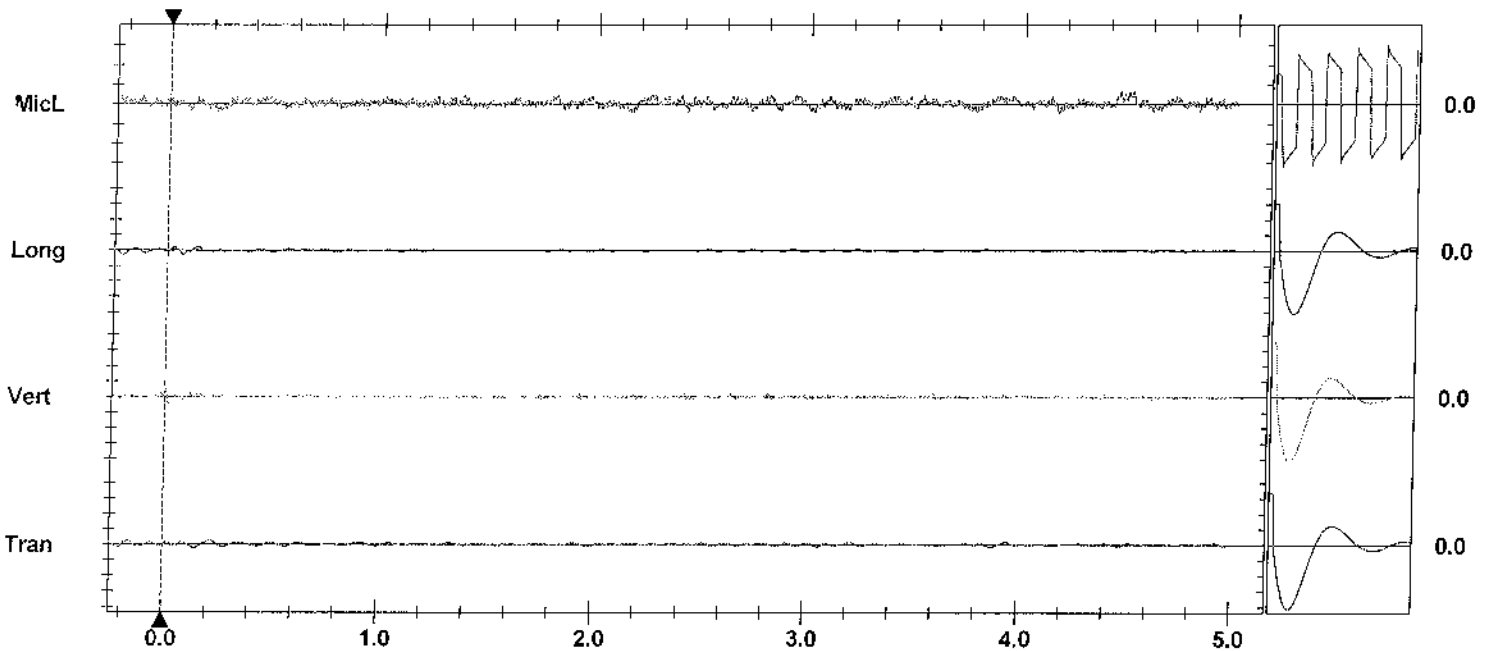
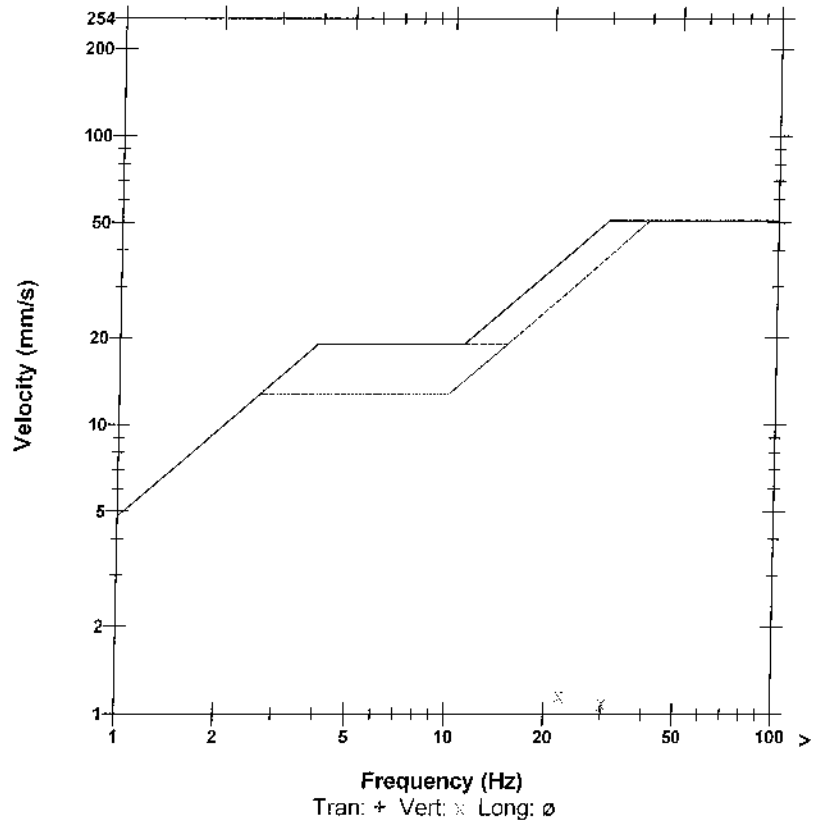
PRISM CEMENT LIMESTONE MINES


**Microphone** Linear Weighting  
**PSPL** 0.636 pa.(L) at 4.490 sec  
**ZC Freq** 5.0 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 1226 mv )

	Tran	Vert	Long	
PPV	0.638	1.167	0.607	mm/s
ZC Freq	6.9	22	9.1	Hz
Time (Rel. to Trig)	0.225	0.022	-0.215	sec
Peak Acceleration	0.008	0.025	0.006	g
Peak Displacement	0.012	0.008	0.009	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.1	7.5	7.1	Hz
Overswing Ratio	3.3	3.2	3.3	

Peak Vector Sum 1.234 mm/s at 0.022 sec

USBM RI8507 And OSMRE



**Time Scale:** 0.20 sec/div **Amplitude Scale:** Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
**Trigger** = 

Sensor Check

**Date/Time** Tran at 10:42:18 April 6, 2019  
**Trigger Source** Geo: 0.900 mm/s, Mic: 2.000 pa.(L)  
**Range** Geo: 254.0 mm/s  
**Record Time** 2.991 sec at 1024 sps  
**Operator/Setup:** Operator/SSB.MMB

**Serial Number** UM8131 V 10-76 Micromate ISEE  
**Battery Level** 3.8 Volts  
**Unit Calibration** February 26, 2018 by UES New Delhi  
**File Name** UM8131\_20190406104218.IDFW  
**Scaled Distance** 16.9 (100.0 m, 35.0 kg)  
**Post Event Notes**  
 7050 2nd bench, No of holes -36 nos, Depth - 6.5 Mtrs  
 Charge/delay - 32.5 Kg/delay, Observation Distance - 200 Mtr

## Notes

Location:  
 Client:  
 User Name: PRISM.CEMENT.LTD  
 General:

## Extended Notes

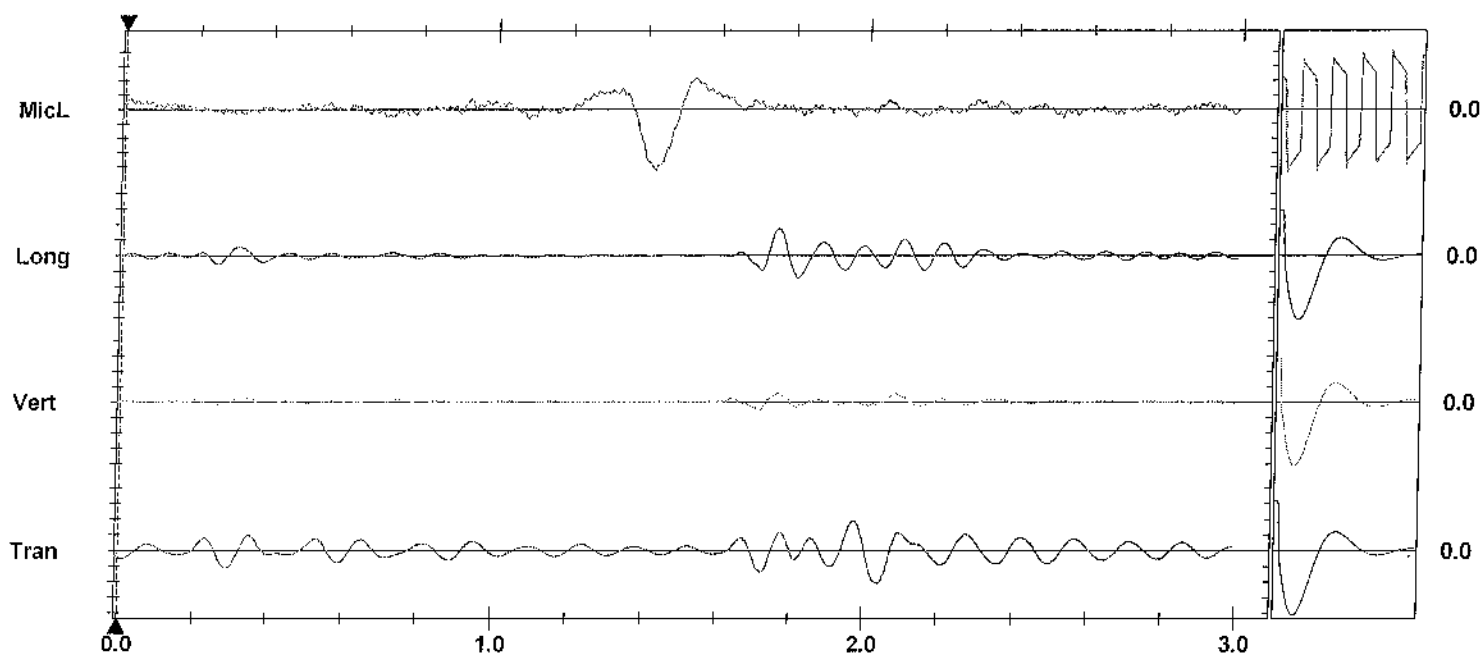
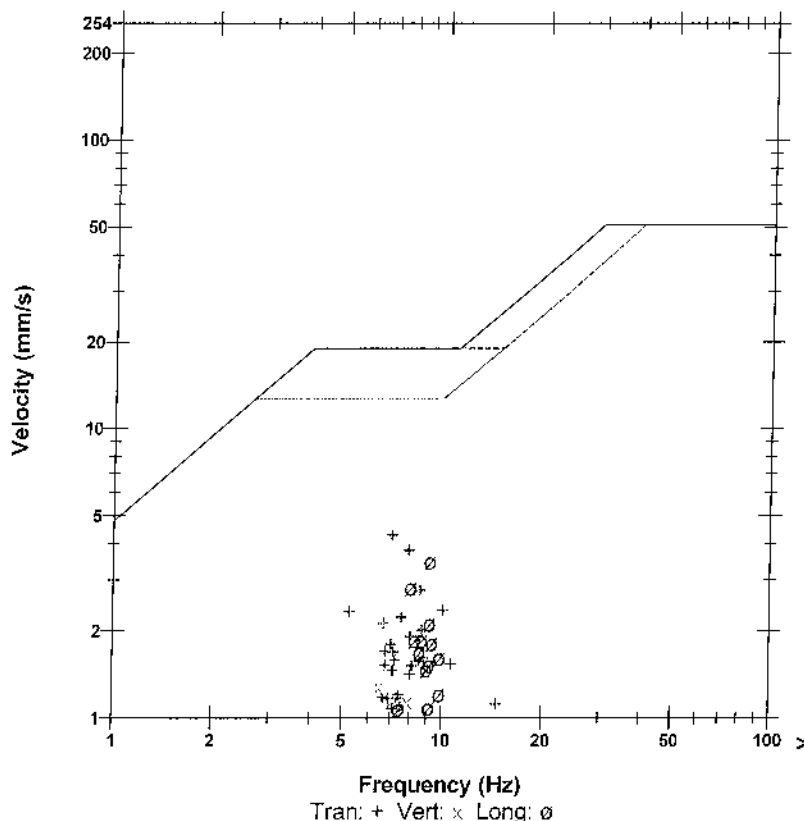
PRISM CEMENT LIMESTONE MINES

**Microphone** Linear Weighting  
**PSPL** 4.220 pa.(L) at 1.423 sec  
**ZC Freq** 4.0 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 1217 mv )

	Tran	Vert	Long	
PPV	4.272	1.293	3.476	mm/s
ZC Freq	7.0	6.5	9.1	Hz
Time (Rel. to Trig)	2.043	1.714	1.760	sec
Peak Acceleration	0.028	0.023	0.022	g
Peak Displacement	0.097	0.022	0.061	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.1	Hz
Overswing Ratio	3.4	3.2	3.6	

Peak Vector Sum 4.517 mm/s at 2.043 sec

USBM RI8507 And OSMRE





**Date/Time** Tran at 10:32:26 April 8, 2019  
**Trigger Source** Geo: 0.900 mm/s, Mic: 2.000 pa.(L)  
**Range** Geo : 254.0 mm/s  
**Record Time** 1.75 sec at 1024 sps  
**Operator/Setup:** Operator/SSB.MMB

**Serial Number** UM8131 V 10-76 Micromate ISEE  
**Battery Level** 3.8 Volts  
**Unit Calibration** February 26, 2018 by UES New Delhi  
**File Name** UM8131\_20190408103226.IDFW  
**Scaled Distance** 16.9 (100.0 m, 35.0 kg)  
**Post Event Notes**  
 EPR 2nd bench, No of holes -32 nos, Depth - 6.5 Mtrs  
 Charge/delay - 17.9 Kg/delay, Obsevation Distance - 150 Mtr

**Notes**

Location:  
 Client:  
 User Name: PRISM.CEMENT:LTD  
 General:

**Extended Notes**

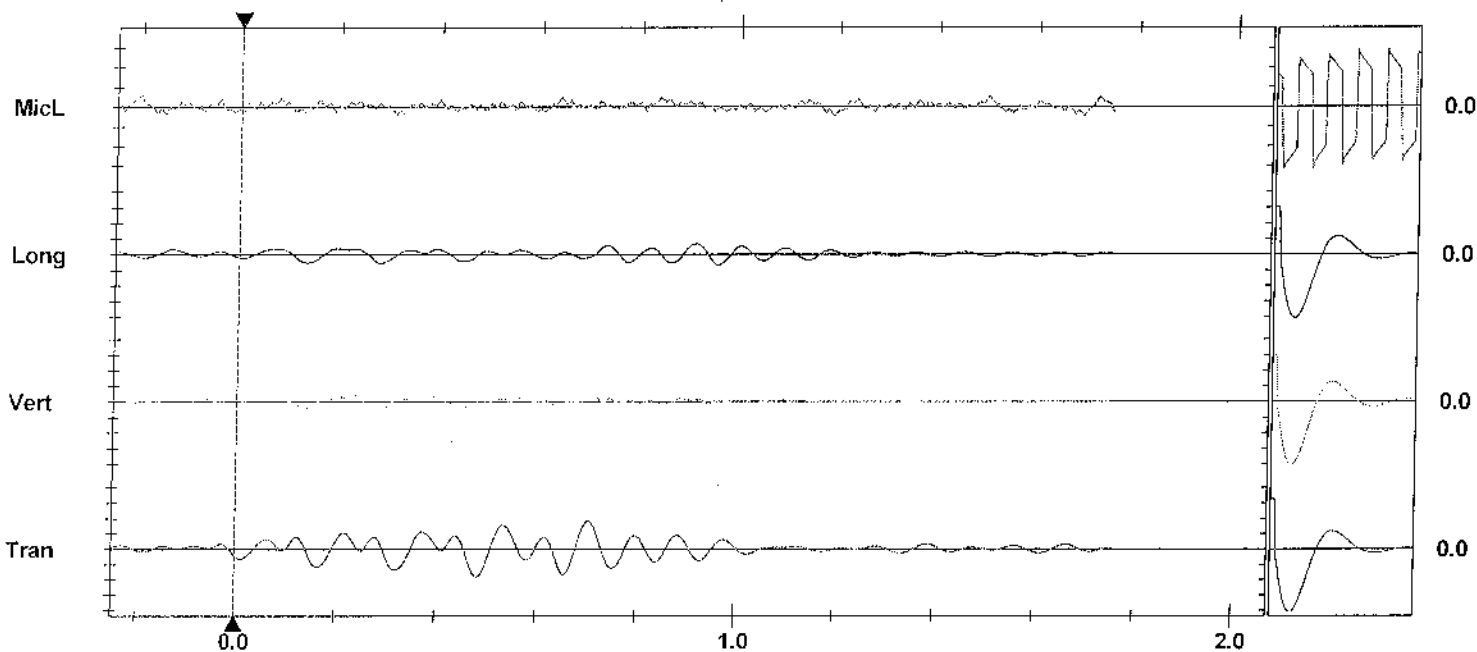
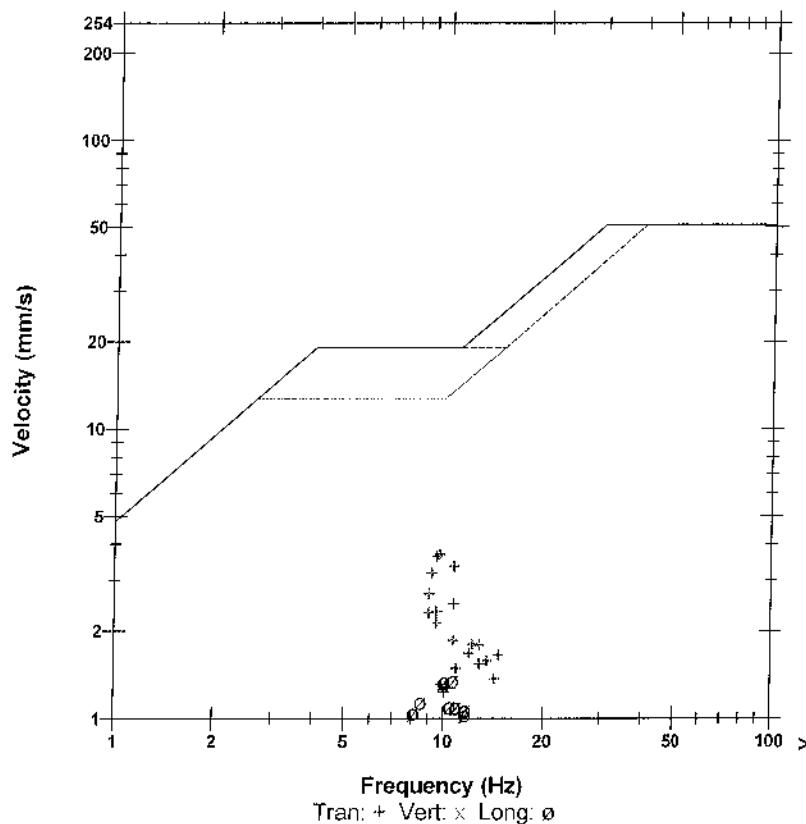
PRISM CEMENT LIMESTONE MINES

**Microphone** Linear Weighting  
**PSPL** 0.621 pa.(L) at -0.205 sec  
**ZC Freq** 10 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 1210 mv )

	Tran	Vert	Long	
PPV	3.681	0.891	1.356	mm/s
ZC Freq	9.7	8.8	11	Hz
Time (Rel. to Trig)	0.705	0.134	0.959	sec
Peak Acceleration	0.026	0.014	0.012	g
Peak Displacement	0.060	0.019	0.025	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.1	Hz
Overswing Ratio	3.5	3.3	3.5	

**Peak Vector Sum** 3.697 mm/s at 0.705 sec

**USBM RI8507 And OSMRE**



**Time Scale:** 0.20 sec/div **Amplitude Scale:** Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
**Trigger =**

**Sensor Check**

**Date/Time** Tran at 10:34:05 April 9, 2019  
**Trigger Source** Geo: 0.900 mm/s, Mic: 2.000 pa.(L)  
**Range** Geo: 254.0 mm/s  
**Record Time** 3.25 sec at 1024 sps  
**Operator/Setup:** Operator/SSB.MMB

**Serial Number** UM8131 V 10-76 Micromate ISEE  
**Battery Level** 3.8 Volts  
**Unit Calibration** February 26, 2018 by UES New Delhi  
**File Name** UM8131\_20190409103405.IDFW  
**Scaled Distance** 16.9 (100.0 m, 35.0 kg)  
**Post Event Notes**  
 H 16 1st bench, No of holes -43 nos, Depth - 7 Mtrs  
 Charge/delay - 32.56 Kg/delay, Observation Distance - 200 Mtr

## Notes

Location:  
 Client:  
 User Name: PRISM:CEMENT:LTD  
 General:

## Extended Notes

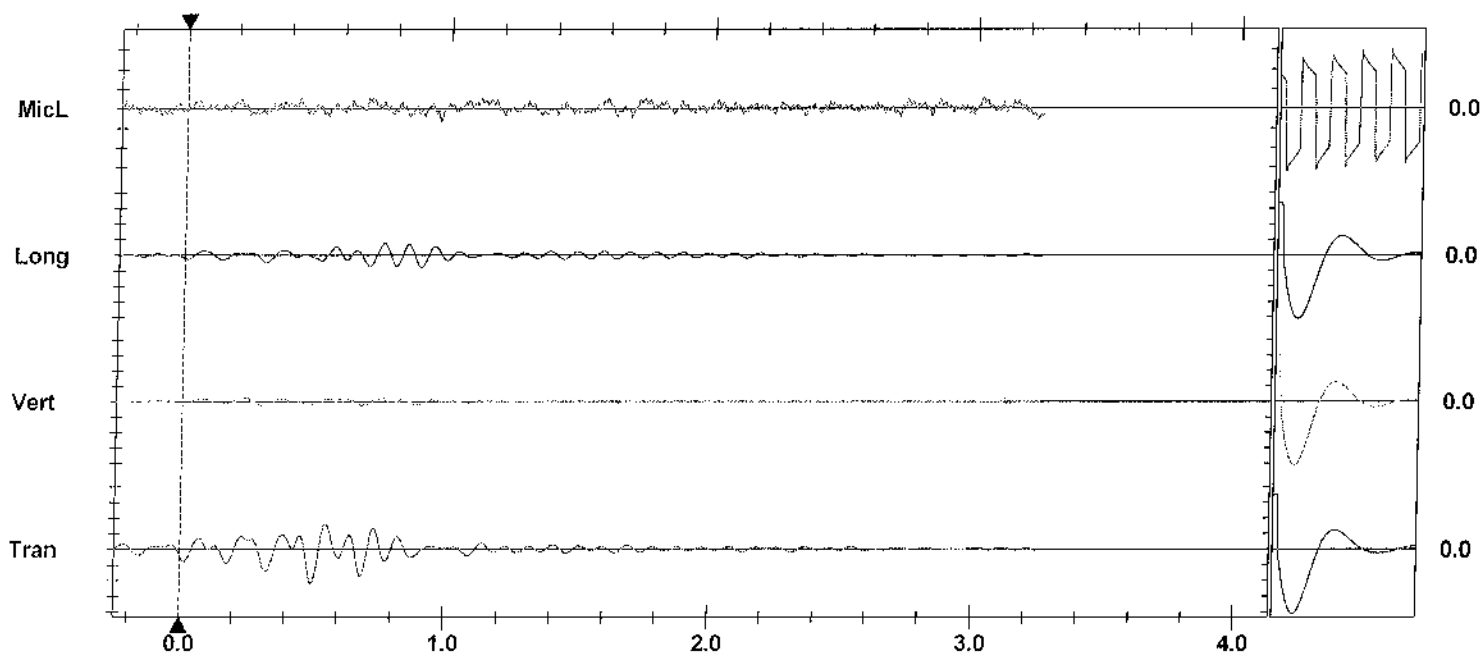
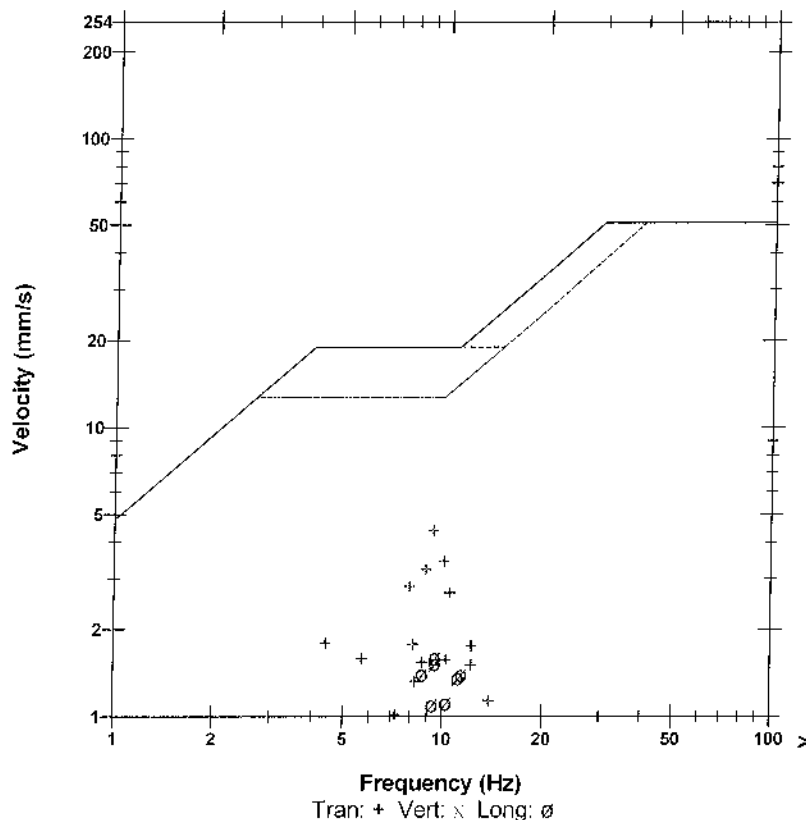
PRISM CEMENT LIMESTONE MINES

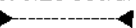
**Microphone** Linear Weighting  
**PSPL** 0.714 pa.(L) at 0.962 sec  
**ZC Freq** 11 Hz  
**Channel Test** Passed (Freq = 19.7 Hz Amp = 1205 mv )

	Tran	Vert	Long	
PPV	4.398	0.631	1.608	mm/s
ZC Freq	9.3	7.0	9.5	Hz
Time (Rel. to Trig)	0.501	0.303	0.896	sec
Peak Acceleration	0.027	0.016	0.013	g
Peak Displacement	0.073	0.013	0.026	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.7	7.1	Hz
Overswing Ratio	3.4	3.2	3.3	

Peak Vector Sum 4.437 mm/s at 0.501 sec

USBM RI8507 And OSMRE



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div  
 Trigger = 

Sensor Check



***An Analysis to Monitor the change in Land Use / Land Cover using Remote Sensing & GIS Technique***  
***Final Report***

***“ Digital Processing of Mining Leases- 772Ha, 512Ha, 117Ha & 99Ha using Remote Sensing Technique for fulfillment of EC Compliance of Cement Unit Plant II and Integrated Mines.” for Prism Johnson Ltd ( Formerly Prism cement Ltd) in Satna, Madhya Pradesh.***



***Submitted By:***

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Tel: 91-120-4567200, Fax: 91-120-4567100

***Purchase Order***

**PO No : 3100157191 - P200**

**PO Date : 22.06.2020**



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## 1. Introduction

Prism Johnson Limited is professionally managed Company promoted by the Rajan Raheja Group. Prism Johnson Limited is India's largest integrated Building Materials Company with a wide range from cement, ready-mixed concrete, tiles, bath products to kitchens. The Company has three Divisions, viz. Prism Cement, H & R Johnson (India), and RMC Readymix (India). Prism Cement primarily caters to the demand in the Northern Region, mainly in the States of Uttar Pradesh, Bihar and Madhya Pradesh. The capacity expansion has established the Division's brand in new markets and to a larger consumer base. A team of experienced engineers and a dedicated workforce combined with a high level of automation and sophisticated control systems have placed the Division's products in the premium segment.

Prism Johnson Ltd ( Formerly Prism cement Ltd) commenced its production in August 1997 and manufactures Portland Pozzollana Cement (PPC) with the brand name 'Champion' and Ordinary Portland Cement (OPC). It has the highest quality standards due to efficient plant operations with automated controls. It caters mainly to markets of UP, MP and Bihar, with an average lead of 340–370 km of its plant at Satna, MP. It has a wide marketing network with about 2,000 dealers serviced from 46 stocking points.

Cement and mining is seventh of the core industries that contribute significantly to the economic development of India . As for environment point of view, Line stone mining and installation of cement plant is a major habitat transforming activity is lead to change in land Use/Land cover. The change have been described as the most significant regional anthropogenic disturbance to the environment and are consistently with mining of natural resources.

Remote sensing and geographic information system (GIS) are important tool for studying the land use pattern and their dynamic . The change detection in Land use /land cover due to natural and human activities can be monitored by using multi date image to evaluate difference in land cover . The mapping of land use of classes and monitoring their changes with time has been widely recognized. The change detection in Land use/ Land cover due to natural and human activities can be monitored by using multi date images to evaluated differences in land cover where lime stone mines 772.067 HA, 512.317 HA, 117.594 HA & 99.416 HA and Cement Unit II are under operation by using multi temporal remote sensing data.

The concept, method and application of land use/land cover studies are introduced to mining area in order to find the land use change and give support to land management and ecological reconstruction. its prerequisite for planning, policy making and developmental program that land use /land cover information its spatial distribution and change in land use pattern is commonly used.



## 1.1 Scope of work

1. Collection of Primary data - Raw satellite data to be obtained from NRSC.
2. Base map to be prepared with help of survey of India Toposheet G44U14, G44V2 and other details.
3. Data processing including following steps with the help of application software
  - a. Geometric correction, rectification and Geo referencing .
  - b. Image enhancement.
  - c. Training set selection.
  - d. Signature generation and classification.
  - e. Validation of classification image.
  - f. Final thematic map preparation.
4. The map to be prepared on scale of 1:50000.
5. Comparative study with respect to land use change in the last three years.

## 1.2. Objectives

The main objective of present study is to understand land use /land cover change in the time and space , with special reference to the cement & mining activities being carried by M/s Prism Johnson Ltd ( Formerly Prism cement Ltd) , which is also one of the special condition of the environment clearance issued.

## 1.3. Software Used

1. ArcGIS 10.3
2. ERDAS Imagine
3. Microsoft Office

## 1.4. Study Area

The study area lies in Tehsil-Rampur baghelan, Satna district (MP) where cement Plant-II . The area is well connected to broad gauge line of central railway Linking ,satna with Rewa. The nearest major railhead is Satna on the jabalpur- Allahabad board guge section of central railway and is well connected to the major cities of the country. There is a good network of roads, there is an all weather motor able road up to project site. it is 22 km. from Satna city and 3 Km. from Satna - Rewa highway.

The details of the Mine lease areas are listed in the Table 1:

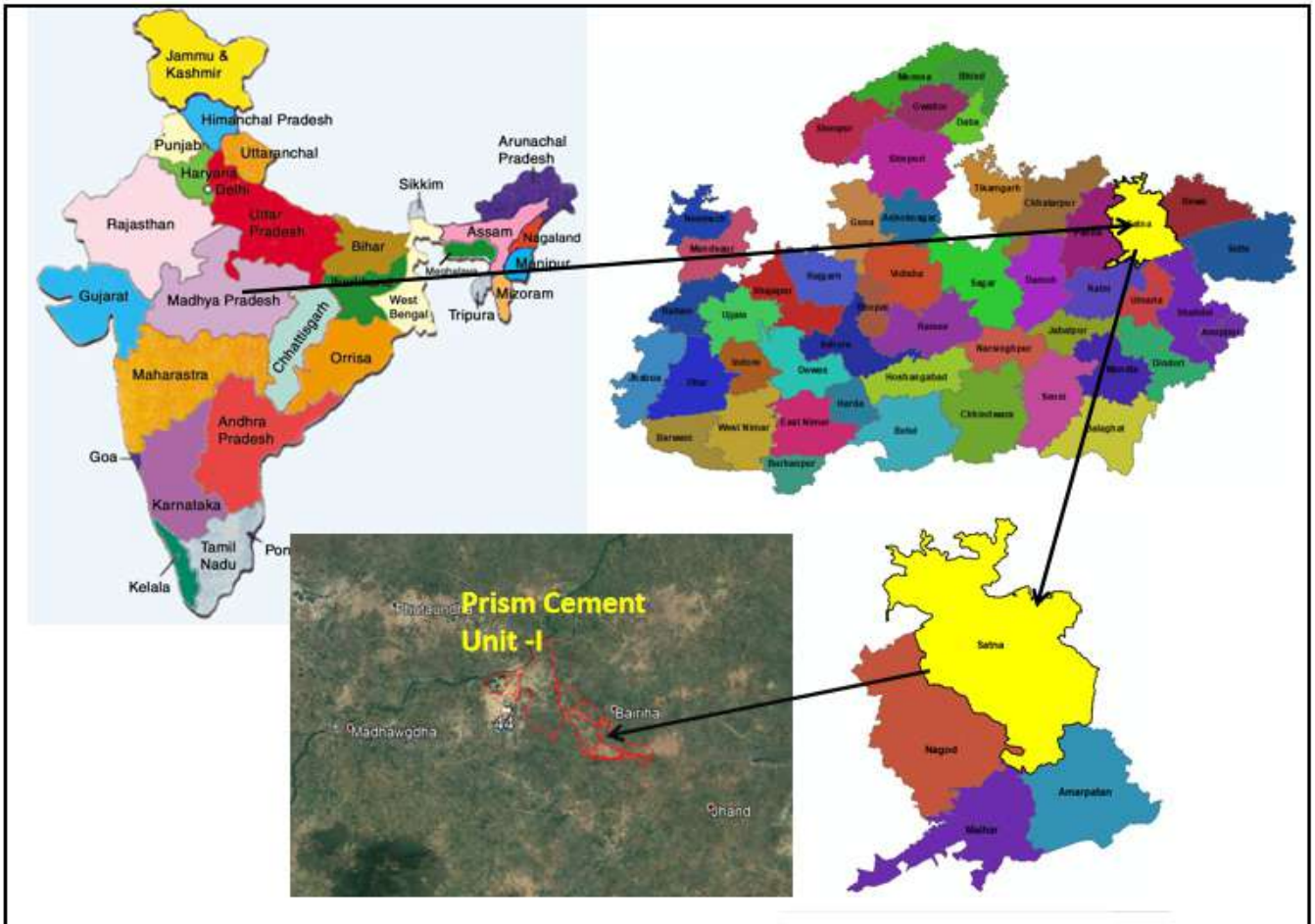
**Table - 1**

Details	Cement Plant	Hinouti & Sijhatta Lime stone (772.067 & 99.416)	Mendhi Lime stone Mine (117.594)	Baghai Limestone Mine (512.317)
Village	Mankhari	Hinouti & Sijhatta	Mendhi	Baghai
Tehsil	Rampur, Baghelan	Rampur, Baghelan	Rampur, Baghelan	Rampur, Baghelan
District	Satna	Satna	Satna	Satna
State	Madhya Pradesh	Madhya Pradesh	Madhya Pradesh	Madhya Pradesh

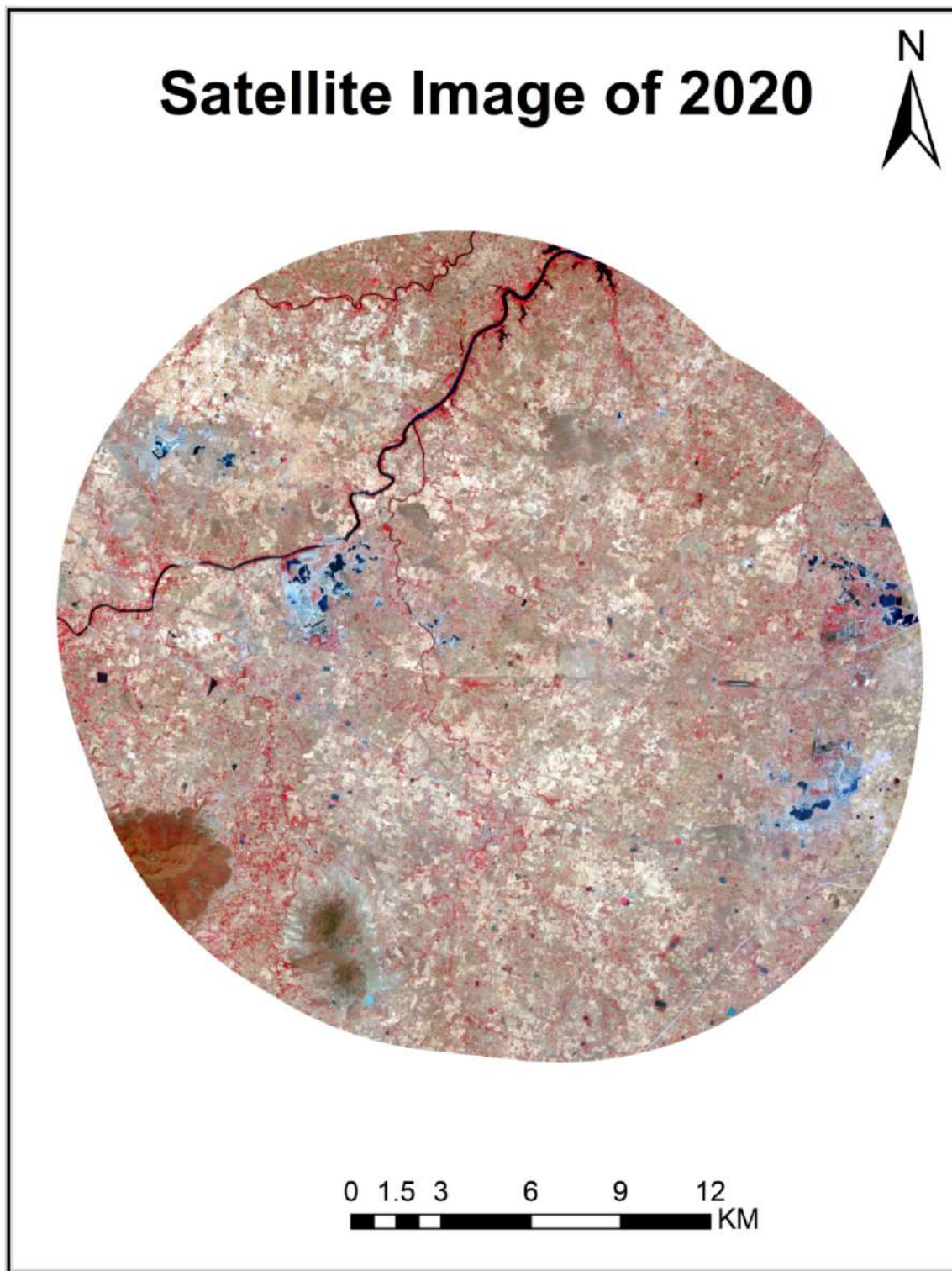
Toposheet No.	G44U14 & G44V2	G44U14 & G44V2	G44V2	G44V2
National Highway	N.H. - 39 Gwalior to Rewa			
Nearest River	Tamas River 2.15 Km.	Adjecnt to the boundary (In NW direction)	Tamas River 3.5 Km. (NW of Baghai)	Tamas River: 4 Km. (NW of Baghai)
Latitude	24°33'32.3"N	24°33'20.71"N	24°34'15.3."N	24°33'20.71"N
Longitude	80°59'34.12"E	80°59'20"E	81°02'26.1"E	81°04'47.8"E
Nearest Town	Satna (21 km)	Satna (18 Km) Towards west	Satna (24 Km) Towards west	Satna (23 Km) Towards west
Nearest Railway station	Satna railway station (20Km.)	Satna on the jabalpur-Allahabad board gauge section of west central Railway (18 KM.)	Satna on the jabalpur-Allahabad board gauge section of west central Railway (22 KM.)	Satna on the jabalpur-Allahabad board gauge section of west central Railway (20 KM.)
Nearest Airport	Khajuraho (120 Km.)	Khajuraho (120 Km.)		



## 1.5. Location Map



### 1.6. Satellite Image of Study Area





## 2. APPROACH & METHODOLOGY

Indian remote sensing satellite LISS-IV MSS & PAN geocoded data were used to analyze the land use/land cover pattern. The present study utilizes multi-spectral/multi-temporal data of the Indian remote sensing satellite LISS-IV MSS & PAN for thematic mapping. Survey of India toposheet G44U14 & G44V2 on scale 1:50,000 were used for preparation of base map which was overlay on the LISS-IV for land use /land cover mapping through visual interpretation. Visual interpretation of satellite imagery lead to the identification of fifteen land use/land cover categories. The ground truth verification was carried out in the key areas to rectify the errors in generated maps and then land use/land cover maps were finalized.

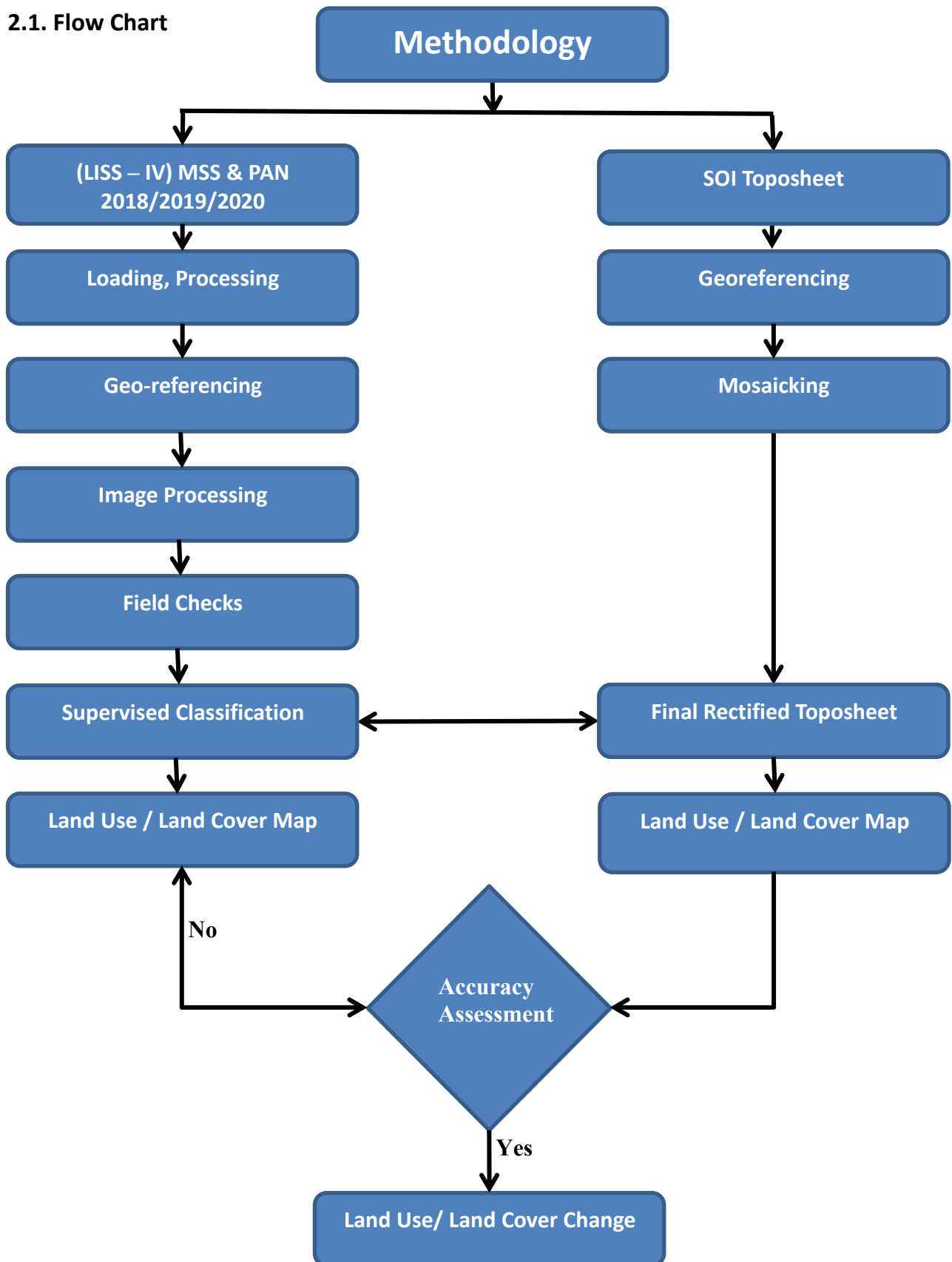
Data available gives uniform spectral and radiometric characteristics and minimize the seasonal variation. The survey of India topographic sheets No. G44U14 & G44V2 on scale 1:50,000 were used for preparation of base map. Secondary data obtained from published material. Visual interpretation is the effective method for classifying land use/land cover especially when the analyst is familiar with the area being classified from satellite data.

These categories were identify on the basis of visual interpretation of satellite data and ground truth verification were done in the key areas for editing and authentication. On screen digitization technique has been carried out to digitize the maps using Arc Map 10.3 software for land use analysis.

There are number of steps involved between RAW satellite data procurement and preparation of final maps. National Remote sensing Centre (NRSC). Hyderabad, being the nodal agency for satellite data supply in India , Provides only RAW digital satellite data , which needs further digital image processing for extracting the information and map preparation before uploading the same in the website. Methodology for land reclamation is given table no.2

With the invent of remote sensing and Geographical Information System (GIS) techniques, land use/cover mapping has given a useful and detailed way to improve the selection of areas designed to agricultural, urban and/or industrial areas of a region. Application of remotely sensed data made possible to study the changes in land cover in less time, at low cost and with better accuracy in association with GIS that provides suitable platform for data analysis, update and retrieval. The advent of high spatial resolution satellite imagery and more advanced image processing and GIS technologies, has resulted in a switch to more routine and consistent monitoring and modeling of land use/land cover patterns. Remote-sensing has been widely used in updating land use/cover maps and land use/cover mapping has become one of the most important applications of remote sensing.

## 2.1. Flow Chart





**2.2. Data Procurement:**

After browsing the data quality and date of pass on internet, supply order for data is placed to NRSC. Secondary data like leasehold boundary, Toposheet are procured for creation of vector database.

**2.3. Satellite Data Processing:**

Satellite data are processed using *DIGITAL IMAGE PROCESSING SOFTWARE*. Mythology involves the following major steps.

**2.4. Rectification & Geo-referencing:**

Inaccuracies in digital imagery may occur to *systematic errors* attributes to earth curvature and ration as well as *non systematic errors* attributes to satellite receiving station itself. RAW digital contain geometric distortions, which make them unusable as maps. Therefore, Geo-referencing is required for correction of image data using ground control points (GCP) to make it compatible to SOI toposheet.

**2.5. Image enhancement:**

To improve the interpret-ability of the raw data, image enhancement is necessary. Local operations modify the value of each pixel based on brightness pixels using *DIGITAL IMAGE PROCESSING SOFTWARE* and enhance the image quality for interpretation.

**2.6. Classification and Accuracy assessment:**

Image classification is carried out using the maximum likelihood algorithm. The classification proceeds through the following steps :

(A) calculation of statistics for the identified training area, and correlation matrix. After evaluating the statistical parameters of the training sets is conducted by measuring the statistical separation between the classes that resulted from computing divergence matrix. The overall accuracy of the classification was finally reference to ground truth data.

**2.7. Area Calculation:**

The area of each land use class in the leasehold is determined using *DIGITAL IMAGE PROCESSING SOFTWARE*.

**2.8. Overlay of Vector data base:**

Vector data base created based on secondary data. Vector layer like drainage, railway line, Lease boundary, mines area, forest boundary water body etc.

**2.9. Field Survey:**

Field survey was carried out by taking selective traverses in order to collect the ground information (or reference data).











## 2.10. Finding of Study:

### 2.10.1. Baghai Lime Stone Mine

Land use /land cover information derived from IRS LISS-IV 2018, 2019 & 2020 (Table 3). Area statistic of each land use /land cover category were generated in GIS software and has been determined to analyze change in their spatial distribution. By comparing the land use/land cover maps, a change detection map has been generated in smart GIS software to assess the major changes in the Mines area **Baghai Lime Stone Mine (512.317)**.

<b>Table - 2 Baghai Lime Stone Mine Land use Details (512.317)(Fig.2)</b>	
<b>Description</b>	<b>2020 (Area In Ha)</b>
<i>CropLand</i>	4.5569
<i>Agriculture-Fallow</i>	413.402
<i>Built up Land</i>	18.1843
<i>Soil Dump</i>	21.844
<i>Limestone Quarry</i>	28.119
<i>Drainage / WaterBody</i>	9.009
<i>WasteLand</i>	24.7409
<i>Plantation</i>	0
<i>Road</i>	0
<b>Total</b>	<b>512.317</b>

### 2.10.2. Mendhi Lime Stone Mine

Land use /land cover information derived from IRS LISS-IV 2018, 2019 & 2020 (Table 4). Area statistic of each land use /land cover category were generated in GIS software and has been determined to analyze change in their spatial distribution. By comparing the land use/land cover maps, a change detection map has been generated in smart GIS software to assess the major changes in the Mines area of **Mendhi Lime Stone Mine (117 Ha)**.

Table - 3 Mendhi Lime Stone Mine ( 117 Ha.)(Fig.3)	
Description	2020 (Area In Ha)
<i>Crop Land</i>	3.7463
<i>Agriculture-Fallow</i>	101.88
<i>Built up Land</i>	9.1168
<i>Soil Dump</i>	0.3761
<i>Limestone Quarry</i>	5.9157
<i>Wasteland</i>	1.536
<i>Plantation</i>	1.5347
<i>Road</i>	0
<b>Total</b>	<b>117</b>

### 2.10.3. Hinouti & Sijhatta Lime Stone Mine

Land use /land cover information derived from IRS LISS-IV 2018, 2019 & 2020 (Table 5). Area statistic of each land use /land cover category were generated in GIS software and has been determined to analyze change in their spatial distribution. By comparing the land use/land cover maps, a change detection map has been generated in smart GIS software to assess the major changes in the Mines area of **Hinouti & Sijhatta Lime stone Mine(772.067 & 99.416 Ha)**.

Table - 4 Hinouti & Sijhatta Lime Stone Mine (772.067 & 99.416 Ha)(Fig. 4)	
Description	2020 (Area In Ha)
<i>Crop Land</i>	18.617
<i>Agriculture-Fallow</i>	574.481
<i>Built up Land</i>	74.568
<i>DumpingLand</i>	13.262
<i>Limestone Quarry</i>	120.267
<i>Drainage / WaterBody</i>	55.512
<i>Wasteland</i>	19.144
<i>Plantation</i>	36.437
<b>Total</b>	<b>871.583</b>



#### 2.10.4. Land Use/Land Cover Map Of Buffer Zone with 10 Sq.km.

Land use /land cover information derived from IRS LISS-IV 2018, 2019 & 2020 (Table 6). Area statistic of each land use /land cover category were generated in GIS software and has been determined to analyze change in their spatial distribution. By comparing the land use/land cover maps, a change detection map has been generated in smart GIS software to assess the major changes in the Mines area.

<b>Table - 5 Land Use Details of Buffer Zone (Fig. 5)</b>	
<b>Description</b>	<b>2020 (Area in Ha)</b>
<i>Cement plant unit II Boundary</i>	<i>134.3396</i>
<i>Settlements</i>	<i>4732.44</i>
<i>Agriculture Fallow</i>	<i>49411.6077</i>
<i>Dense Forest</i>	<i>2529.8061</i>
<i>Dumping Land</i>	<i>63.7381</i>
<i>Lime Stone Quarry</i>	<i>838.0919</i>
<i>Open Scrub</i>	<i>2443.2466</i>
<i>Plantation</i>	<i>335.2833</i>
<i>River</i>	<i>572.1627</i>
<i>Road</i>	<i>80.0801</i>
<i>Waste Land</i>	<i>46.6298</i>
<i>Crop Land</i>	<i>229.37306</i>
<i>Water Body</i>	<i>676.9213</i>
<i>Open Mix Jungle</i>	<i>136.7961</i>
<i>Other Quarry Land</i>	<i>677.6188</i>
<b>Total</b>	<b>62598.3184</b>

### 3. Conclusion

The Present study reveals that mining and industrial activities around Prism Johnson Ltd. are the main forces responsible for land use land cover change during years from commencement of their operation. The mining has increased manifold that has resulted in change land use in terms of forest land, cultivated land and water bodies in the area.

Exploitation on natural resource in the area is going on due to the expansion of limestone mining activities, and other industrial activities. This report focuses on LU/LC changes in the Mine lease areas and buffer areas in and around to Prism Johnson Limited, Satna India, using remote sensing data and GIS technology. Our results clearly show that LU/LC changes were summarized during the period of 2020 in the Table no-6. On the other hand there is minor change in agricultural area, water spread area, and forest areas. This study clearly indicates the significant impact of environmental and its development activities on LU/LC change. This study proves that integration of GIS and remote sensing technologies is effective tool for change detection. The quantification of LU/LC changes of Prism Johnson Ltd. area is very useful for environmental management groups, policy makers and for public to better understand the surrounding.



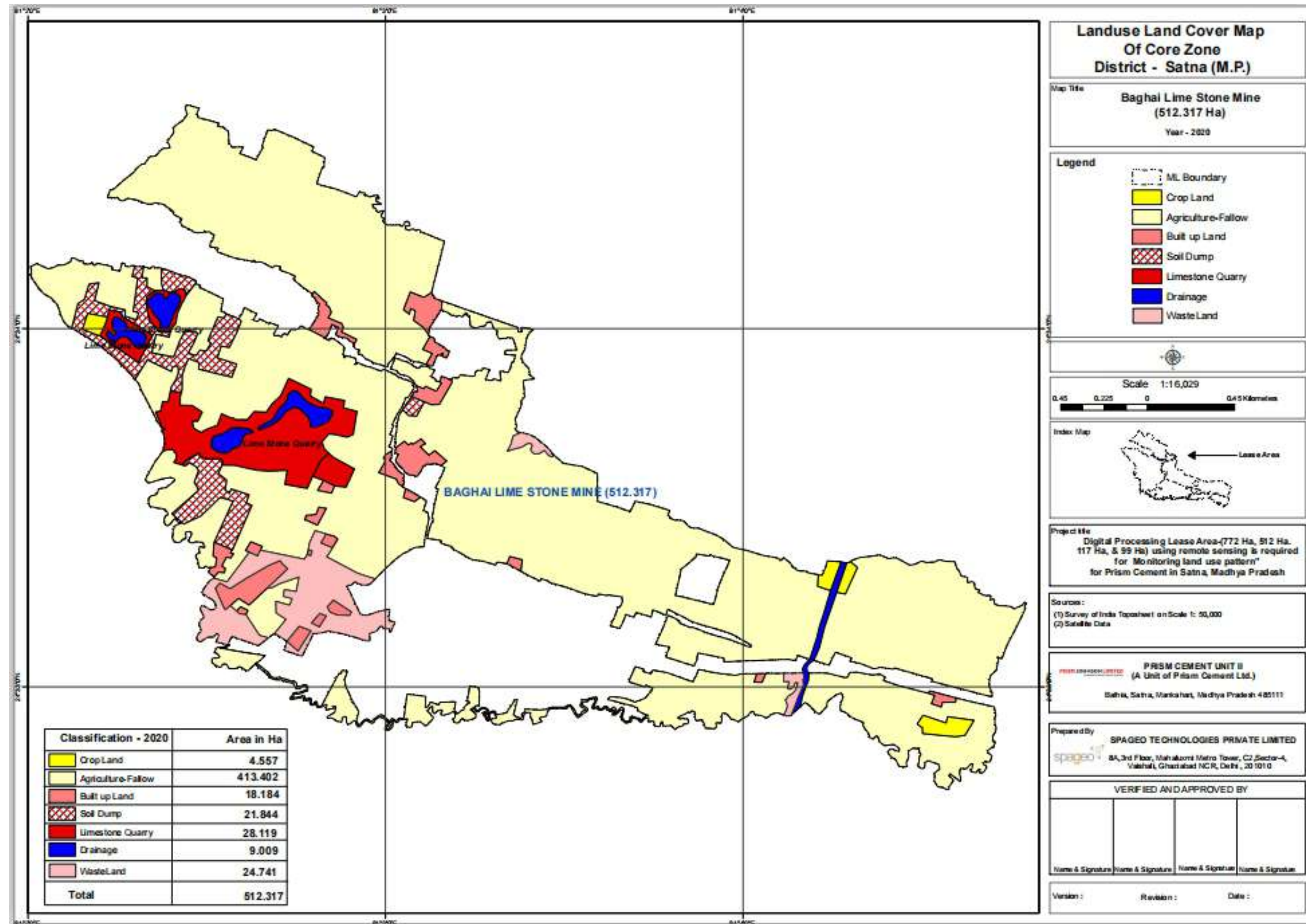


Fig:- 2 Baghai Lime stone Mine Land use Details 2020 (512.317)

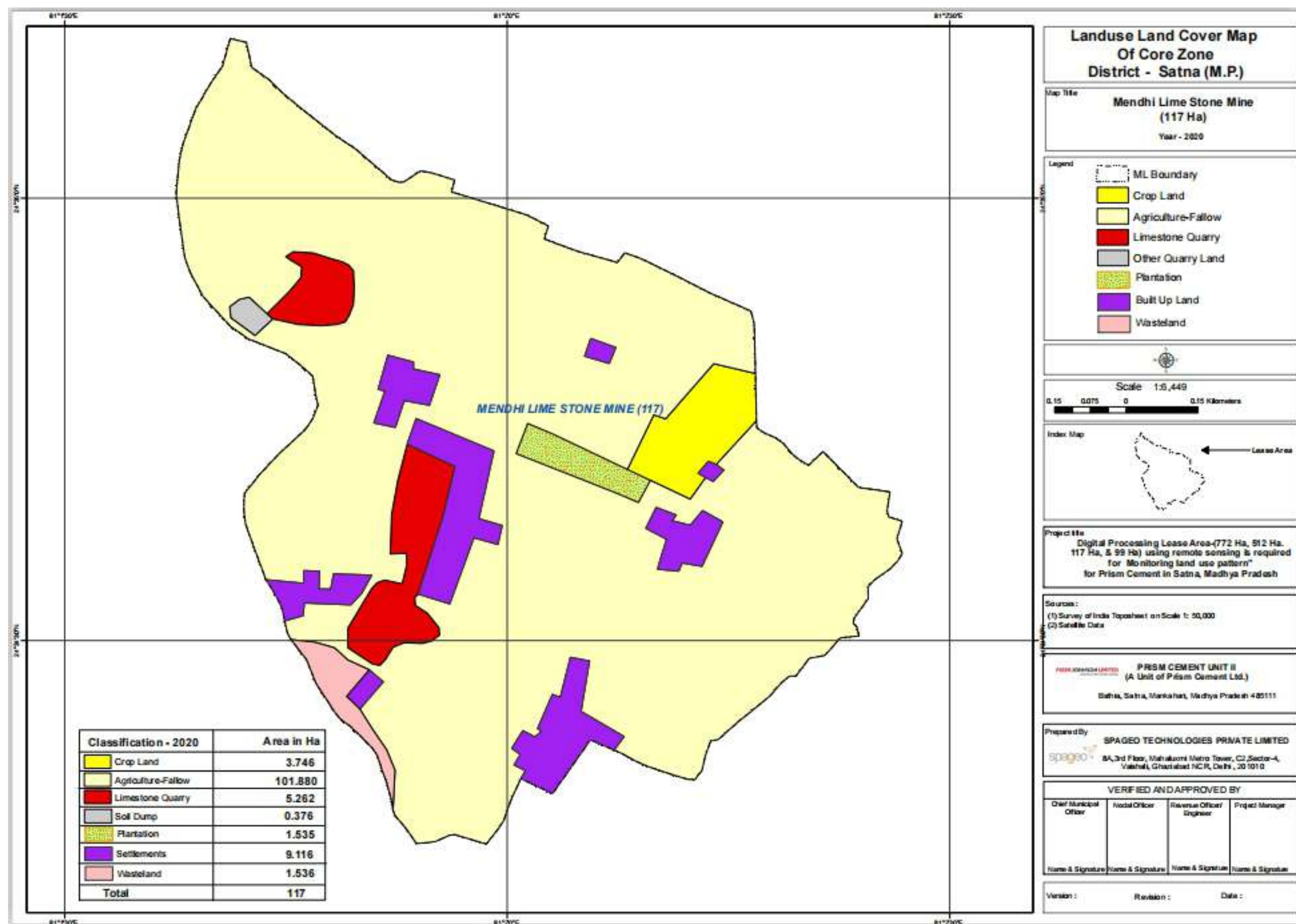


Fig:-3 Mendhi Lime stone Mine Land use Details 2020 (117 Ha.)



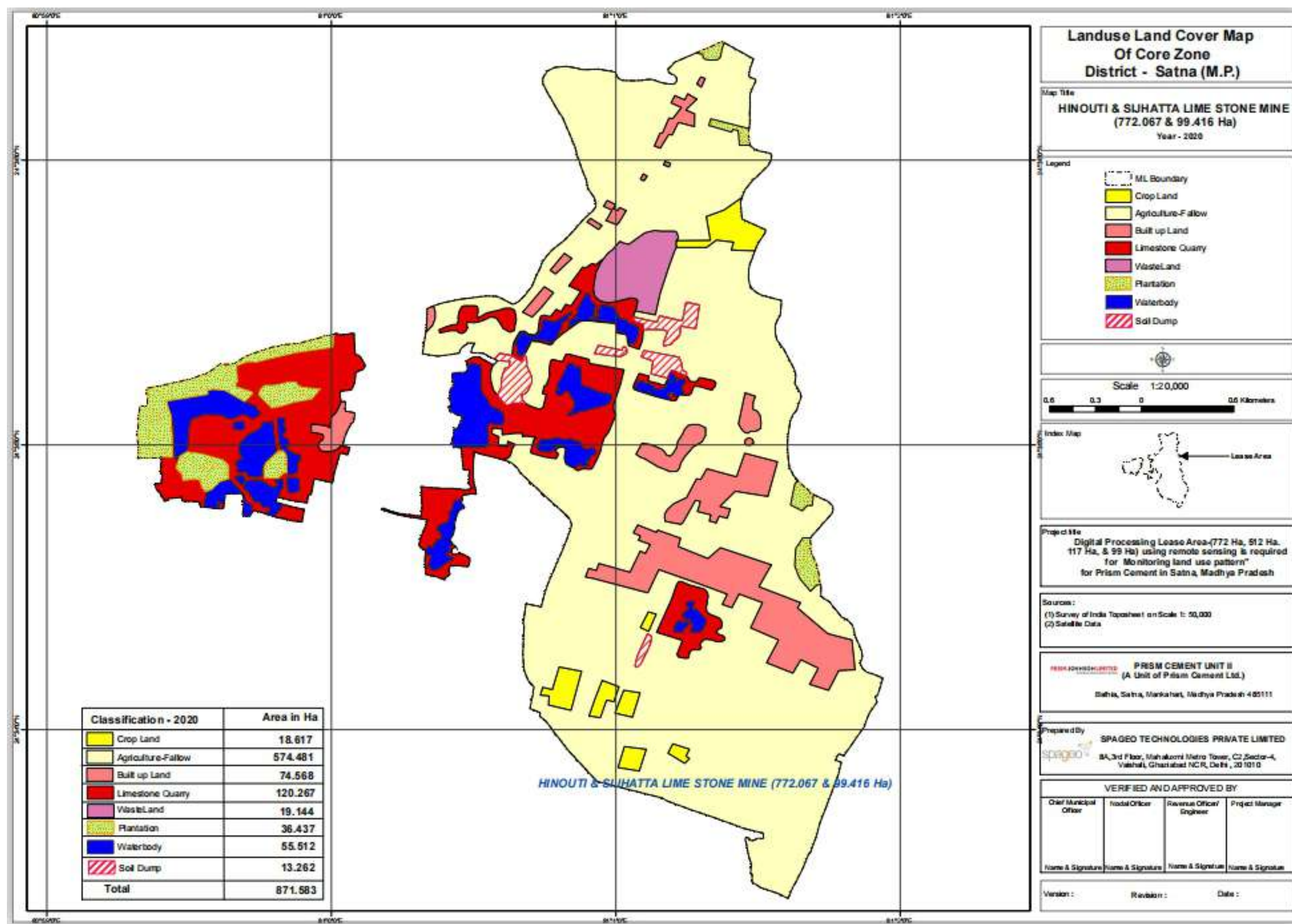


Fig:- 4 Hinouti & Sijhatta Lime stone Mine Land use Details 2020 (772.067 & 99.416)







## STATUS OF COMMITMENTS MADE DURING PUBLIC HEARING HELD ON 22.05.2008

S.No.	Name of Candidate	Suggestions & Points raised	Reply of Project Proponent	Present Status
1	Mrs. Guddi devi, Chairperson "Garib Sangh Samiti" Bamhauri, Satna	a) Admission on merit and free of fee for admission  b) Plantation to be done from plant gate to Mahuracch Junction  c) Street light facility from Plant gate to Mahuracch Junction  d) Permanent employment to effected person	Provision for proper facilities will be considered  Agreed, plantation will be done during rainy season  Work will be taken up by the management as per financial position of the company  Employment will be granted as per rules and regulations of company	Admission is given to the students of surrounding villages as per availability of seats and guidelines of the company  Plantation is being done on road side and around the Mankahari Pond  Few lamp posts have been established and will be extended in phase wise  Employment and other facilities are being provided to affected persons
2	'Sarpanch' Village Panchayat – Bathia, Satna	Employment to local villagers of Bamhauri	Employment will be granted as per rules and regulations of company	More than 50% employment has been given to local persons
3	Mithilesh – (student) Bamhauri, Satna	Appeal of Pollution Control in industry	All pollution control acts will be complied with	All due provisions have been made to combat pollution likely to be caused. <ul style="list-style-type: none"> <li>Details of APCEs are as under</li> <li>1- Raw mill/ Kiln – Bag House (1)</li> <li>2- Cooler – ESP (1)</li> <li>3- Coal Mill – Bag House (1)</li> <li>4- Cement mills – Bag House (2)</li> <li>5- 92 Bag filters installed to cover all the transfer points</li> <li>Arrangement of water sprinkling at crusher hopper and limestone conveyor bet</li> <li>Water sprinkling on haul roads</li> </ul>

				through tankers
4	Mr. Triloki Singh Baghel, Village – Bamhauri, Satna	a) Priority to employment for eligible persons  b) Construction of Stadium in the ground of Higher Secondary School  c) Permanent water & electricity supply in school  d) Admission for village children to Prism Bhawan School  e) To & fro School Bus facility to Satna for the students of villages  f) Distribution of sports material to Panchayat	Employment will be granted as per rules and regulations of company  Action will be taken  Adequate action will be taken  Admission will be granted as per rules and regulation of company  Provision for proper facilities will be considered  Adequate action will be taken	Employment is being given to eligible persons as per rules framed by the company  Play ground has been rehabilitated. Maintenance is done as per requirement.  Water & Electricity supply are available at school  Admissions is being given to village students as per availability of seats  School bus service has been provided to students of villages for commuting to Satna Study and sports materials are being distributed to village students
5	Mrs. Kalawati Singh, Bamhauri, Satna	Provision of facilities from Prism Cement for the land sellers to company	Adequate action will be taken as per rules & regulation of company	All the possible services are being provided to land losers
6	Mr. Ajit Khureshi, National Civil Human Right Association, Country Head Qtr Delhi, Camp Satna	19 point comments raised on pollution	All pollution control acts will be complied with	All due provisions have been made to combat pollution likely to be caused. <ul style="list-style-type: none"> <li>Details of APCEs are as under</li> </ul> 1- Raw mill/ Kiln – Bag House (1) 2- Cooler – ESP (1) 3- Coal Mill – Bag House (1) 4- Cement mills – Bag House (2) 5- 90 Bag filters installed to cover



				all the transfer points <ul style="list-style-type: none"> <li>• Arrangement of water sprinkling at crusher hopper and limestone conveyor belt</li> <li>• Water sprinkling on haul roads through tankers</li> </ul>
7	Mr. Shankar Singh, Rtd. Commissioner, (Milk & Dairy Dept), 31 Rachna Nagar, Bhopal	Employment should be provided to effected villagers	Employment will be granted as per rules and regulations of company	Employment is being provided to affected villagers. More than 50% employment has been given to local persons
8	Mr. Ramadhar Prasad, Sarpanch, Village- Hinauti, Satna	Necessary assistance & help will be extended by him for the establishment of industry with the protection of environment from Pollution	Thanks & All pollution control acts will be complied with	All the efforts are being done to control the pollution
9	Sarpanch, Village Panchayat- Mankahari, Satna	Expressed his consent to establish the industry	Thanks & Agreed	----
10	Sarpanch, Village Panchayat- Sijahata, Satna	Expressed his consent to establish the industry	Thanks & Agreed	----
11	Sarpanch, Village Panchayat- Sijahata, Satna	Suggested to plant 10000 saplings, seek help to improve health, sanitation facilities in villages and employment for educated persons	Agreed, Plantation will be done during rainy season, health, sanitation and employment will be considered as per rules and regulation of company	Improving green cover in and around plant premises is always company's utmost priority. Saplings are also distributed to village students to promote plantation & to make awareness. Villagers seeking medical attention have also easy access to medical centre of prism cement plant. Apart from this, free medical camps are also being regularly organised in nearby villages. Employment is also being given as

				per rules of the company
12	Mr. Diwakar Pd. Mishra Mr. Shankhadhar Mishra Panch – Village Bamhauri, Satna	Expressed his consent to establish the industry	Thanks & Agreed	---
13	Mr. Sobha Nath Tiwari, Village- Bamhauri, Satna	Plantation to be done on road side & water spraying on roads	Agreed	Plantation is in continuous practice. Saplings are also distributed to villagers.
14	Mr. Tejpal Singh Parihar, & Mr. Shankhadhar Mishra, Village – Hinauti, Satna	Eradication of diseases & pollution from village Hinauti	Best efforts and assistance will be extended	Medicals camps and other awareness programmes are being organised by the company
15	Mr. Ramesh Kumar Tiwari & Sarpanch Village Mankahari, Satna	Expressed their consent to established the industry	Thanks & agreed	----
16	Mr. Girija Prasad Tiwari & Others, Village Panchayat Bagahai	Improvement in tree plantation, health, education, drinking water, employment & setting up of worship places	All demands will be considered as per rules and regulations of company	Plantation is in continuous practice. Saplings are also distributed to villagers. Villagers seeking medical attention have also easy access to medical centre of prism cement plant. Apart from this, free medical camps are also being regularly organised in nearby villages. Study materials, bags, uniforms etc are being distributed to the students of nearby villages. Free drinking water is being supplied through tankers during summer season as per requirement Renovation of Jabala Baba temple, construction of Ghat and Yagya Shala has been done by the company.





# Consent Order

M.P. Pollution Control Board  
E-5, Arera Colony  
Paryavaran Parisar, Bhopal - 16 MP  
Tele : 0755-2466191, Fax-0755-2463742

RED-LARGE

CCA-Renewal  
VALIDITY (A/W): 30/06/2021

CONSENT NO: \*\*\*

PCB ID: 13880

Outward No:100175,25/04/2020

Consent No:AW-51451

To,  
The Occupier,  
M/s. Prism Johnson Ltd. (Cement Division Unit-II),  
Village-Mankahari, P.O. Bathia,  
Tehsil-Rampur Baghelan,  
Distt. Satna-485111 (M.P.).

**Subject:** Grant of Renewal of Consent under section 25 of the Water (Prevention & Control of Pollution) Act, 1974 & under section 21 of the Air (Prevention & Control of Pollution) Act, 1981

**Ref:** Your Application Receipt No. 956623 Dt. 11/01/2020 and last communication received on Dt.25/02/2020.

With reference to your above application, the renewal of consent has been considered under the aforesaid Acts and existing rules therein. The M. P. Pollution Control Board agreed to grant renewal of consent up to 30/06/2021, subject to the fulfillment of the terms & conditions incorporated in consent to operate for expansion issued vide order outward no. 55415 dt. 24.07.2017, CCA- Amendment outward no. 87440 dt. 22/10/2018, CCA-Amendment for use of Petcoke vide outward no. 87549 dt.15/11/2018, its subsequent renewal orders & as enclosed with this letter.

## SUBJECT TO THE FOLLOWING CONDITIONS :-

- a. Location: Village-Mankahari, P.O. Bathia, Tehsil-Rampur Baghelan, Distt. Satna-485111 (M.P.).  
b. The capital investment in lakhs: Rs. 112652  
c. Product & Production Capacity:

Product	CTE Qty./Year	CCA Qty./Year	Applied CCA Qty./Year
Cement	6700000.000 M.T.	6700000.000 M.T.	6700000.000 M.T.
Clinker	3000000.000 M.T.	3000000.000 M.T.	3000000.000 M.T.

Note:- For any change in above industry shall obtain fresh consent from the board.

The Validity of the consent is up to 30/06/2021 and has to be renewed before expiry of consent validity. Online application through XGN with annual license fees in this regard shall be submitted to this office 6 months before expiry of the consent. Board reserves the right to amend/cancel / revoke the above condition in part or whole as and when required.

## Enclosures:-

- \* Conditions under Water Act
- \* Conditions under Air Act
- \* General conditions



e-Signed On 25/04/2020 12:46:42  
(Organic Authentication on AADHAR from UIDAI Server)  
TPAV # KX2Y234S21

R.S. KORI  
Member Secretary



## CONDITIONS PERTAINING TO WATER (PREVENTION & CONTROL OF POLLUTION) ACT 1974 :-

1. The daily quantity of trade effluent generation shall not exceed 0.000 KL/day, and the daily quantity of generation shall not exceed 200.000 KL/day

2. Sewage Treatment :- The applicant shall operate sewage treatment system and maintain the same properly to achieve following standards notified vide GSR No. 1265(E) Dt. 13.10.2017:-

pH	Between	6.5 – 9.0
Suspended Solids	Not exceed	100 mg/l.
BOD <sub>5</sub> Days 27°C	Not exceed	30 mg/l.
COD	Not exceed	250 mg/l.
Oil and grease	Not exceed	10 mg/l.
Fecal Coliform (FC) MPN/100ml	Not exceed	1000

**Note:** Reuse/Recycling of treated effluent shall be encouraged and in cases where part of the treated effluent is reused and recycled involving possibility of human contact, standards as specified above shall apply.

Sr.	Water Code (Quantity in Kld.)	WC : 1290.000	WWG : 200.000	Water Source
1	Cooling Water	1000.000	0.000	Mine Water
2	Domestic Purpose	290.000	200.000	Bore well

3. The sewage shall be treated up to prescribed Standards and reuse in the process, for cooling and for green belt devolvement/gardening within premises. Hence zero discharge condition shall be practiced. In no case treated effluent shall be discharged outside of industry/unit premises.

4. Water meter preferably electromagnetic/ultrasonic type with digital flow recording facilities shall be installed separately for category wise consumption of water for Industrial cooling/boiler feed, mine spray, process & domestic purposes and data shall be submitted online through XGN monthly patrak/statements. The industry/unit shall also monitor the treated wastewater flow and report the same online through monthly patrak/statements.

5. Any change in production capacity, process, raw material used etc. and for any enhancement of the above prior permission of the Board shall be obtained. All authorized discharges shall be consistent with terms and conditions of this consent. Facility expansions, production increases or process modifications which result new or increased discharges of pollutants must be reported by submission of a fresh consent application for prior permission of the Board

6. All treatment/control facilities/systems installed or used by the applicant shall be regularly maintained in good working order and operate effectively/efficiently to achieve compliance of the terms and conditions of this consent

7. Compilation of Monitoring data-

- Samples and measurements taken to meet the monitoring requirements specified above shall be representative of the volume and nature of monitored discharge.
- Following promulgation of guidelines establishing test procedures for the analysis of pollutants, all sampling and analytical methods used to meet the monitoring requirements specified above shall conform to such guidelines unless otherwise specified sampling and analytical methods shall conform to the latest edition of the Indian Standard specifications and where it is not specified the guidelines as per standard methods for the examination of Water and Waste latest edition of the American Public Health Association, New York U.S.A. shall be used.
- The applicant shall take samples and measurement to meet the monthly requirements specified above and report online through XGN the same to the Board.

8. Recording of Monitoring Activities & Results-

- The applicant shall make and maintain online records of all information resulting from monitoring activities by this Consent.
- The applicant shall record for each measurement of samples taken pursuant to the requirements of this Consent as follows:
  - The date, exact place and time of sampling
  - The dates on which analysis were performed
  - Who performed the analysis?
  - The analytical techniques or methods used and
  - The result of all required analysis

iii. If the applicant monitors any Pollutant more frequently as is by this Consent he shall include the results of such monitoring in the calculation and reporting of values required in the discharge monitoring reports which may be prescribed by the Board. Such increased frequency shall be indicated on the Discharge Monitoring Report Form.

**Consent No:AW-51451**





iv. The applicant shall retain for a minimum of 3 years all records of monitoring activities including all records of Calibration and maintenance of instrumentation and original strip chart regarding continuous monitoring instrumentation. The period of retention shall be extended during the course of any unresolved litigation regarding the discharge of pollutants by the applicant or when requested by Central or State Board or the court.

**9. Reporting of Monitoring Results:-**

Monitoring Information required by this Consent shall be summarized and reported by submitting a monthly Discharge Monitoring report on line to the Board.

**10. Disposal of Collected Solid waste/sludge-**

All hazardous waste/sludge shall be disposed of as per the Authorization issued under Hazardous & other waste (M&TM) Rules 2016. And/other Solids Sludges, dirt, silt or other pollutant separated from or resulting from treatment shall be disposed of in such a manner as to prevent any pollutant from such materials from entering any such water. Any live fish, Shell fish or other animal collected or trapped as a result of intake water screening or treatment may be returned to eaters body habitat.

**11. Provision for Electric Power Failure-**

The applicant shall assure to the consent issuing authority that the applicant has installed or provided for an alternative electric power source sufficient to operate all facilities utilized by the applicant to maintain compliance with the terms and conditions of the Consent.

**12. Prohibition of Bypass system of treatment facilities-**

The diversion or by-pass of any discharge from facilities utilized by the applicant to maintain compliance with the terms and conditions of this Consent is prohibited except:

- i. where unavoidable to prevent loss of life or severe property damage, or
- ii. Where excessive storm drainage or run off would damage any facilities necessary for compliance with the terms and conditions of this Consent. The applicant shall immediately notify the consent issuing authorities in writing of each such diversion or by-pass in accordance with the procedure specified above for reporting non-compliance.

13. Industry management shall submit the information online through XGN in reference to compliance of consent conditions.

**Additional Water condition:**

Storm water shall not be allowed to mix with effluent, treated sewage or floor washing. Storm water shall be channelized through separate drain(S) as per natural gradient passing through lined pits each having holding capacity of 10 minutes (Hourly average) of rain fall for its catchment area.

**CONDITIONS PERTAINING TO AIR (PREVENTION & CONTROL OF POLLUTION) ACT 1981 :-**

1. The applicant shall operate air pollution control system and maintain continuously so as to achieve the level of pollutants to the following standards:-

Name of section	Stack height (mtrs.)	Fuel	Control equipment installed	P.M, SO <sub>x</sub> , NO <sub>x</sub> (mg/Nm <sup>3</sup> )
Cement Mill – 2 nos.	49	---	Bag Filter,	30,NA,NA
Coal Mill	65	---	Bag Filter,	30,NA,NA
Cooler Exit	50	---	E.S.P,	30,NA,NA
Raw Mill Kiln	110	Coal & Petcoke	Bag Filter,	30,100,800

2. Ambient air quality at the boundary of the industry/unit premises shall be monitored and reported to the Board regularly on quarterly basis: The Ambient air quality norms are prescribed in MoEF gazette notification no. GSR/826(E), dated: 16/11/09. Some of the parameters are as follows:

- Particulate Matter (less than 10 micron) - 100 µg/m<sup>3</sup> (PM10 µg/m<sup>3</sup> 24 hrs. basis)
- Particulate Matter (less than 2.5 micron) - 60 µg/m<sup>3</sup> (PM2.5 µg/m<sup>3</sup> 24 hrs. basis)
- Sulphur Dioxide [SO<sub>2</sub>] (24 hrs. Basis) - 80 µg/m<sup>3</sup>
- Nitrogen Oxides [NO<sub>x</sub>] (24 hrs. Basis) - 80 µg/m<sup>3</sup>
- Carbon Monoxide [CO] (8 hrs. Basis) - 2000 µg/m<sup>3</sup>

3. The industry shall take adequate measures for control of noise level generated from industrial activities within the premises less than 75 dB(A) during day time and 70 dB(A) during night time.

4. Industry shall provide with each stack port hole with safe platform of 1 meter width with support & spiral ladder/ Stepped ladder with hand rail up to monitoring platform as per specifications given in part-III emission regulation of CPCB. In no case monkey ladder shall be allowed as stack monitoring facility.

5. The industry shall make the necessary arrangements for control of the fugitive emission from any source of emission/section/activities.

6. All other fugitive emission sources such as leakages, seepages, spillages etc shall be ensured to be plugged or sealed or made airtight to avoid the public nuisance.

7. The industry shall ensure all necessary arrangements for control of odour nuisance from the industrial activities or process within premises

8. All the internal roads shall be made pucca to control the fugitive emissions of particulate matter generated due to transportation and internal movements. Good housekeeping practices shall be adopted to avoid leakages, seepages, spillages etc.

9. Industry shall take effective steps for extensive tree plantation of the local tree species within or around the industry/unit premises for general improvement of environmental.

10. Reporting of Monitoring Results:-

Monitoring Information required by this Consent shall be summarized and reported by submitting a monthly emission Monitoring report on line to the Board.

**Additional Air condition:**

- The continuous online monitoring system with all emission sources shall be connected with Environment Surveillance Centre, M.P. Pollution control board Bhopal with online remote calibration facility for real time remote surveillance.
- The industry shall provide pneumatic system for the handling & shall comply with the monitoring protocol as decided by the CPCB for the use of AFR . The industry is permitted to use of Biomass –120 MT, Carbon Black –18000 MT, Polythene waste/Plastic waste/ Pouches etc. –60 MT & Rice Husk –15000 MT per annum as AFR and chemical Gypsum – 75000MT, chemical waste gypsum- 36000 MT per annum as raw material.
- The industry is permitted to use Pet-coke –210000 MT/Annum as feed stock or in the manufacturing process.
- The industry shall furnish the online monthly patrak through XGN separately for indigenous /imported pet coke showing the balance quantity at the start of month, quantity procured during the month, the quantity consumed during the month as feedstock or in the manufacturing Process and the balance quantity in the end of the month.
- Sufficient Arrangements shall be made for the covered storage of Coal/ Pet coke, laterite/bauxite/Red Ochre, Fly ash, Gypsum, Clinkers and AFR. In no case these raw materials shall be stored in open.





## **GENERAL CONDITIONS:**

1. The non hazardous solid waste arresting in the industry/unit/unit premises sweeping, etc. be disposed off scientifically so as not to cause any nuisance/pollution.
2. The applicant shall allow the staff of Madhya Pradesh Pollution Control Board and/or their authorized representative, upon the representation of credentials:
  - a. To inspect raw material stock, manufacturing processes, reactors, premises etc to perform the functions of the Board.
  - b. To enter upon the applicant's premises where an effluent source is located or in which any records are required to be kept under the terms and conditions of this Consent.
  - c. To have access at reasonable times to any records required to be kept under the terms and conditions of this Consent.
  - d. To inspect at reasonable times any monitoring equipment or monitoring method required in this Consent: or,
  - e. To sample at reasonable times any discharge or pollutants.
3. This consent is transferable, in case of change of ownership/management and addresses of new Owner/partner/Directors/proprietor should immediately apply for the same.
4. The issuance of this Consent does not convey any property rights in either real or personal property or any exclusive privileges, nor does it authorise any invasion of personal rights, nor any infringement of Central, State or local laws or regulations.
5. Industry shall install separate electric metering arrangement for running of pollution control devices and this arrangement shall be made in such fashion that any non functioning of pollution control devices shall immediately stop electric supply to the production and shall remain tripped till such time unless the pollution control device/devices are made functional. The record of electricity consumption for running of pollution control equipment shall be maintained and submitted to the Board every month
6. This consent is granted in respect of Water pollution control Act 1974 & Air Pollution Control act, 1981 and does not relate to any other Department/Agencies. License required from other Department/Agencies have to be obtained by the unit separately and have to comply separately as per there Act / Rules.
7. Balance consent fee, if any shall be recoverable by the Board even at a later date.
8. The applicant shall submit such information, forms and fees as required by the board not later than 180 day prior to the date of expiration of this consent.
9. The industry shall establish a separate environmental cell, headed by senior officer of the unit for reporting the environmental compliances. The industry/ Unit shall submit environmental statement for the previous year ending 31st March on or before 30th September every year to the Board.
10. Industry shall obtain membership of Emergency Response Center of the Board if needed.
11. Knowingly making any false statement for obtaining consent or compliance of consent conditions shall result in the imposition of criminal penalties as provided under the Water Act or the Air Act.
12. After notice and opportunity for the hearing, this consent may be modified, suspended or revoked by the Board in whole or in part during its term for cause including, but not limited to, the following:
  - (a) Violation of any terms and conditions of this Consent.
  - (b) Obtaining this Consent by misrepresentation of failure to disclose fully all relevant facts.
  - (c) A change in any condition that requires temporary or permanent reduction or elimination of the authorized discharge.
13. On violation of any of the above-mentioned conditions the consent granted will automatically be taken as canceled and necessary action will be initiated against the industry.

## **Additional condition:**

1. The industry shall operate the Outdoor HD Industrial grade IP (Internet Protocol) Cameras with pan-Tilt-Zoom (PTZ) feature, minimum focal length 30X with night vision facility and temper proof mechanism at suitable location to display all emission sources and effluent discharge point shall be kept operational & in working order and connect the same with Environment Surveillance Centre of MP Pollution control board Bhopal for remote surveillance.
2. The authorization under Hazardous & Other wastes (Management & Transboundary Movement) Rules 2016 will expire on dt. 31.12.2020 & it shall be kept valid. Timely application shall be submitted for the renewal of the same.



## Consent Order

**M.P. Pollution Control Board**  
**E-5, Arera Colony**  
**Paryavaran Parisar, Bhopal - 16 MP**  
**Tele : 0755-2466191, Fax-0755-2463742**

3. Time bound action plan shall be submitted by the industry for ensure improvement in housekeeping by regular movement of sweeping machine. A logbook shall be maintained for the same and arrangement shall also be made for collection of solid waste scattered in the plant premises
4. Industry shall ensure regular operation and maintenance of canyons water foggers installed in the plant. They must be kept in working condition at all times.

Consent as required under the Water (Prevention & Control of Pollution) Act, 1974 & The Air (Prevention & Control of Pollution) Act, 1981 is granted to your industry subject to fulfillment of all the conditions mentioned above. For renewal purpose you shall have to make an application to this Board through XGN at least Six months before the date of expiry of this consent. The applicant without valid consent (for operation) of the Board shall not bring in to use any outlet for the discharge of effluent and gaseous emission.



**e-Signed On 25/04/2020 12:46:42**  
**(Organic Authentication on AADHAR from UIDAI Server)**  
**TPAV # KX2Y234S21**

**R.S. KORI**  
**Member Secretary**

**Consent No:AW-51451**



**ECOMEN LABORATORIES PVT. LTD.**

Flat No. 8, 2nd Floor, Arif Chamber-V, Sector H, Aliganj, Lucknow - 226 024

Phone No. : (91-522) 2746282, 2745726 Telefax No.: (91 - 522) 2745726

E-mail: ravi.bhargava@gmail.com, Website: www.ecomen.in, CIN - U74210UP1989PTC010601, GSTIN : 09AAACE6076H1Z1

**ecoMen**  
LABORATORIES PVT LTD.

An approved Laboratory from Ministry of Environment, Forest and Climate Change, Govt. of India, New Delhi

FORMAT NO. ECO/QS/FORMAT/07

TEST REPORT NO:ECO LAB/WW/1243/11/20

TEST REPORT ISSUE DATE: 25.11.2020

**TEST REPORT OF WASTE WATER\***

**Name of the Company** : M/s. Prism Johnson Ltd.  
**Address of the Company** : Village Mankahari,  
Tehsil Rampur Baghelan  
Distt.Satna ( M.P.)  
**Sampling Method** : APHA/ IS: 3025  
**Sample Collected by** : Mr.Maana Singh  
**Sample Quantity** : As per requirement.  
**Date of Sampling** : 12.11.2020  
**Date of Receiving** : 15.11.2020  
**Date of Analysis** : 15.11.2020 to 25.11.2020  
**Source of Sample** : Mine Workshop after separate Treated Water  
**Sample ID Code** : ELW-12579

Sl. No.	TESTS	PROTOCOL	RESULT	Limits of Detection	G.S.R 1265 (E)
1	pH	APHA, 23 <sup>rd</sup> Ed. 2017, 4500H+ A+B	7.45	2-12	6.5-9.0
2	Total Suspended Solid as TSS (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 2540-D	22.0	5.0-1000	<100.0
3	Oil & Grease as O & G (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 5520 A+B+D	BDL	5.0-600	-
4	Biochemical Oxygen Demand as BOD (mg/l) 3days at 27°C	APHA, 23 <sup>rd</sup> Ed. 2017, 5210 A+B	8.0	5-10000	30.0
5	Chemical Oxygen Demand as COD (mg/l)	APHA, 23 <sup>rd</sup> Ed. 2017, 5220 A+C	54.0	5-50000	-
6.	Fecal Coliform (MPN/100 ml)	APHA, 23 <sup>rd</sup> Ed. 2017, 9221 A + E	Absent	-	<1000

\*The result are related only to item tested.

BDL = Below Detection Limit

  
Analyst  
Authorized Signatory

Ecomen Laboratories Pvt. Ltd.  
Flat No.8 Second Floor Arif Chamber  
Sector-H, Aliganj, Lucknow-226024  
Ph.2746282 Fax-2745726

  
Manager (Q)

9

66690

02/10/20

FORM "O"

803924

[See Rule 29 - F (2) and 29 - L]  
Report of medical examination under rule 29-B.  
(To be issued in triplicate)\*\*

Certificate No.

Certified that Shri/Shrimati\* employed as Helper in P.L.C.  
mine, Form No. 103 has been examined for an initial/periodical\*  
medical examination. He/she appears to be 44 years of age. The findings  
of the examining authority are given in the attached sheet. It is considered that Shri  
/Shrimati Umesh Singh

- ✓ \* (a) is medically fit for any employment in mines.  
✓ \* (b) is suffering from ..... and is medically unfit for  
( i ) any employment in mines  
( ii ) any employment below ground; or  
( iii ) any employment or work.....  
✓ \* (c) is suffering from ..... and should get this disability\*  
cured/controlled and should be again examined within a period of ..... months.  
\*He/she will appear for re-examination with the result of test of ..... \*and the  
opinion of ..... specialist from ..... He/She\* may be  
permitted/not permitted\* to carry on his duties during this period.



Place P.L.C. mines mankahan  
Date 22/10/20

Signature of Examining Authority  
Dr. D. D. Mishra  
मेडिकल सेक्टर  
प्रिजम जॉनसन लिमिटेड  
(सीमेन्ट डीपीजल)  
मनकहरी, रांजना (मोप्रो)

Name and Designation Block Letters

\* Delete whatever not applicable.

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and third copy shall be retained by the examining authority.



# REPORT OF THE EXAMINING AUTHORITY

n for every medical examination whether initial or periodical or re-  
flier cure/control of disability).

rtificate No. ....as a result of medical examination on

rk... Cut mark on Left Thumb



Left thumb impression of candidate  
✓ Good/Fair/Poor

development .  
166.....Cms.  
60.....Kg.

Visual acuity -Distant vision (with or without glasses )

Right eye None Left eye None

any organic disease of eyes NO

night blindness NO

Colour blindness NO

Squint NO

\*to be tested in special cases )

hearing right ear None Left ear None

ny organic disease NO

tory system :

measurement

full inspiration .....9.3.....Cms.

full expiration .....8.7.....Cms.

ory system :

ressure

126/86 mm  
84/74

en :

less

NO  
None

None

NO

s system

None

02/10/20

FORM "O"

[See Rule 29 - F (2) and 29 - L]  
Report of medical examination under rule 29-B.  
(To be issued in triplicate)\*\*

Certificate No.

Certified that Shri/Shrimati\* employed as Helper in PCC  
mine, Form A No. 102 has been examined for an initial/periodical\*  
medical examination. He/she appears to be 44 years of age. The findings  
of the examining authority are given in the attached sheet. It is considered that Shri  
/Shrimati Umesh Singh

- ☒ (a) is medically fit for any employment in mines.  
☒ (b) is suffering from ..... and is medically unfit for  
( i ) any employment in mines  
( ii ) any employment below ground; or  
( iii ) any employment or work.....  
☒ (c) is suffering from ..... and should get this disability\*  
cured/controlled and should be again examined within a period of ..... months.  
\*He/she will appear for re-examination with the result of test of .....\* and the  
opinion of ..... specialist from ..... He/She\* may be  
permitted/not permitted\* to carry on his duties during this period.



Place PCC  
Date Mines Manager's Office  
22/10/20

Signature of examining authority

डॉ० डी० मिश्रा  
एम०० (आर००)  
मेडिकल सेंटर  
ग्रिजम जॉनसन लिमिटेड  
प्रिजम जॉनसन लिमिटेड  
Name and Designation (in Block Letters)  
सत्रकरी, सत्रकरी

\* Delete whatever not applicable.

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and third copy shall be retained by the examining authority.



## REPORT OF THE EXAMINING AUTHORITY

(To be filled in for every medical examination whether initial or periodical or re-examination or after cure/control of disability).

Annexure to certificate No. .... as a result of medical examination on .....

Identification mark... Cut mark on L Thumb



Left thumb impression of the candidate

C Good/Fair/Poor

1. General development .
2. Height .... 1.66 .....Cms.
3. Weight .... 60 .....Kg.
4. Eyes :
  - (i) Visual acuity -Distant vision (with or without glasses )
 

Right eye... Normal
Left eye ... Normal
  - (ii) any organic disease of eyes NO
  - \* (iii) night blindness NO
  - \* (iv) Colour blindness NO
  - \* (v) Squint NO

(\*to be tested in special cases )
5. Ears :
  - (i) Hearing right ear Normal ..... Left ear Normal .....
  - (ii) any organic disease NO
6. Respiratory system :
 

Chest measurement

  - (i) after full inspiration .... 93 .....Cms.
  - (ii) after full expiration .... 87 .....Cms.
7. Circulatory system :
 

Blood pressure 126/86 mm

Pulse 84/m
8. Abdomen :
 

Tenderness NO

Liver Normal

Spleen Normal

Tumour NO
9. Nervous system
 

History of fits or epilepsy NO

Paralysis NO

Mental Health NO
10. Locomotor system
11. Skin Normal
12. Hernia NO
13. Hydrocele NO
14. Any other abnormality NO
15. Urine : Reaction acidic Albumin nil Sugar NO
16. Skiagram of chest
17. Any other "c" test considered necessary by the examining authority NO

Original

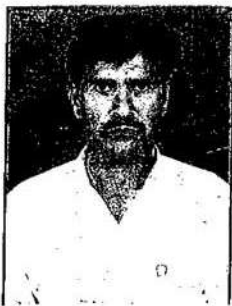
FORM "O"

[See Rule 29 - F (2) and 29 - L]  
Report of medical examination under rule 29-B.  
(To be issued in triplicate)\*\*

Certificate No.

Certified that Shri/Shrimati\* employed as Helper in PCC  
mine, Form No. 103 has been examined for an initial/periodical\*  
medical examination. He/she appears to be 44 years of age. The findings  
of the examining authority are given in the attached sheet. It is considered that Shri  
/Shrimati Umesh Singh

- ☒ (a) is medically fit for any employment in mines.  
☒ (b) is suffering from ..... and is medically unfit for  
(i) any employment in mines  
(ii) any employment below ground; or  
(iii) any employment or work.....  
☒ (c) is suffering from ..... and should get this disability\*  
cured/controlled and should be again examined within a period of ..... months.  
\*He/she will appear for re-examination with the result of test of .....\* and the  
opinion of ..... specialist from ..... He/She\* may be  
permitted/not permitted\* to carry on his duties during this period.



Place PCC mines management  
Date 24/10/20

Signature of examining authority  
Dr. D. S. Mishra  
महोदय (महोदय)  
मेडिकल, डक्टर  
प्रमुख नर्सिंग सिस्टीम  
(होमो डीपार्टमेंट)  
नाम और Designation Block Letters

\* Delete whatever not applicable.

\*\* One copy of the certificate shall be handed over to the person concerned and another copy shall be sent to the manager of the mine concerned by registered post; and third copy shall be retained by the examining authority.

## REPORT OF THE EXAMINING AUTHORITY

(To be filled in for every medical examination whether initial or periodical or re-examination or after cure/control of disability).

Annexure to certificate No. .... as a result of medical examination on .....

Identification mark.. Cut mark on L. Thumb



Left thumb impression of the candidate  
☒ Good/Fair/Poor

1. General development .
2. Height ..... 1.66 .....Cms.
3. Weight ..... 60 .....Kg.
4. Eyes :
  - (i) Visual acuity -Distant vision (with or without glasses )  
 Right eye... Normal... Left eye ... Normal...
  - (ii) any organic disease of eyes No
  - \* (iii) night blindness No
  - \* (iv) Colour blindness No
  - \* (v) Squint No

(\*to be tested in special cases )
5. Ears :
  - (i) Hearing right ear ... Normal... Left ear ... Normal.....
  - (ii) any organic disease No
6. Respiratory system :  
 Chest measurement  
 (i) after full inspiration ... 93 .....Cms.  
 (ii) after full expiration ... 87 .....Cms.
7. Circulatory system :  
 Blood pressure 126/80 mm  
 Pulse
8. Abdomen :  
 Tenderness No  
 Liver Normal  
 Spleen Normal  
 Tumour No
9. Nervous system  
 History of fits or epilepsy No  
 Paralysis  
 Mental Health
10. Locomotor system Normal
11. Skin
12. Hernia Normal
13. Hydrocele No
14. Any other abnormality None
15. Urine : Reaction Acidic Albumin Nil Sugar None
16. Skiagram of chest
17. Any other "c" test considered necessary by the examining authority



*Report of Medical Examination under Mines Rule 29B*  
*(To be used in continuation with Form O)*

State No.

*unemployed*

Station Marks:

*cut mark Lt Thumb*

Function Test (Spirometry)

	Predicted Value	Performed Value	% of Predicted
City	<i>Normal</i>		
City 1	<i>Normal</i>	<i>Normal</i>	
	<i>Normal</i>	<i>Report Attached</i>	
W			

closed *Normal*

*Medical Examination as per the recommendations of  
National Safety Conferences in Mines  
(To be used in continuation with Form O)*

Case No

Identification Marks:

cut mark of thumb

Physical Assessment

S1	
S2	Normal
Additional Sound	
ph (12 leads) findings:	Normal/ Abnormal

Normal

ECG Assessment

findings	Normal/ Abnormal
	Normal

#### 4. Audiometry Finding

Conduction Type	Left Ear	Right Ear
Ear Conduction	<input checked="" type="checkbox"/> Normal/Abnormal	<input checked="" type="checkbox"/> Normal/Abnormal
Bone Conduction	<input checked="" type="checkbox"/> Normal/Abnormal	<input checked="" type="checkbox"/> Normal/Abnormal

Enclosed Audiometry Report

None

#### 5. Pathological/Microbiological Investigations:

S.No	Tests	Findings
1.	Blood- To, De, Hb, ESR, Platelets	<input checked="" type="checkbox"/> WNL/Abnormal
2.	Blood Sugar- Fasting & PP	<input checked="" type="checkbox"/> WNL/Abnormal
3.	Lipid profile	<input checked="" type="checkbox"/> WNL/Abnormal
4.	Blood Urea, Creatinine	<input checked="" type="checkbox"/> WNL/Abnormal
5.	Urine Routine	<input checked="" type="checkbox"/> WNL/Abnormal
6.	Stool Routine	<input checked="" type="checkbox"/> WNL/Abnormal

Enclosed Investigation Reports.

None

#### 6. Special Tests for Mn exposure

Behavioral Disturbances	Present/ Not Present
Speech Defect	<input checked="" type="checkbox"/> Present/ Not Present
Tremor	<input checked="" type="checkbox"/> Present/ Not Present
Adiadocokinesia	<input checked="" type="checkbox"/> Present/ Not Present
Emotional Changes	<input checked="" type="checkbox"/> Present/ Not Present

#### 7. Any other Special Test Required:

None

Signature of the Examination Authority

**डॉ. सी. मिश्रा**  
एडमिनिस्ट्रेटर (अर्थो)  
ऑर्थोपेडिक सर्जन  
एडमिनिस्ट्रेटर (अर्थो)  
ऑर्थोपेडिक सर्जन



Audiometry Findings	
Left Ear	Right Ear
Conduction Type Ear Conduction	Normal/Abnormal
Bone Conduction	Normal/Abnormal

Enclosed Audienary Report

5. Pathological/Microbiological Investigations:

Pathological/Microbiological Investigations.		Findings
S.No	Tests	
1.	Blood- Tc, Dc, Hb, ESR, Platelets	✓ WNL / Abnormal
2.	Blood Sugar- Fasting & PP	✓ WNL / Abnormal
3.	Lipid profile	✓ WNL / Abnormal
4.	Blood Urea, Creatinine	✓ WNL / Abnormal
5.	Urine Routine	✓ WNL / Abnormal
6.	Stool Routine	✓ WNL / Abnormal

Enclosed Investigation Reports.

### 6. Special Tests for Mn exposure

Special Tests for Mn exposure		Present/ Not Present
Neurological Disturbances	Behavioral Disturbances	Present/ Not Present
	Speech Defect	Present/ Not Present
	Tremor	Present/ Not Present
	Adiadocokinesia	Present/ Not Present
	Emotional Changes	Present/ Not Present

7. Any other Special Test Required:

Signature of the Examination Authority

**PRISM JOHNSON LIMITED**

((FORMERLY PRISM CEMENT LIMITED))

Village:-Mankahari, P.O.-Bathia, Tehsil- Rampur Baghelan, Distt.- Satna,  
PIN-485111 (M.P.) India



Phone:-07672-302600, Email:-

**Registration No. : 66690**

**Lab No. : 19-5283**

**Patient Name : Mr. UMESH SINGH**

**Age/Sex : 40Yrs.- /  
Male**

**Doctor: Dr. TRIBHUVAN SINGH**

**Date By: 23-10-2020  
12:15:13 PM**

Test Name	Result	Unit	Normal
LIPID PROFILE			
Total Cholesterol	123.6	mg/dl	130-220
Triglyceride	74.6	mg/dl	75-150
H.D.L.	35.6	mg/dl	30-95
L.D.L.	....	mg/dl	65-135
SERUM CREATININE			
Serum Creatinine	0.81	mg/dl	0.4-1.4
BLOOD SUGAR (F)			
Fasting Blood Glucose	86.8	mg/dl	70-110
BLOOD UREA			
Blood Urea	28.7	mg/dl	10-40
CBC			
HB	14.8	G/DL	12-16
TLC/Total Count Of WBC	6200	/CUMM of Bld.	4000-11000
DLC-NEUTROPHIL	56	%	40-75
LYMPHOCYTE	40	%	20-45
EOSINOPHIL	04	%	0-5
MONOCYTE	00	%	0-6
BASOPHIL	--	%	0-1
E.S.R.	05	/HR.	0-10
Platelet Count	1.20	lakh/cumm	1.5-3.5
R.B.C./Total Count of RBC	4.49	millions./cumm	4.5-6.5
P.C.V.	--	%	33-48
M.C.V.	--	fl	76-96
M.C.H.	--	pg	27-32
M.C.H.C.	--	%	31-35
URINE REPORTS			
REPORT OF URINE	....	FORMAT	-

66690  
ESH SINGH  
UVAN SINGH

Lab No. : 19-5283  
Age/Sex : 40Yrs.- / Male  
Date: 23-10-2020

**:- URINE EXAMINATION :-**

Appearance :- Clear

Reaction :- Acidic

Specific Gravity : 1020

Bili salt :-

Bili Pigment :-

Urobilinogen :-

Other :-



**DIAGNOSTIC REPORT****SRL**  
Diagnostics

CLIENT CODE : C000084392

CLIENT'S NAME AND ADDRESS :  
UMESH SINGH PCL 503924SRL LIMITED  
PRIME SQUARE BUILDING, PLOT NO 1, GAIWADI INDUSTRIAL  
ESTATE, S.V. ROAD, GOREGAON (W)  
Mumbai, 400062  
MAHARASHTRA, INDIA  
Tel : 1-800-222-000,  
CIN - U74899PB1995PLC045956  
Email : connect@srl.in

PATIENT NAME : UMESH SINGH PCL 503924

PATIENT ID : UMESM2709752

ACCESSION NO : 0002SI072240 AGE : 44 Years SEX : Male

DATE OF BIRTH :

DRAWN : 27/09/2020 16:19

RECEIVED : 27/09/2020 16:21

REPORTED : 02/10/2020 15:38

REFERRING DOCTOR : SELF

CLIENT PATIENT ID :

Test Report Status	Final	Results	Biological Reference Interval	Units
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**PRISM JOHNSON- ONSITE PACKAGE****LUNG FUNCTION TEST**

LUNG FUNCTION TEST

WITHIN NORMAL LIMITS

**AUDIOMETRY BASIC**

AUDIOMETRY

HEARING WITHIN NORMAL LIMITS

**BASIC EYE EXAMINATION**

DISTANT VISION RIGHT EYE WITHOUT GLASSES

WITHIN NORMAL LIMIT (6/6)

DISTANT VISION LEFT EYE WITHOUT GLASSES

WITHIN NORMAL LIMIT (6/6)

NEAR VISION RIGHT EYE WITHOUT GLASSES

REDUCE VISUAL ACUITY (N12)

NEAR VISION LEFT EYE WITHOUT GLASSES

REDUCE VISUAL ACUITY (N12)

COLOUR VISION

NORMAL(17/17)

ECG

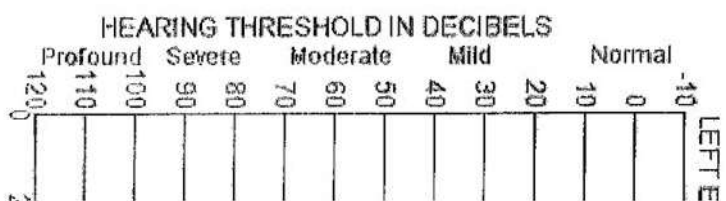
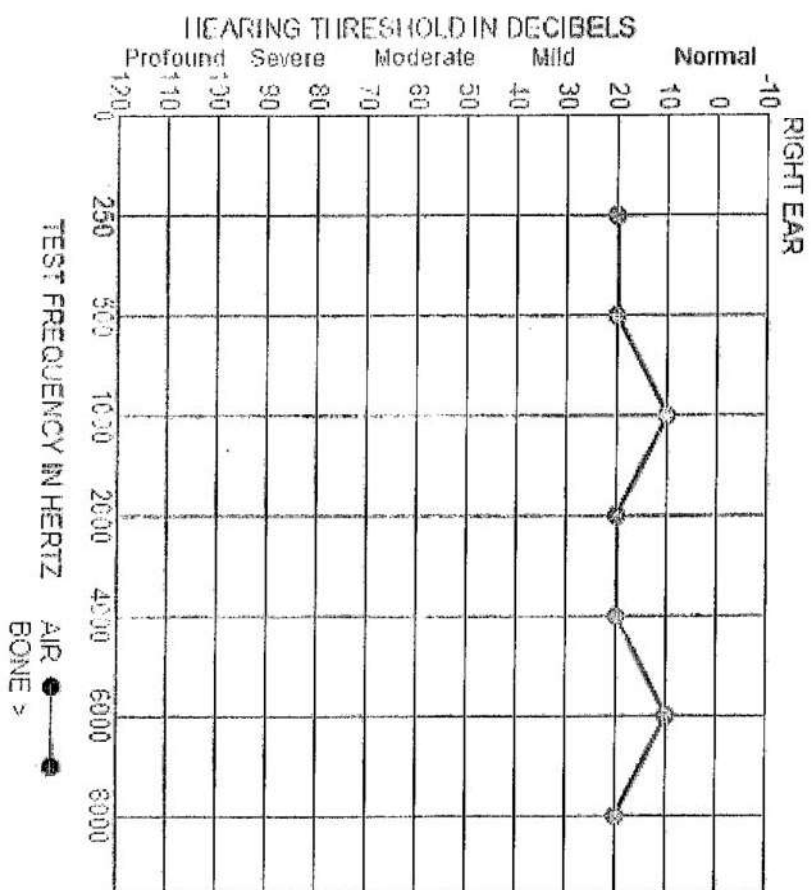
ECG

WITHIN NORMAL LIMITS

**\*\*End Of Report\*\***Please visit [www.srlworld.com](http://www.srlworld.com) for related Test Information for this accessionDr. J N Shukla, MBBS, AFIH  
Consultant Physician

# Screening Test

# AUDIOGRAM



# ECG

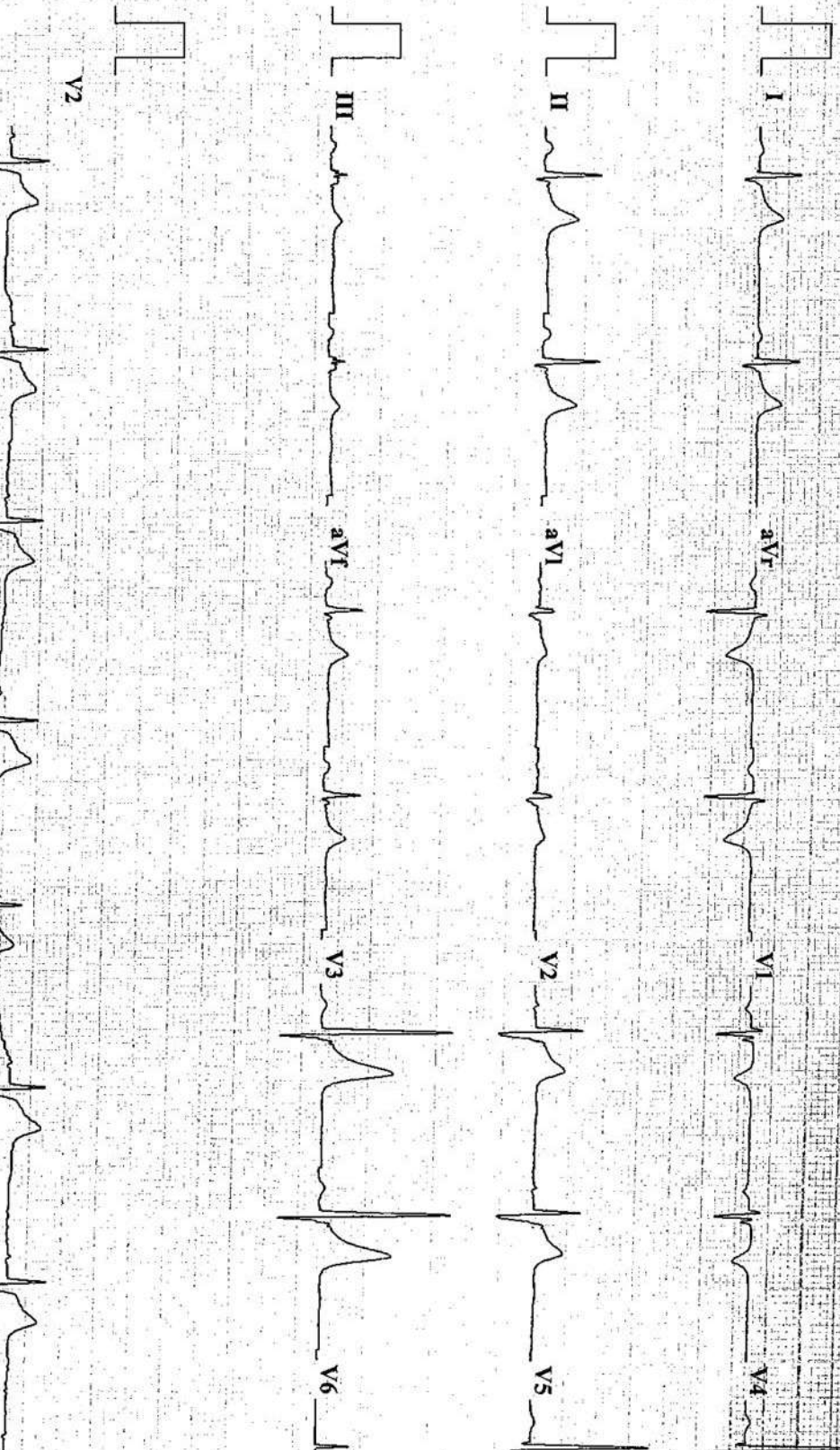
## ELECTROCARDIOGRAM

### ECG

Mr. UMESH SINGH  
ID : 177  
AGE/SEX : 44 Yr / M  
HT/WT : /  
DATE : 20/09/2020 09:30:35 AM  
REF BY : Dr.  
MACHINE INTERPRETATION : Normal ECG.

RATE : 57 bpm  
BP : N/A  
P Axis : 59 deg.  
QRS Axis : 54 deg.  
T Axis : 49 deg.

P Duration : 96 ms  
PR Duration : 168 ms  
QRS Duration : 96 ms  
QT Interval : 356 ms  
QTc Interval : 349 ms





# PULMONARY FUNCTION TEST PFT

## Information

: UMESH SINGH

DATE : 20-09-20 09:03:30

: 44 /M

ID : 177

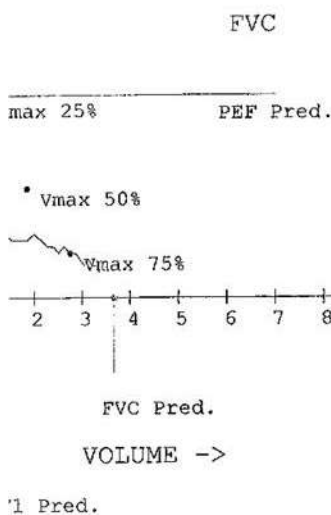
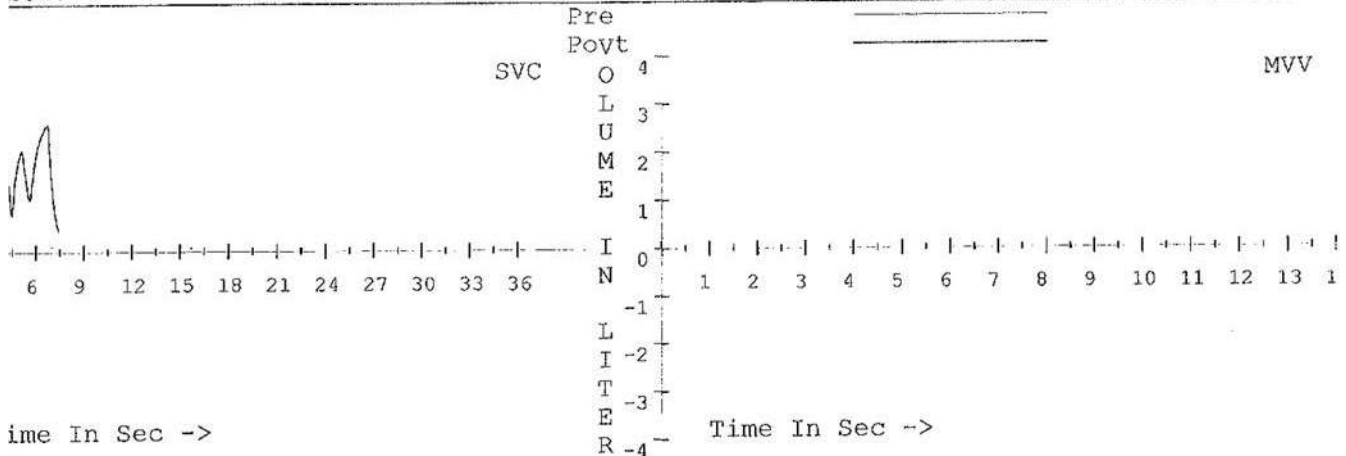
Height : 166

: Dr.

Weight : 60

ion:

Smoker : Non Smoker



Parameter	Pred	Pre	%Pred	Post	%Pred	Dif.%
FVC (L)	3.67	3.54	96.53			
FEV0.5 (L)		1.72				
FEV1 (L)	3.03	2.82	93.07			
FEV1/FVC %	82.70	79.73	96.41			
PEF (L/S)	8.45	5.19	61.37			
PIF (L/S)						
FEF25-75% (L/S)	4.03	2.48	61.65			
VMax25 %	7.32	4.39	59.97			
VMax50 %	4.58	2.79	61.01			
VMax75 %	1.85	1.99	107.90			
FET100 %		1.76				
SVC (L)	3.82	2.15	56.40			
ERV (L)	1.15	0.30	26.36			
IRV (L)		0.72				
Rf (BrPM)		62.72				
VT (L)		1.15				
TI (s)		0.34				
TE(s)		0.61				
VE (I/M)		63.38				
VT/TI(L/S)		3.35				
TI/T.TOT		0.36				
IC		1.87				
MVV	111.32					
FEF50 % (L/S)		2.79				
FIF50 % (L/S)		88.56				
FEF50/FIF50 %		0.03				



# X-RAY REPORT

(4)

DATE... 22/10/2020

NAME Umesh Singh FATHER NAME Ram Chahal Singh  
AGE/SEX 46/M EMP COD 503924  
FACTORY NAME/CONTRACTOR NAME PCL  
DEPARTMENT/ADDRESS maxis

## CHEST X RAY PA VIEW FINDINGS

1>TRACHEAL SHADOW Normal  
2>LUNG FIELD Normal  
3>HILAR SHADOW Normal  
4>BOTH C P ANGLE Normal  
5>CARDIAC SHADOW Normal  
6>VISUALIZED BONE RIB CAGE Normal  
7>IMPRESSION NAD

NAME & SIGNATURE Dr. Anurag Pandey  
Regd. No. 2162 Centre  
Dr. Anurag Pandey  
Regd. No. 2162 Centre  
REGD NO 2162





**PRISM JOHNSON LIMITED**  
**CSR ACTIVITIES EXPENSE SUMMARY FY 2020-21 (01.04.2020 to 31.03.2021)**

(1)	(2)	(3)	(4)	(5)		(6)
Sl. No	Name of the Project	Item from the list of activities in schedule VII to the Act.		Location of the project.		Amount spent on the projects or programs (Rs. In Lacs)
			Local area (Yes/No)	State.	District.	
<b>A.</b>	<b>INFRASTRUCTURE DEVELOPMENT (Rural Infrastructure Development Schedule VII (X))</b>					
<b>1</b>	Construction of WBM road at Adivasi Basti Chulhi villages (1.6 KM)	Rural Infrastructure Development Schedule VII (X)	Yes	Madhya Pradesh	Satna	5.59
<b>2</b>	WBM road Construction Kulhadi (3 KM)		Yes	Madhya Pradesh	Satna	10.77
<b>3</b>	Construction of concrete wall for protection of River Bank along stair case near Jabla Baba Hinauti		Yes	Madhya Pradesh	Satna	8.00
<b>4</b>	Construction of bus shelter at Majhiyar		Yes	Madhya Pradesh	Satna	3.21

5	Construction of bus shelter at Chormari		Yes	Madhya Pradesh	Satna	2.82
6	Renovation of Community Centre at Nagod		Yes	Madhya Pradesh	Satna	4.16
7	Renovation of Community Centre at Majhgawan with providing of chairs		Yes	Madhya Pradesh	Satna	10.36
	<b>SUB TOTAL</b>					<b>44.91</b>
<b>B.</b>	<b>HEALTH &amp; HYGIENE (Health &amp; Hygiene Schedule VII (i))</b>					
1	Free consultation & medicines distribution from PCL Medical centre Out door patient to nearby villagers (Attended 12530 Patients)	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	3.77
2	Organisation eye Camp for cataract patients from nearby villages (20 Nos.)	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	1.90
3	24 hrs. ambulance facility will be provided to nearby villagers free of cost. (Attended 690 Patients)	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	5.50
4	Construction of ODF Toilets at Village Majhiyar (10 no's)	Health & Hygiene Schedule VII (i)	Yes	Madhya Pradesh	Satna	2.19
5	Construction of ODF Toilets at Village Malgaon (10 no's)		Yes	Madhya Pradesh	Satna	2.06
6	Construction of ODF Toilets at Village Narsinghpur (10 no's)		Yes	Madhya	Satna	2.25

				Pradesh		
7	Construction of ODF Toilets at Village Katra Narsinghpur (10 no's)		Yes	Madhya Pradesh	Satna	2.32
8	Operation & Maintenance of Sulabh Complex at Mahurachh Turning (12 months)	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	5.42
9	Financial assistance to Mr. Ambar Tiwari Cancer Patient, for treatment	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	1.00
10	Financial Assistance to Mr. Ramgopal Prajapati for cancer treatment	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	0.50
11	Financial Assistance to Mr. Rajeev Jain, Kidney patient from Ashoknagar on 24.11.2020	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	1.00
12	Providing nutritional food to 133 Children at Rampur Baghelan Block in association with Women & Child Development Program	Eradicating Malnutrition Schedule (i) VII	Yes	Madhya Pradesh	Satna	0.67
13	Repairing and white wash of Primary health Centre at Sijahata (2000 sqft)	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	1.32
14	Repairing and white Veterinary health Centre at Sijahata	Health & Hygiene Schedule (i) VII	Yes	Madhya Pradesh	Satna	0.18



15	Renovation of Ayurvedic Hospital Chormari	Health Hygiene Schedule (i) & VII	Yes	Madhya Pradesh	Satna	4.39
	<b>SUB TOTAL</b>					<b>34.47</b>
<b>C.</b>	<b>WATER CONSERVATION &amp; DRINKING WATER (Safe Drinking Water Schedule VII (i))</b>					
1	Providing water Tankers for drinking purpose as required (Provided 270 tankers)	Safe Drinking Water Schedule VII (i)	Yes	Madhya Pradesh	Satna	2.43
2	Installation of new Hand pump with bore well at Chormari (01 Nos)		Yes	Madhya Pradesh	Satna	0.69
3	Installation of new Hand pump with bore well Majhiyar (01 Nos)		Yes	Madhya Pradesh	Satna	0.70
4	Installation of new Hand pump with bore well at Chulhi village (01 Nos)		Yes	Madhya Pradesh	Satna	0.69
5	Installation of new Hand pump with bore well Baghai (01 Nos)		Yes	Madhya Pradesh	Satna	0.70
6	Installation of new Hand pump with bore well Hinauta (01 Nos)		Yes	Madhya Pradesh	Satna	0.67
7	Installation of new Hand pump with bore well Badhaura (01 Nos)		Yes	Madhya Pradesh	Satna	0.68
	<b>SUB TOTAL</b>					<b>6.56</b>

D.	EDUCATION (Promoting Education Schedule VII (ii))					
1	Renovation of Government Primary School Adiwasi basti Chulhi	Promoting Education Schedule VII (ii)	Yes	Madhya Pradesh	Satna	4.94
2	Renovation of Government Girls Primary School Mankahari		Yes	Madhya Pradesh	Satna	3.51
3	Renovation of Government Primary School Hinauta		Yes	Madhya Pradesh	Satna	3.72
4	Renovation of Govt Higher Sec School Sijahata		Yes	Madhya Pradesh	Satna	7.16
5	Renovation of Govt Higher Sec School Bamhauri		Yes	Madhya Pradesh	Satna	6.88
6	Construction of 65 meter boundary wall at Government Primary School Adiwasi basti Chulhi		Yes	Madhya Pradesh	Satna	3.36
7	Providing of 60 Desk table to Government College Rampur Baghelan	Promoting Education Schedule VII (ii)	Yes	Madhya Pradesh	Satna	2.25
8	Slogan painting for awareness on different themes at near by villages (Total 200 Nos.)	Promoting Education Schedule VII (ii)	Yes	Madhya Pradesh	Satna	0.72
9	Smart class setup at Bamhauri and Sajjanpur Higher Secondary Schools (08 classes)	Promoting Education Schedule VII (ii)	Yes	Madhya Pradesh	Satna	10.37

		<b>SUB TOTAL</b>				<b>42.91</b>
<b>E.</b>	<b>ENVIRONMENT CONSERVATION (Environment Conservation Schedule VII (iv))</b>					
1	Plantation with honey bee structure (100 Nos)	Environment Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	2.67
2	Survival & Maintenance of plantation at Sijahata & Baghai (For 73150 plants)	Environment Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	11.12
3	Survival & Maintenance of Satari village plantation (For 30000 plants)	Environment Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	8.10
4	Irrigation of plantation at nearby villages	Environment Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	4.25
5	Distribution of fruit plant saplings and plantation at Nearby villages (6000 Plants Between July to Oct)	Environment Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	1.12
6	Development and plantation of 18000 saplings at Satari village	Environment Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	8.24
7	De-silting of pond at Malgaon (6000 M <sup>3</sup> )	Conservation of Natural Resources Schedule VII (iv)	Yes	Madhya Pradesh	Satna	4.32
8	De-silting of Sharman Dongari Jamuniya Pond (90M x 35M x 1.5M) - 4725 M <sup>3</sup>		Yes	Madhya Pradesh	Satna	9.13



9	Construction of Single Bore shaft structures at Malgaon	Water Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	1.18
10	Construction of Single Bore shaft structures at Sharman Dongari Jamuniya		Yes	Madhya Pradesh	Satna	1.66
11	Construction of double Bore shaft structures at Malgaon		Yes	Madhya Pradesh	Satna	2.14
12	Construction of Drum based Water Harvesting Structure at Badhaura (100 no's)	Water Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	5.29
13	Construction of Drum based Water Harvesting Structure at Mahurachh (100 no's)		Yes	Madhya Pradesh	Satna	4.96
14	Installation of solar street lights at Baghai - 20 Nos	Environment Conservation Schedule VII (iv)	Yes	Madhya Pradesh	Satna	3.27
15	Installation of solar street lights at Majhiyar -20		Yes	Madhya Pradesh	Satna	3.27
16	Installation of solar street lights at Hinauti -20		Yes	Madhya Pradesh	Satna	3.27
17	Installation of solar street lights at Mankahari - 20		Yes	Madhya Pradesh	Satna	3.27
18	Installation of solar street lights at Sijahata - 20 Nos		Yes	Madhya Pradesh	Satna	3.27
19	Installation of solar street lights at Malgaon - 20		Yes	Madhya	Satna	3.27

				Pradesh		
20	Installation of solar street lights at Hinauta - 10		Yes	Madhya Pradesh	Satna	1.63
21	Plantation of 70000 saplings in forest land at Khamhariya		Yes	Madhya Pradesh	Satna	53.81
22	Purchasing and providing of Garbage Collection Vehicle to Janpad Panchayat Rampur Baghelan		Yes	Madhya Pradesh	Satna	6.59
	<b>SUB TOTAL</b>					<b>145.83</b>
<b>F.</b>	<b>EMPOWERMENT &amp; SKILL DEVELOPMENT Vocational Skill Development Schedule VII (ii)</b>					
<b>1</b>	Training program for driver with license making for at least 100 incumbents (02 Batch of 50 nos.)	Vocational Skill Development Schedule VII (ii)	Yes	Madhya Pradesh	Satna	2.30
<b>2</b>	Training program for Stitching for 50 incumbents from nearby villages. (02 Batch of 25 nos.)	Vocational Skill Development Schedule VII (ii)	Yes	Madhya Pradesh	Satna	4.30

3	Training program for carry bag making for 25 incumbents from nearby villages	Vocational Skill Development Schedule VII (ii)	Yes	Madhya Pradesh	Satna	2.50
4	Training program for Agarbatti making for 25 incumbents from nearby villages	Vocational Skill Development Schedule VII (ii)	Yes	Madhya Pradesh	Satna	2.50
5	Training program for Cotton wick making for 25 incumbents from nearby villages	Vocational Skill Development Schedule VII (ii)	Yes	Madhya Pradesh	Satna	1.50
6	Permanent Driving license making to 69 trainees	Vocational Skill Development Schedule VII (ii)	Yes	Madhya Pradesh	Satna	0.87
7	Setting up of marketing centre (Shop) at Satna for Self Help Group products	Livelihood Development Schedule VII (ii)	Yes	Madhya Pradesh	Satna	4.70
	<b>SUB TOTAL</b>					<b>18.67</b>

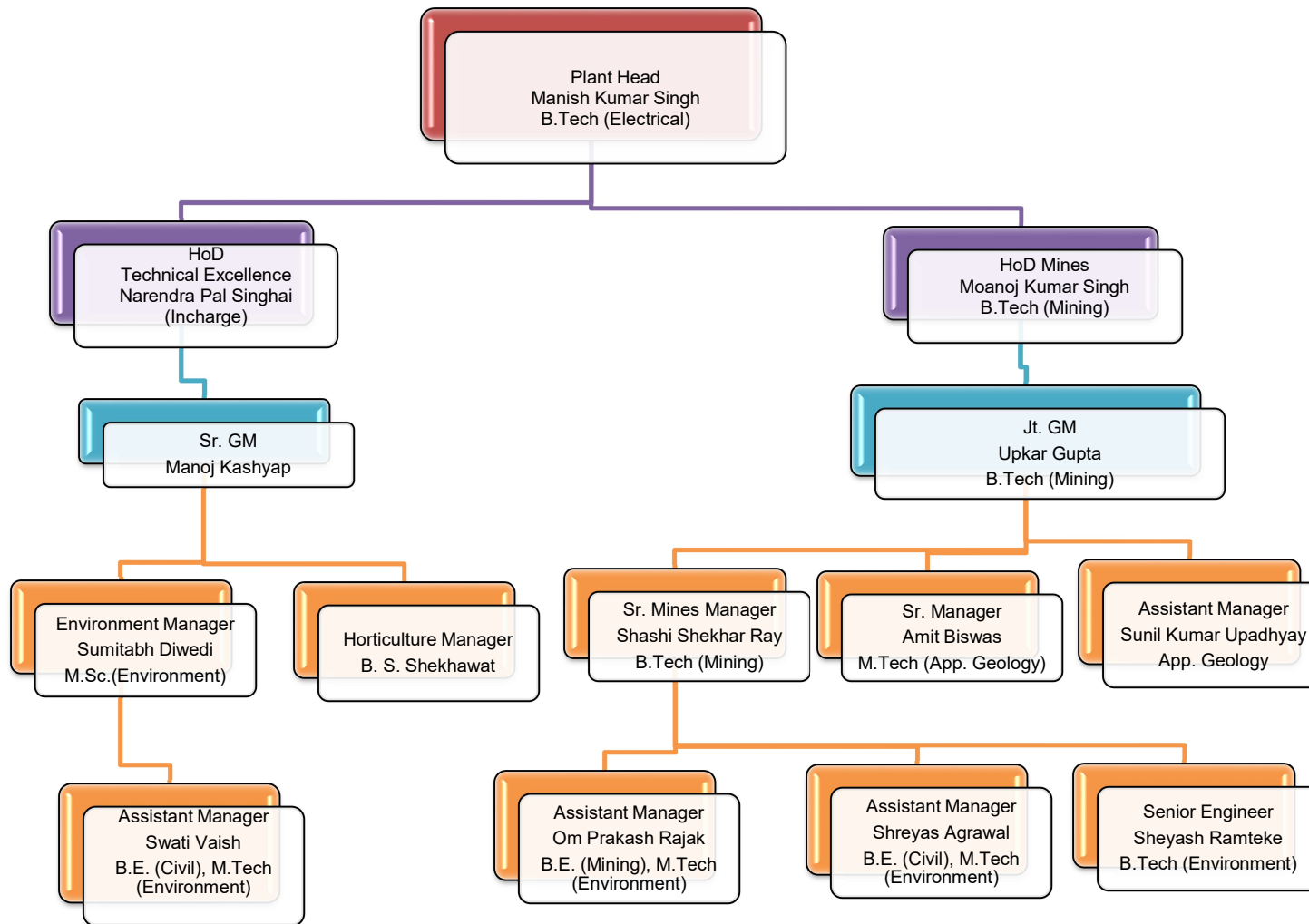


G.	PROMOTION OF SPORT ACTIVITIES (Promotion of Sports Schedule VII (vii))						
1	Construction of main gate at playground Mankahari	Promotion of Sports Schedule VII (vii)	Yes	Madhya Pradesh	Satna	4.54	
2	Construction of covered Pavilion at playground Mankahari	Promotion of Sports Schedule VII (vii)	Yes	Madhya Pradesh	Satna	12.06	
	SUB TOTAL					16.60	
H.	SOCIAL WELFARE Social Welfare Schedule VII (iii)						
1	Facilities for senior citizens, old age homes (1 Activity)	Social Welfare Schedule VII (iii)	Yes	Madhya Pradesh	Satna	6.00	
2	Provided 50 nos. dustbin to district administration Satna under Swatch Bharat Abhiyan	Support to Swatch Bharat Mission Schedule VII (i)	Yes	Madhya Pradesh	Satna	0.26	
3	Distribution of thermo cot innerwear to Sr. Citizens at Satna (200 Nos.)	Social Welfare Schedule VII (iii)	Yes	Madhya Pradesh	Satna	0.51	
4	Financial assistance to Amalgamated Fund	Measure for benefit of Armed forces veterans war widows and their dependents Schedule VII	Yes	Madhya Pradesh	Satna	0.51	

		(vi)				
5	PCR Machine for Covid test to Gandhi Memorial Hospital Bhopal (M.P.)	Disaster Management Schedule VII (xii)	No	Madhya Pradesh	Bhopal	55.00
6	Providing of Sanitizer Hand wash to peoples at Satna (20 ltrs 50 nos)	Disaster Management Schedule VII (xii)	Yes	Madhya Pradesh	Satna	1.10
7	Financial assistance to Keshav Madhav Gau Sewa Sansthan, Bagaha, Satna for arrangement of food items in COVID-19 Lockdown	Disaster Management Schedule VII (xii)	Yes	Madhya Pradesh	Satna	0.11
8	Distribution of 200 food packets in COVID 19 lockdown in Rampur Baghelan	Disaster Management Schedule VII (xii)	Yes	Madhya Pradesh	Satna	0.97
9	Fina. Asst. to Manas Sangh Ramvan, For Corona Pandemic Management	Disaster Management Schedule VII (xii)	Yes	Madhya Pradesh	Satna	5.24

10	Fodder for Gaushala and other animal welfare activities (Mahurachh Gaushala)	Animal Welfare Schedule (iv)	VII	Yes	Madhya Pradesh	Satna	4.00
	<b>SUB TOTAL</b>						<b>73.70</b>
	<b>GRAND TOTAL</b>						<b>383.65</b>







### Expenditure 2020-2021(October'20-March'21)

	Unit I	Unit II
Maintenance of APCEs	49323	468975
Env Monitoring, STP Operation & Maintenance, Plantation Etc.	1006255	365953
APCE Power Consumption	30048681	63432541
Total (INR)	31104258.5	64267469.45





**PRISM CEMENT LIMITED**

Works : Vill-Vasanthnagar, P.O. - Indira, Dist. Sainia - 485 001 (M.P.) India  
Tel. : 0076721 275301-2, 275321-22, Fax : 175303  
Corps. Addl. : "Raydees", Revue Road, Sainia - 485 001 (M.P.) India  
Tel. : 0076721 402726, Fax : 402710



Ref: PCU/ENV/2011/31/U2  
Date: 11.04.2011

To,  
**Regional Director,**  
Ministry of Environment & Forests  
Regional Office, Western Region  
Ravishankar Nagar, Bhopal

Dear Sir,

Sub: Intimation of financial closure of the project  
Your Ref: J-11011/949/2007-1A-II (I) Date 22.09.2008

With reference to above mentioned subject and letter, we would like to inform you that the date of financial closure / commercial production is 01.01.2011. A certificate in this regard is attached.

Thanking you,

Yours faithfully,  
For **PRISM CEMENT LIMITED**

**D.K. Singh**  
Jt. General Manager (Environment)

Enc: as above

मध्यप्रदेश शासन  
जिला व्यापार एवं उद्योग केन्द्र, सतना

क्रमांक/जि.व्या.उके-सत/बृहद उद्योग/2011/

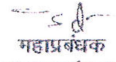
सतना, दिनांक :-

**उत्पादन प्रमाण पत्र**

प्रमाणित किया जाता है कि मेसर्स प्रिज्म सीमेंट यूनिट- 2 (ए यूनिट आफ प्रिज्म सीमेंट लि0) ग्राम मनकहरी पो0 बठिया जिला-सतना (म0प्र0) को भारत सरकार उद्योग मंत्रालय से आई0ई0एम0 पार्ट बी जारी किया गया है जिसका नं0 3406/ आईआईएम/ पीआरओडी/2011 न्यू देहली दिनांक 27-1-11 है। इसमें वर्णित उत्पाद का नाम वार्षिक स्थापित क्षमता एवं उत्पादन दिनांक निम्नानुसार है :-

क्र0	आइटम कोड	उत्पाद का नाम	स्टील कैपिसिटी	व्यवसायिक उत्पादन दिनांक
1--	3242	आल वैराइटीज आफ पोर्टलैण्ड सीमेंट	3600000 टन	1-1-2011
2--	3241	सीमेंट क्लिंकर	2300000 टन	1-1-2011

उपरोक्तानुसार एवं इकाई द्वारा प्रस्तुत किये गये अभिलेखों के आधार पर सीमेंट क्लिंकर की वार्षिक उत्पादन क्षमता 2300000 टन एवं आल वैराइटीज आफ पोर्टलैण्ड सीमेंट की वार्षिक उत्पादन क्षमता 3600000 टन के लिये, व्यवसायिक उत्पादन दिनांक 1-1-2011 है।


  
महाप्रबंधक

जिला व्यापार एवं उद्योग केन्द्र,  
सतना(म0प्र0)

क्रमांक/जि.व्या.उके-सत/बृहद उद्योग/2011/ 65/5--  
प्रतिलिपि :-

सतना, दिनांक :- 31/3/11

मेसर्स प्रिज्म सीमेंट यूनिट- 2 (ए यूनिट आफ प्रिज्म सीमेंट लि0) ग्राम मनकहरी पो0 बठिया जिला-सतना (म0प्र0)।

  
महाप्रबंधक  
जिला व्यापार एवं उद्योग केन्द्र,  
सतना(म0प्र0)  
जि.व्या.उके-सत/बृहद उद्योग कः  
सतना (म0प्र0)

Advertisements given in Newspapers regarding information of Public Hearing.

नव एव देश, सतना, दिनांक 25.05

## आम सूचना

सर्वसाधारण को यह सूचित किया जाता है कि प्रिज्म सीमेंट (यूनिट-II) क्लिंकर प्रोडक्शन 3.0MTPA, सीमेंट प्रोडक्शन 6.7MTPA और माइन्स (हिनीती और सिजहटा 772.067 हे., हिनीती और सिजहटा 99.416 हे., मेढी 117.594 हे. और बगहाई - 512.317 हे.) मनकहरी, पोस्ट-बठिया जिला सतना (म.प्र.) का पर्यावरणीय क्लियरेंस हो गया है। पर्यावरणीय क्लियरेंस हो गया है। पर्यावरणीय क्लियरेंस की प्रति म.प्र. प्रदूषण नियंत्रण बोर्ड एवं पर्यावरण एवं वन मंत्रालय की वेब साइट <http://entor.nic.in> पर उपलब्ध है।

सीएम 3630

देशबन्धु, सतना, दिनांक 25.05.2008

## आम सूचना

सर्व साधारण को यह सूचित किया जाता है कि प्रिज्म सीमेंट (यूनिट-II) क्लिंकर प्रोडक्शन 3.0 एम टी पी ए, सीमेंट प्रोडक्शन 6.7 एम टी पी ए और माइन्स (हिनीती और सिजहटा 772.067 हे., हिनीती और सिजहटा 99.416 हे., मेढी 117.594 हे. और बगहाई 512.317 हे.) मनकहरी, पोस्ट बठिया जिला सतना (म.प्र.) का पर्यावरणीय क्लियरेंस हो गया है। पर्यावरणीय क्लियरेंस की प्रति म.प्र. प्रदूषण नियंत्रण बोर्ड एवं पर्यावरण एवं वन मंत्रालय की वेब साइट <http://entor.nic.in> पर उपलब्ध है।

प्रबंधक  
प्रिज्म सीमेंट लि.  
मनकहरी, जिला सतना म.प्र.