

Ref: OCL/ENV/2025-26/1098

Date: 22.05.2025

To

Director-IA Division,  
Ministry of Environment, Forests & Climate Change,  
Indira Paryavaran Bhavan,  
Jor Bagh Road, New Delhi - 110 003.

Respected Sir,

**Sub:** All EC compliance report of Green field Cement Plant (**Lime Stone Mine 3.0 MTPA**)  
at Chittapur, Gulbarga District by M/S. Orient Cement Ltd:-Reg

Ref no: F. No. J-11015/60/2011-IA-II (M) Dated on 22.09.2014.

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As mentioned in the above cited subject & vide Ref-(1) of our EC condition, M/s Orient Cement Ltd, is hereby submitting your good self the point wise half yearly EC **compliance of Mines** uploaded & submitted online in Parviesh portal of MoEF for the period **October-2024 to March-2025**.

Kindly consider the compliance report & oblige.

Thanking You

Yours faithfully

For Orient Cement Limited



Satyabrata Sharma

President-Manufacturing & Unit Head



Cc:

1. The Additional Principal Chief Conservator of Forests (C)  
Ministry of Environment, Forests & Climate change,  
4th Floor, E & F Wing, Kendriya Sedan  
Koramangala, Bangalore-560 034
2. Secretary to Government  
Department of Ecology & Environment  
Government of Karnataka  
7th floor, Multistoried Building,  
Bangalore 560001
3. Chairman,  
Central Pollution Control Board,  
Parivesh Bhawan, CBD-cum-Office Complex,  
East Arjun Nagar,  
New Delhi - 110 032
4. The Member Secretary,  
Karnataka State Pollution Control Board,  
# 49, 4th & 5th floor,  
Parisara Bhavana,  
Church Street,  
Bangalore - 560 001
- ✓ 5. Environmental officer,  
Karnataka State Pollution Control Board  
Regional office, Kalaburagi,  
Plot No. 12/2, Sy. No:19/P,  
Mansafdar Layout, M.G Road,  
Santraswadi, Kalaburgi-585 101





**Half Yearly Compliance Report**  
**2024**  
**01 Jun(01 Oct - 31 Mar)**

**Acknowledgement**

<b>Proposal Name</b>		Captive Lime stone mine of M/s Orient Cement with Lime stone production of 3.0 million tonnes per annum (ROM) located at itgi and Mogla villages, Chittapur taluk, Gulbarga district, Karnataka	
<b>Name of Entity / Corporate Office</b>		Orient Cement Ltd, Chittapur, Karnataka	
<b>Village(s)</b>		N/A	
<b>District</b>		KALABURAGI	
<b>Proposal No.</b>	IA/KA/MIN/9324/2011	<b>Category</b>	Non-Coal Mining
<b>Plot / Survey / Khasra No.</b>	N/A	<b>Sub-District</b>	N/A
<b>State</b>	KARNATAKA	<b>Entity's PAN</b>	*****5420A
<b>MoEF File No.</b>	J-11015/60/2011-IA.II (M)	<b>Entity name as per PAN</b>	ORIENT CEMENT LIMITED

**Compliance Reporting Details**

**Reporting Year** 2024  
**Remarks (if any)**  
**Reporting Period** 01 Jun(01 Oct - 31 Mar)

**Details of Production and Project Area**

**Name of Entity / Corporate Office** Orient Cement Ltd, Chittapur, Karnataka

	<b>Project Area as per EC Granted</b>	<b>Actual Project Area in Possession</b>
Private	602.054	519
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	602.054	519

**Production Capacity**

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
1	Lime Stone	Million Tons per Annum (MTPA)	31/03/2025	3.0	2.8515	3.0

**Conditions**

## Specific Conditions

Sr.No.	Condition Type	Condition Details
1	Statutory compliance	Environmental clearance for mining shall be for Pit-1 (238.80ha) and Pit-2 (42.10ha) Mining lease may be executed for the area for which EC is accorded. The EC would be subject to project proponent fulfilling the requirement under the provisions of MMDR Act, 1957 and MCR 1960 with regard to reduced mine lease area.
<b>PPs Submission:</b> Complied DMG, Bangalore has granted the mining lease for 519 Ha inclusive of pit 3. The amended EC vide letter No. (EC) F.NO, J-11015/60/2011-IA-II (M) dated: 28/06/2022, inclusive of Pit No.3 as no mining zone submitted to DMG vide letter No. OCEM/CHIT/MINES/02, 06th July 2022.		Date: 22/05/2025
2	GREENBELT	Project Proponent shall carry out only the plantation in the safety area of 500 meters, after spreading topsoil
<b>PPs Submission:</b> Complied Condition being Implemented and plantation/Green belt development are being carried out in the safety area of 500 meters, after spreading topsoil.		Date: 22/05/2025
3	LAND RECLAMATION	A safety zone of 500m from any dwelling or habitation will be left out as no mining area and no blasting will be conducted in this zone
<b>PPs Submission:</b> Complied A safety zone of 500m from dwelling or habitation or village hutment area has already been left as no mining area and no blasting is being conducted in this zone.		Date: 22/05/2025
4	GREENBELT	A bund of about 5m height is to be made along the mining lease boundary on the village side with good width of green belt between village and mining area.
<b>PPs Submission:</b> Complied A bund of about approx. 5.0 Mtr height has been created around the mining lease boundary on the village side area with good width.		Date: 22/05/2025
5	MINING PLAN	Mining will not be done in all sides of Itgi village at one time and will be done in a sequential manner as per mining plan approved by IBM. During these operations all along the safety zone, measures will be taken to prevent air and noise pollution.
<b>PPs Submission:</b> Complied Mining is being done in a sequential manner as per Mining Plan approved by IBM. Necessary measures are being taken to prevent air and noise pollution. As a measure of Noise pollution control, Controlled blasting using Nonel system is being carried out to minimize the vibration and noise. To prevent air pollution, M/s OCL has made wet drilling arrangement and dust extractor system provided in drilling machine. Bag filter is provided at crusher to collect dust. Conveyor belts are totally covered with metal hood. Water spray is being done in hopper and on conveyor belts.		Date: 22/05/2025
6	WATER QUALITY MONITORING AND PRESERVATION	The natural streams (nalas) passing through the mining lease area shall not be disturbed. Further, these streams shall be creation of bunds on both sides, if required. The rain water collected in the mining pit shall be pumped out to the water storage in plant area for use and shall not be discharged into any natural stream or nala.
<b>PPs Submission:</b> Complied Condition being followed and natural stream or nala passing through the mining lease area are not being disturbed and in future also will be protected. The bank of nala has been protected with dry stone pitching. The collected rainwater from mining pit is pumped to the water storage reservoir at		Date: 22/05/2025

		plant through pipeline. M/s OCL Chittapur is having pipeline for conveying the collected rainwater from the mining pit to the water storage reservoir. Through this pipeline the collected rainwater in the mining pit is being pumped out to the water storage reservoir in plant area and will not be discharged to any natural stream or nala.	
7	WATER QUALITY MONITORING AND PRESERVATION	A long term study with at least one year field data on runoff, rain fall, vegetation disturbance and water flow and drainage in all streams of the catchment will be carried out by reputed Institution and recommendations will be implemented within one year of commencement of mining.	
<b>PPs Submission:</b> Complied This study has been already carried out by a reputed Government institution Central University of Karnataka, Kalburgi and all the recommendations have been implemented.			Date: 22/05/2025
8	Statutory compliance	Environmental clearance is subject to obtain clearance under the wildlife (Protection) Act, 1972 from the competent authority, if any, as may be applicable to this project.	
<b>PPs Submission:</b> Complied As the Area does not fall under Forest / Wildlife Sanctuary, obtaining clearance under the wildlife (Protection) Act, 1972 from the competent authority, is not applicable to this project. Kindly exempt this condition.			Date: 22/05/2025
9	Statutory compliance	The project proponent shall obtain Consent to Establish and Consent to Operate from the Karnataka State Pollution Control Board and effectively implement all the conditions stipulated therein.	
<b>PPs Submission:</b> Complied Consent to Establish and Consent to Operate have been obtained from KSPCB and the Conditions stipulated therein are being effectively implemented.			Date: 22/05/2025
10	Noise Monitoring & Prevention	During mining, pollution mitigation measures will be taken up to ensure that the impact on the village and the surrounding area will not occur. Small blasts will be conducted to reduce ground vibrations and noise. Blasted material heaps will be thoroughly wetted before loading to avoid fugitive dust during loading.	
<b>PPs Submission:</b> Complied Conditions being followed and small blasts are being conducted in order to reduce ground vibrations and noise. Prior to the loading of blasted material heaps, the heaps are being thoroughly wetted to avoid fugitive dust during loading.			Date: 22/05/2025
11	AIR QUALITY MONITORING AND PRESERVATION	Effective safeguard measures such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as haul road, loading and unloading point and transfer points. It shall be ensured that the ambient air quality parameters conform to the norms prescribed by the central pollution control board in this regard. Main haulage road in the mine will be provided with permanent water sprinklers and other roads will be wetted with water tanker fitted with sprinklers. Crusher and material transfer points will be provided with bag filters and conveyor will be fully covered to avoid air borne dust.	
<b>PPs Submission:</b> Complied Effective safeguard measures have been carried out in the critical areas prone to air pollution. Regular water Sprinkling arrangements through tankers and permanent water sprinklers have been provided to control fugitive dust emission on Haulage roads. All material loading and unloading points have been provided with water sprinklers and water tankers to suppress the dust generated.			Date: 22/05/2025

Crusher and material transfer points have been provided with bag filters. Crushed limestones are being conveyed to plant by fully covered belt conveyor to avoid air borne dust.		
12	AIR QUALITY MONITORING AND PRESERVATION	Effective safeguard measures such as conditioning of material with water, regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of particulate matter such as around crushing and screening plant, loading and unloading point and transfer points. It should be ensured that the ambient air quality parameters conform to the norms prescribed by the Central Pollution Control Board in this regard.
<b>PPs Submission:</b> Complied Condition is being followed and implemented. Areas prone to air pollution and areas having high levels of particulate matter are being wetted with water tankers fitted with sprinklers. Permanent water sprinklers are also fitted along the main haulage road. All the material loading and unloading points have been wetted with water tankers. Crusher and material transfer points are provided with the bag filters. Conveyor belt is fully covered to avoid spillage and fugitive dust. It is also being ensured that the ambient air quality parameters are confirming to the norms prescribed by the Central Pollution Control Board. Ambient Air Quality Report in Mines for the period October-2024 to March-2025 attached as Annexure-1.		Date: 22/05/2025
13	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of ground water level and quality shall be carried out in around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring ((at least four times a year pre-monsoon (April/May), monsoon (August), post monsoon (November) and winter (January); once in each season)) shall be carried out in consultation with State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the ministry of Environment and forests and its Regional office Bangalore, the Central Ground Water Authority and its Regional Director, Central Ground Water Board. If at any stage, it is observed that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.
<b>PPs Submission:</b> Complied Regular monitoring of ground water level and quality are being carried out by establishing a network of existing wells and installing new piezometers as require. Periodic monitoring (at least four times in a year) are being carried out by MoEFCC recognised and NABL accredited laboratory around the mine lease. The data collected are submitted to the concerned authorities regularly. Recently submitted Report of ground water level and quality vide our letter No. OCL/ENV/2025-26/1073 dated-12/04/2025 to Ministry of Environment and forests and its regional office Bangalore, the Central Ground Water Authority and its Regional Director, Central Ground Water Board.		Date: 22/05/2025
14	WATER QUALITY MONITORING AND PRESERVATION	The project authority shall implement suitable conservation measures to augment ground water resources in the area in consultation with Regional Director, Central Ground Water Board.
<b>PPs Submission:</b> Complied As a suitable conservation measure a reservoir of capacity 5,60,000 Cubic meters has already been developed inside the plant to augment the groundwater. Also, Rainwater harvesting pit with size 50m X 40m with depth 2m has been constructed near south side of the mine lease boundary for ground water recharge.		Date: 22/05/2025
15	AIR QUALITY MONITORING AND PRESERVATION	The Raw material shall be transported through road on 200 dumpers/trucks covered with tarpaulin.
<b>PPs Submission:</b> Complied As ours is the captive Limestone mine, no vehicle is being used for transportation of raw materials		Date:



outside the premises. For internal material transfer, closed conveyors belts are used without needing trucks covered with tarpaulin.		22/05/2025
16	WASTE MANAGEMENT	Appropriate mitigative measures shall be taken to prevent pollution of the Benithora and Kagina river in consultation with the State Pollution Control Board
<b>PPs Submission:</b> Complied No water/wastewater is being discharged from our premises to the rivers /nalla. The specified Benithora and Kagina river is situated far away from our premises with an approx. distance of 15-20Km. Anyhow Appropriate mitigative measures have been taken to prevent pollution by providing suitable drains in order to convey rainwater to the natural water bodies without getting mixed with other water.		Date: 22/05/2025
17	Human Health Environment	Setting up of hospital with satisfactory health care facilities for local residents as per the followings: i). 9/10 bedded Hospital is with necessary equipment and medicines for providing health care facilities to local residents; ii). Three doctors (out of which atleast one will be lady doctor) and necessary paramedical staff will be appointed ; iii). Medical and Health and Hygiene education camps will be organized for nearby villagers periodically; iv). Rs 110lakhs will be spent for launching ICUs on wheels s service with ultra-modern facilities like ECG, EEG, respiratory, Bio-metric monitors etc. Recurring cost of Rs 86 lakhs will be spent during the 10 years period; v). Ambulances/Vehicles will be provided whenever necessary to take the patients to the following nearby hospitals having better medical facilities. Orient Cement is committed to contribute Rs. 57.60 lakhs in the next 10 years for strengthening of this health center. Orient Cement is also committed to contribute Rs 57.20 lakhs in the next 10 years for strengthening of the District Hospital and Rs 54.10 lakhs to Red Cross society at Gulbarga.
<b>PPs Submission:</b> Complied 10 bedded OHC is in operation. The OHC is appointed with male and female medical officers and suitable supporting paramedical staff for company employees and surrounding villages. Appropriate Medical and Health and Hygiene education camps are being organized for nearby villagers periodically. Company owned Ambulance facility is already provided as and when required for the inhabitants of the villages, who cannot come to the hospitals on their own for getting medical aid facilities. Complied and remaining amount will be complied in phase manner.		Date: 22/05/2025
18	PUBLIC HEARING	With regard to the R and R plan i). There shall be (no Habitation or dwellings within the mine lease area. ii). Land sellers are paid as per compensation package fixed/decided by the tripartite committee comprising of project proponent, land sellers and district authorities in the presence of local legislator and other leaders, and agreed upon by all. iii). Gainful employment to the land sellers directly or through its agencies, within the needs of the company. iv). Preference to local people for the various jobs as per qualifications and suitability. v). Initiated necessary training activity by identifying 40 local people and sending them for training in various trades at L/T Training center and will be absorbed in various jobs in the project; vi). As part of CSR activities, Rs 74 crores will be spent in the first ten years of the project; vii). Welfare measures in the fields of education, health, hygiene and sanitation, community mobilization, livelihood promotion and capability building etc., of the local population.
<b>PPs Submission:</b> Complied As per the approved mining plan, within 05 years the benches shall not attain its ultimate position thus reclamation is not possible within five years. i) No dwelling or habitation within the mine lease area. ii) The compensation rate for the land is finalized by the district administrating authority after		Date: 22/05/2025

		<p>discussing with landowners to their satisfaction and some has been paid by Orient Cement Ltd to the land seller. iii) Employment is provided to the land sellers either directly or indirectly but within the premises of the company. iv) Preference to locals has been given and based on their qualification company has provided either direct or indirectly employment to the Land seller. v) Initiated necessary training activity to the local people and OCL is sending them for training in various trades at Training center to create employability. vi) As a part of CSR-R and R activity and welfare measures, Orient Cement Ltd is carrying out the CSR activity in and around the villages of cement plant and has spent approx. amount of Rs. 6223.25229Lakh as on March-2025. FY 2024-25 alone for the period October-2024 to March-2025 M/s OCL has spent Rs. 815.13619 Lakhs towards CSR-R and R expenses.. For the period of October-2024 to March-2025 expenses are attached as in Annexure-II</p>	
19	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of water quality upstream and downstream of adjoining water bodies shall be carried out and record of monitoring data should be maintained and submitted to Ministry of Environment and Forests, its Regional office, Bangalore, Central Groundwater Authority, Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.	
<p><b>PPs Submission:</b> Complied</p> <p>Regular monitoring of water quality upstream and downstream of adjoining water bodies is being carried out by MoEFCC recognized and NABL accredited laboratory National Analytical Research laboratory, Bangalore and record of monitoring data is being maintained and submitted to State Pollution Control Board. Recently submitted Report vide our letter No. OCL/ENV/2025-26/1077 dated-12/04/2025 for upstream and downstream of adjoining water bodies to Ministry of Environment and forests and its Regional office Bangalore, the Central Ground Water Authority and its Regional Director, KSPCB, Central Ground Water Board.</p>			Date: 22/05/2025
20	WASTE MANAGEMENT	There shall be scientific method for the solid waste management which will be in the form of black cotton soil and lateritic soil. The top soil of 5.05 million m3 will be generated out of which 5.01 million m3 will be backfilled in 18.40ha of mined out area and 0.04 million m3 will be disposed in 9.35 ha by bund formation along SW of pit in the safety zone of village to the height of 10m. Further, 16.2 million m3 of waste (subgrade limestone) will be generated and backfilled in 64.44 ha of mined out area. Ground Water Level is 80m below the general ground water level (340 MSL)	
<p><b>PPs Submission:</b> Complied</p> <p>Scientific method for the solid waste management is being followed, where in the generated top soil and Overburden quantity of 1174763 Tonnes (up to End of March 2025), 80 percent is used concurrently for plantation while OB waste quantity will be used for making nala safety bund, village safety bund and formation bunds along the lease boundary for green belt development. The remaining soil is stocked in the mine lease in the earmarked site, for better usage.</p>			Date: 22/05/2025
21	MISCELLANEOUS	Compliance status shall be submitted to the Ministry of Environment, Forests and Climate change and its regional office located at Bangalore on six monthly bases.	
<p><b>PPs Submission:</b> Complied</p> <p>All the six-monthly Compliance status is being submitted to the Ministry of Environment, Forests and Climate change and its regional office located at Bangalore. Soft Copy of all EC compliance report of Mines for the period April-2024 to September-2024 was uploaded in PARIVESH portal dated 30-11-2024 sent via mail dated 03-12-2024 12:21 PM and hard copy was submitted vide our letter no OCL/ENV/2024-25/1006 dated 03-12-2024.</p>			Date: 22/05/2025
22	WASTE MANAGEMENT	ETP shall also be provided for workshop and wastewater generated during the mining operation	

<b>PPs Submission:</b> Complied ETP has been provided with Oil separation chambers. There will not be any wastewater generation during mining operation. Only domestic wastewater is being generated at mines office, mines workshop, rest shelter etc., That wastewater generated is being treated at Soak Pit.		Date: 22/05/2025
23	MISCELLANEOUS	Digital processing of the entire lease area using remote sensing technique shall be carried out regularly once in three years for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional office, Bangalore.
<b>PPs Submission:</b> Complied Digital processing of the entire lease area using remote sensing technique has been carried out for monitoring land use pattern and report submitted to Ministry of Environment and Forests and its Regional office, Bangalore, Vide Letter no. OCL/ILM/EC/2024/001, dated 30th July 2024.		Date: 22/05/2025
24	AIR QUALITY MONITORING AND PRESERVATION	Regular monitoring of ambient air quality shall be carried out and records maintained
<b>PPs Submission:</b> Complied Regular monitoring of ambient air quality is being carried out by MoEFCC recognised and NABL accredited laboratory National Analytical Research Laboratory, Bangalore, and records of the same are being maintained. Average results of ambient air quality report of mines for the period October 2024 to march 2025 attached as Annexure-I		Date: 22/05/2025
25	Human Health Environment	Pre-placement medical examination and periodical medical examination of the workers engaged in the project shall be carried out and records maintained. For the purpose, schedule of health examination of the workers should be drawn and followed accordingly.
<b>PPs Submission:</b> Complied Regular Pre-placement medical examination and periodical medical examination of the workers engaged in the project are being carried out and records are maintained accordingly. 1. Around 103 nos of Eye Examination for the Drivers, Locomotive operators completed. 2. Medical examination for Food Handlers of canteen workers carried out in the month of April 2024 to September 2024. Total 41- employees check-up has been carried out. 3. Preplacement medical Examination for employees, workmen has carried out for 196 no.s. 4. Around 1778 no.s of Pre-Medical examination has been carried out for workmen ,contract workmen-163 members.		Date: 22/05/2025
26	PUBLIC HEARING	Implementation of action plan on issues raised during public hearing.
<b>PPs Submission:</b> Complied The company is complying with the commitments made during public hearing.		Date: 22/05/2025
<b>General Conditions</b>		
Sr.No.	Condition Type	Condition Details
1	Noise Monitoring & Prevention	Measures should be taken for control of noise levels below 85dBA in the work environment. Workers engaged in operations of HEMM, etc., should be provided with ear plugs/muffs.
<b>PPs Submission:</b> Complied Noise level is being regularly monitored. In the work environment, the workers are provided with Ear plugs / Muffs. The Average noise levels for the period October-2024 to March-2025 are well within the limits for the areas specified as in Annexure-VI.		Date: 22/05/2025

2	WASTE MANAGEMENT	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.
<b>PPs Submission:</b> Complied There is no wastewater generation during mining operation. Only domestic wastewater will be generated at mines office, mines workshop, rest shelter etc., That wastewater is being treated at Soak Pit. ETP has been installed with Oil and grease trap for treating the wastewater discharged from Workshop.		Date: 22/05/2025
3	MINING PLAN	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment and Forests.
<b>PPs Submission:</b> Complied Noted. No change in mining technology and scope of working will be carried out without prior approval of the Ministry of Environment and Forests. Mining is being done in accordance with the Approved Mining Plan / Review of Mining plan.		Date: 22/05/2025
4	MINING PLAN	No change in the calendar plan including excavation, quantum of limestone mineral and waste should be made.
<b>PPs Submission:</b> Complied No change in the calendar plan including excavation, quantum of limestone mineral and waste will be made.		Date: 22/05/2025
5	MINING PLAN	A final mine closure plan along with details of corpus fund shall be submitted to the Ministry of Environment, Forests and Climate change 5 years in advance of final mine closure for approval.
<b>PPs Submission:</b> Complied Final Mine Closure Plan with details of Corpus Fund will be submitted to the Ministry of Environment, Forests and Climate Change 5 years in advance of final mine closure for approval.		Date: 22/05/2025
6	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall ensure that no natural water course and/or water resources are obstructed due to any mining operations. Adequate measures shall be taken for protection of the 1st order and 2nd order streams, if any emanating/passing through the mine lease during the course of mining operation
<b>PPs Submission:</b> Complied No natural water course is obstructed due to any mining operations. No construction activity is being carried out near the Natural water course.		Date: 22/05/2025
7	LAND RECLAMATION	The top soil, if any shall temporarily be stored at earmarked site(s) only and it should not be kept unutilized for long. The topsoil shall be used for land reclamation and plantation.
<b>PPs Submission:</b> Complied All the generated topsoil shall be concurrently utilized by spreading over the bunds and afforested area for plantation and green belt development.		Date: 22/05/2025
8	LAND RECLAMATION	The overburden (OB) generated during the mining operation shall be temporarily stacked at earmarked dumpsite(s) only for the purpose of backfilling. Monitoring and management of rehabilitated areas should continue until the vegetation becomes self-sustaining. Compliance status should be submitted to the Ministry of Environment, Forests and Climate Change and its Regional Office,



		Bangalore on six monthly basis.	
		<b>PPs Submission: Complied</b> Circular OB dump with terrace is made stacked at earmarked site and a RR drystone toe wall for a length of 371m is constructed at below the topsoil dump to check flow of loose material from the dumps and non-active sites are stabilized by thick plantation along the slopes of over burden dump. Total 36nos Random rubble checks has been constructed at 50m intervals in the garland drain to arrest the silt. In the year 2023-24 and 2024-25, an RR dry stone toe wall has been constructed for a length of 715 meters at the additional OB dump (OD-5). Additionally, a garland drain with a suitable gradient has been made for a length of 435 meters around the OD-5 dump, and 1160 meters of catchment drains have been made along the working pit to avoid surface runoff in to the mine. Monitoring and management of dump is continued so as to have self-sustaining vegetation. Compliance status has been submitted to MoEF and its regional office on half- yearly basis.	Date: 22/05/2025
9	WATER QUALITY MONITORING AND PRESERVATION	Catch drains and siltation ponds of appropriate size shall be constructed for the working pit, temporary OB and mineral dumps to arrest flow of silt and sediment directly into the Kagina River and Benithora River and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc., and The drain should be regularly desilted particularly after the monsoon and maintained properly.	
		<b>PPs Submission: Complied</b> Catch drains and siltation ponds of appropriate size has been constructed, no run off water and sediments flow directly in to Benithora and Kagina river and other water bodies as the water bodies are located 15-20Km away from the mine lease area The rainwater collected is being used for dust suppression and green belt development. The drains are desilted and maintained properly before every monsoon.	Date: 22/05/2025
10	Human Health Environment	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.	
		<b>PPs Submission: Complied</b> Persons working in dusty areas are been provided with dust mask and adequate training and information on safety and health aspects are provided.	Date: 22/05/2025
11	WATER QUALITY MONITORING AND PRESERVATION	Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and temporary over burden dumps to prevent run off of water and flow of sediments directly into the Benithora and Kagina river and other water bodies and sump capacity should be designed keeping 50 percent 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 shall also provide adequate retention period to allow proper settling of silt material. Sedimentation pits shall be constructed at the corners of the garland drains and de-silted at regular intervals.	
		<b>PPs Submission: Complied</b> Garland drains with appropriate size with suitable gradient is constructed to avoid runoff water into the mines. A toe wall for the Over Burden dumps is constructed as per proposal in IBM Approved Plan to prevent run off water. No runoff water and sediments flow directly in to Benithora and Kagina river and other water bodies as the water bodies are located 15-20Km away from the mine lease area.	Date: 22/05/2025
12	MINING PLAN	Dimension of the retaining wall at the toe of the temporary OB dumps and the OB benches within the mine to check run-off and siltation should be based on the rainfall data.	

<b>PPs Submission: Complied</b> Dimension of the retaining wall at the toe of the temporary OB dumps and the OB benches (terraces) within the mine to check run-off and siltation is constructed as per IBM Approved Plan.		Date: 22/05/2025
13	GREENBELT	Plantation shall be raised in a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, around water body, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should around 2500plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.
<b>PPs Submission: Complied</b> At present we have planted 58914 saplings in mines lease area till end of March 2025, with a Survival rate of approx. 82.39 percent inside lease area. Green belt along the mine lease area is being developed in a phase wise manner as per IBM Approved Mining Plan.Details of Tree plantation in Mines area from 2015-16 to March 2025 is enclosed as Annexure-IV Type of Saplings planted in 23.33 Ha till End of March-2025: - Acacia, Neem, tamarind, Ashok, People tree, Big neem,Catappa(Badam), Cassia siamea, Delonix regia(Gulmohar Conacorporus) , Custard Apple,Bamboo.		Date: 22/05/2025
14	AIR QUALITY MONITORING AND PRESERVATION	Effective safeguard measures, such as regular water sprinkling shall be carried out in critical areas prone to air pollution and having high levels of PM10 and PM2.5 such as around crushing and screening plant, loading and unloading point and all transfer points. Extensive water sprinkling shall be carried out on haul roads. It should be ensured that the ambient air quality parameters conform to the norms prescribed by the central pollution control board in this regard.
<b>PPs Submission: Complied</b> Limestone crusher is operating with high efficiency bag filters and particulate emission is below 30 mg/Nm3. Water sprinkling is done on haul roads, loading, and unloading points and water sprinkling system provided at crushing operations and transfer points of belt conveyer for controlling fugitive emissions. The Avg Emission Level of LS Crusher Stack For the period October-2024 to March-2025 is 7.13 mg/Nm3.		Date: 22/05/2025
15	WATER QUALITY MONITORING AND PRESERVATION	The project authority should implement suitable conservation measures to augment ground water resources in the area in consultation with the regional director, central ground water board.
<b>PPs Submission: Complied</b> As a suitable conservation measure a reservoir of capacity 5,60,000 Cubic meters has already been developed inside the plant to augment the groundwater. Also, Rainwater harvesting pit with size 50m X 40m with depth 2m has been constructed near south side of the mine lease boundary for ground water recharge. OCL is also here by submitting the piezometer report to CGWA office. Recently submitted Report vide our letter No. OCL/ENV/2025-26/1073 dated-12/04/2025 for ground water level.		Date: 22/05/2025
16	WATER QUALITY MONITORING AND PRESERVATION	Regular monitoring of ground water level and quality shall be carried out in around the mine lease by establishing a network of existing wells and installing new piezometers during the mining operation. The periodic monitoring ((at least four times a year pre-monsoon (April/May), monsoon (August), post monsoon (November) and winter (January); once in each season)) shall be carried out in consultation with State Ground Water Board/Central Ground Water Authority and the data thus collected may be sent regularly to the ministry of Environment and forests and its Regional office Bangalore, the Central Ground Water Authority and its Regional Director, Central Ground Water Board. If at any stage, it is observed

		that the groundwater table is getting depleted due to the mining activity; necessary corrective measures shall be carried out.	
	<b>PPs Submission:</b> Complied Regular monitoring of ground water level and quality are being carried out in and around the mine lease by establishing a network of existing wells by MoEFCC recognised and NABL accredited laboratory, National analytical Research Laboratory, Bangalore, the data collected are submitted to the concerned authorities regularly. Recently submitted Report of ground water level and quality vide our letter No. OCL/ENV/2025-26/1073 dated-12/04/2025 to Ministry of Environment and forests and its regional office Bangalore, the Central Ground Water Authority and its Regional Director, Central Ground Water Board.		Date: 22/05/2025
17	AIR QUALITY MONITORING AND PRESERVATION	Vehicular emission shall 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 mineral transportation shall be carried out through the covered trucks only and the vehicles carrying the mineral shall not be overloaded.	
	<b>PPs Submission:</b> Complied Vehicles emissions are being monitored regularly to bring down the emission levels. Further following measures have been taken to reduce the Vehicular emission i.e., by speed regulation and regular preventive maintenance of the vehicles at mines.		Date: 22/05/2025
18	MINING PLAN	Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	
	<b>PPs Submission:</b> Complied Blasting operations are carried out only during the daytime. For ground vibration control we have adopted and implemented a method of Conventional blasting using high explosives and ANFO with use of millisecond delay/NONEL to prevent the fly rocks, noise and to reduce ground vibration. Rock breaker is used instead of secondary blasting		Date: 22/05/2025
19	AIR QUALITY MONITORING AND PRESERVATION	Drills shall either be operated with dust extractors or equipped with water injection system	
	<b>PPs Submission:</b> Complied Complied. The drilling equipment is inbuilt with Cyclonic dust collector system and Water injection system.		Date: 22/05/2025
20	AIR QUALITY MONITORING AND PRESERVATION	Mineral handling area shall be provided with the adequate number of high efficiency dust extraction system. Loading and unloading areas including all the transfer points should also have efficient dust control arrangements. These should be properly maintained and operated.	
	<b>PPs Submission:</b> Complied Mineral Handling area such as Limestone crusher is operating with high efficiency bag filters and particulate emission is below 30 mg/Nm3. Water sprinkling arrangement is done at all the loading and unloading area and haul roads. Water sprinkling systems are provided for crushing operations and transfer points of belt conveyer for controlling fugitive emissions.		Date: 22/05/2025
21	Human Health Environment	Provision shall be made for the housing of construction labour within the site with all necessary infrastructure and facilities such as fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, creche etc., The housing may be in the form of temporary structures to be removed after the completion of the project.	

<b>PPs Submission:</b> Complied Separate provision is made for the housing of construction labour within the site with all necessary infrastructure and facilities. Safe drinking water and medical facilities are also provided. Temporary structures will be removed after the completion of the project.		Date: 22/05/2025
22	AIR QUALITY MONITORING AND PRESERVATION	The critical parameters such as PM10 (size less than 10micro meter), PM2.5 (size less than 2.5micro meter), NOx in the ambient air within the impact zone, peak particle velocity at 300m distance or within the nearest habitation, whichever is closer shall be monitored periodically. Further, quality of discharged water shall also be monitored ((TDS, DO, PH and Total Suspended Solids (TSS)). The monitored data shall be uploaded on the website of the company as well as displayed on a display board at the project site at a suitable location near the main gate of the company in public domain. The circular no. J-20012/1/2006-IA.II (M) dated 27.05.2009 issued by Ministry of Environment and Forests, which is available on the website of the ministry WWW.envfor.nic.in shall also be referred in this regard for its compliance.
<b>PPs Submission:</b> Complied The critical parameters such as PM10, PM2.5 SO2, NOx and CO in the ambient air within the impact zone or within the nearest habitation, whichever is closer are being monitored periodically. The results of AAQ For the period October-2024 to March-2025 are attached as in Annexure-V. Regarding water quality, we are not discharging any water from Mines, the only water generated in Mines is from Water Closets and Urinals, which is being treated in soak pit. Reports of the same will be updated on the company website.		Date: 22/05/2025
23	GREENBELT	Conservation measures for protection of flora fauna in the core and buffer zone should be drawn up in consultation with the local forest and wildlife department and effectively implemented.
<b>PPs Submission:</b> Complied No such flora and fauna exists in the zones as the area does not fall under forest land. Kindly exempt this condition.		Date: 22/05/2025
24	AIR QUALITY MONITORING AND PRESERVATION	Four ambient air quality monitoring stations should be established in the core zone as well as in the buffer zone for PM10, PM2.5, SO2 and NOx monitoring. Location of the stations should be decided based on the meteorological data, topographical features and environmentally and ecological sensitive targets and frequency of monitoring should be undertaken in consultation with the state pollution control board
<b>PPs Submission:</b> Complied Four ambient air quality monitoring stations have been established in the core zone as well as in the buffer zone for PM10, PM2.5, SO2 and NOx monitoring. The data of the same is being submitted to KSPCB office regularly. The recently submitted report is vide our letter OCL/ENV/2025-26/1077 dated 12/04/2025.		Date: 22/05/2025
25	AIR QUALITY MONITORING AND PRESERVATION	Data on ambient air quality (PM10, PM2.5, SO2 and NOx and other pollutant as per CPCB notification) should be regularly submitted to the ministry of environment and forests including its regional office located at Bangalore and the state pollution control board/central pollution control board once in six months.
<b>PPs Submission:</b> Complied We are regularly monitoring the ambient air quality and regularly submitting reports to the Ministry including its Regional office at Gulbarga and to the State Pollution Control Board. Soft Copy of all EC compliance report of Mines for the period April-2024 to September-2024 was uploaded in PARIVESH portal dated 30-11-2024 sent via mail dated 03-12-2024 12:21 PM and hard copy was		Date: 22/05/2025



submitted vide our letter no OCL/ENV/2024-25/1006 dated 03-12-2024.		
26	AIR QUALITY MONITORING AND PRESERVATION	Fugitive dust emissions from all the sources should be controlled regularly. Water spraying arrangement on haul roads, loading and unloading and at transfer points should be provided and properly maintained.
<b>PPs Submission:</b> Complied We are monitoring the fugitive dust emissions quarterly at haul road, loading and unloading points, drilling and near transfer house. We have provided water spraying arrangement on haul road, loading, and unloading points.		Date: 22/05/2025
27	Human Health Environment	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.
<b>PPs Submission:</b> Complied Surveillance program of the workers are being undertaken periodically. Periodical medical examination of employees is being done on regular basis as per DGMS norms.		Date: 22/05/2025
28	Corporate Environmental Responsibility	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a senior executive, who will report directly to the head of the organization.
<b>PPs Submission:</b> Complied A separate Environment cell is provided with well qualified Engineers (2 persons) holding M.Tech Degree in Environment Engineering to carryout various activities like Analysis of Water and Waste Water, stack emission monitoring, Ambient air quality monitoring, Noise monitoring at plant boundaries and machineries , Report preparation and Compliances etc.,. The Environment Cell is set up under senior Executives of VP-Sustainability and VP-Operation who is reporting directly to the Head of the organization.		Date: 22/05/2025
29	Corporate Environmental Responsibility	The funds earmarked for environmental protection measures should be kept in separate account and should not be diverted for other purpose. Year wise expenditure should be reported to the ministry of environment and forests and its regional office located at Bangalore.
<b>PPs Submission:</b> Complied The condition will be followed / implemented. The year wise expenditure is being submitted to the Ministry of Environment and Forests and its Regional office located at Gulbarga. Recently submitted data is vide our letter no OCL/ENV/2025-26/1097 dated 22/05/2025		Date: 22/05/2025
30	MISCELLANEOUS	The project authorities should inform to the regional office located at Bangalore regarding date of financial closures and final approval of the project by the concerned authorities and the state of land development work.
<b>PPs Submission:</b> Complied Date of financial closure and date of commencing land development work will be informed in due course to the regional office located at Bangalore.		Date: 22/05/2025
31	MISCELLANEOUS	The regional office of this ministry located at Bangalore shall monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the officer (s) of the regional office by furnishing the requisite data/ information/ monitoring reports.
<b>PPs Submission:</b> Complied We will extend full cooperation from our end to Regional office for providing the requisite data		Date:

/information /monitoring reports.		22/05/2025
32	MISCELLANEOUS	The project proponent shall submit six monthly reports on the status of compliance of the stipulated EC conditions including results on the status of compliance of the stipulated EC conditions including results of monitored data (both in hard copies as well as by e-mail) to the ministry of environment and forests, its regional office Bangalore, the respective zonal office of CPCB and the SPCB. The proponent shall upload the status of compliance of the EC conditions, including results of monitored data on their website and shall update the same periodically. It shall simultaneously be sent to the regional office of the ministry of environment, forests and climate change, Bangalore, the respective zonal office of CPCB and the SPCB.
<b>PPs Submission: Complied</b> We are sending six monthly compliance reports to the Ministry of Environment and Forests and its Regional Office located at Bangalore, the respective Zonal Office of Central Pollution control Board the state Pollution control Board. The same is being uploaded in company website. Soft Copy of all EC compliance report of Mines for the period April-2024 to September-2024 was uploaded in PARIVESH portal dated 30-11-2024 sent via mail dated 03-12-2024 12:21 PM and hard copy was submitted vide our letter no OCL/ENV/2024-25/1006 dated 03-12-2024.		Date: 22/05/2025
33	MISCELLANEOUS	A copy of the clearance letter shall be sent by the proponent to concerned panchayat, zilla parisad/municipal corporation, urban local body and the local NGO, if any, from whom suggestion/representations, if any, were received while processing the proposal. The clearance letter shall also be put on the website of the company by the proponent.
<b>PPs Submission: Complied</b> We have submitted the copy of the clearance letter to the concerned Panchayat, local NGO. The clearance letter has also been put on the website of our company.		Date: 22/05/2025
34	MISCELLANEOUS	The state pollution control board should display a copy of the clearance letter at the regional office, district industry center and the collector office/Tehsildar office for 30 days.
<b>PPs Submission: Complied</b> Requested for display a copy of clearance letter.		Date: 22/05/2025
35	MISCELLANEOUS	The environmental statement for each financial year ending 31st march in form-v as is mandated to be submitted by the project proponent to the concerned state pollution control board as prescribed under the environment (protection) rules, 1986, as amended subsequently, shall also be put on the website of the company along with the status of compliance of EC conditions and shall also be sent to the Regional office of the ministry of environment and forests, Bangalore by e-mail.
<b>PPs Submission: Complied</b> We are submitting the Environment Statement Report for each financial year ending 31st march in Form-V to the Regional office of the ministry of environment and forests, Bangalore. The recently submitted Form-V is for the period (April 2023-March 2024) vide our letter no Ref: OCL/ENV/2024-25/971 dated 25/09/2024.		Date: 22/05/2025
36	MISCELLANEOUS	The project authorities should advertise atleast 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 website of the ministry of environment and forests at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy the same should be forwarded to the regional office of this ministry located at Bangalore.
<b>PPs Submission:</b> Complied The issue of the clearance letter informing that the project has been accorded environmental clearance has been Advertised in Local (Kannada) newspaper (Vijayavani and Udayavani) on 26.09.2014 and in English Deccan Herald newspaper on 28.09.2014		Date: 22/05/2025
37	MISCELLANEOUS	The ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.
<b>PPs Submission:</b> Complied We will abide by any such conditions if imposed.		Date: 22/05/2025
38	MISCELLANEOUS	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in Withdrawal of this clearance and attract action under the provisions of environment (protection) act, 1986.
<b>PPs Submission:</b> Complied The data submitted in the compliance report is based on the actual reports conducted by NABL Accredited laboratory.		Date: 22/05/2025
39	MISCELLANEOUS	The above conditions will be enforced inter-alia, under the provisions of the water (prevention and control of pollution) act, 1974 the air (prevention and control of pollution) act, 1981 the environment (protection) act, 1986 and the public liability insurance act, 1991 along with their amendments and rules made thereunder and also any other orders passed by the Honorable Supreme Court of India/High Court of Karnataka and any other court of law relating to the subject matter.
<b>PPs Submission:</b> Complied We will comply all the applicable Acts and Rules as mentioned.		Date: 22/05/2025
40	MISCELLANEOUS	Any appeal against this environmental clearance shall lie with the national green tribunal, if preferred, within a period of 30days as prescribed under section 16 of the National Green Tribunal Act, 2010.
<b>PPs Submission:</b> Complied Appeal against this environmental clearance will lie with the national green tribunal, if preferred, within a period of 30 days as prescribed under section 16 of the National Green Tribunal Act, 2010.		Date: 22/05/2025
<b>Visit Remarks</b>		
<b>Last Site Visit Report Date:</b>		N/A
<b>Additional Remarks:</b>		
<b>Note:</b> This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.		

1. The first part of the document discusses the importance of maintaining accurate records of all transactions and activities. It emphasizes the need for transparency and accountability in financial reporting.

2. The second part of the document outlines the various methods and techniques used to collect and analyze data. It includes a detailed description of the experimental procedures and the statistical analysis performed.

3. The third part of the document presents the results of the study. It includes a series of tables and graphs that illustrate the findings of the research. The data shows a clear trend of increasing activity over time.

4. The fourth part of the document discusses the implications of the findings. It suggests that the results have significant implications for the field of study and may lead to further research in this area.

5. The fifth part of the document concludes the study. It summarizes the main findings and provides a final statement on the importance of the research.



## ANNEXURE-I

The Avg measured AAQ levels at 4 locations for the period **October 2024 – March 2025** are:

2024-25	PM <sub>10</sub> µg/m <sup>3</sup>	PM <sub>2.5</sub> µg/m <sup>3</sup>	SO <sub>2</sub> µg/m <sup>3</sup>	NO <sub>x</sub> µg/m <sup>3</sup>	CO mg/m <sup>3</sup>
<b>Mining Area</b>	<b>60</b>	<b>24</b>	<b>16</b>	<b>25</b>	<b>1</b>
<b>Haulage</b>	<b>60</b>	<b>24</b>	<b>16</b>	<b>24</b>	<b>0</b>
<b>Crushing &amp; Screening</b>	<b>60</b>	<b>24</b>	<b>15</b>	<b>23</b>	<b>1</b>
<b>Labor Colony/Near Surge bin</b>	<b>60</b>	<b>25</b>	<b>16</b>	<b>24</b>	<b>1</b>



## ANNEXURE-II

### CSR-R&R Expenses for the period October-2024 to March-2025

S no	Expenses Booked	Amount
<b>Q3</b>		
1	Infrastructure development in the villages.	777,476
2	Education	24536,214
3	Hygiene and sanitation	123,074
4	Health	1,334,702
5	Livelihood Promotion and Capability building	-
6	Heritage, Culture etc. (Local folk art promotions etc.)	20,584,100
7	Programme administration monitoring and Evaluation	1,539,166
	<b>Q3 Total</b>	<b>48,894,732</b>
<b>Q4</b>		
1	Infrastructure development in the villages.	--
2	Education	29,226,594
3	Hygiene and sanitation	-
4	Health	1,761,815
5	Programme administration monitoring and Evaluation	1,630,478
	<b>Q4 Total</b>	<b>32,618,887</b>
	<b>Q3 &amp; Q4 Total</b>	<b>8,15,13,619</b>



**ANNEXURE - III**

**Over Burden /Top Soil generated during last 5 years and total generated till March 2025**

Particular/ Material Generated	YEAR WISE GENERATION (Tons)					
	2020-21	2021-22	2022-23	2023-24	2024-25	Total 2015 -2025
Overburden / Topsoil	87789	42489	94713	133101	84711	1174763



## ANNEXURE – IV

### Year wise plantation details carried at Orient Cement Ltd

**The Details of Tree Plantation in Orient Cement Mines area from 2015-16 to 2024-25  
till March-2025 and Percentage of Survival**

Year	Mines	Survivals	Survival % Age
2015-16	1220	610	50%
2016-17	4780	2390	50%
2017-18	3159	2527	80%
2018-19	3963	3646	99%
2019-20	4279	3829	89%
2020-21	6726	5381	80%
2021-22	3871	3290	85%
2022-23	2337	1781	85%
2023-24	17480	13984	90%
2024-25	11099	11099	100%
<b>Total-Avg:</b>	<b>58914</b>	<b>48537</b>	<b>82.39%</b>





# ANNEXURE – V

## Results of Ambient Air Quality in $\mu\text{g}/\text{m}^3$ for the period October-2024 to March-2025

Mining Area		Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25
	PM 10	54	48	61	66	66	66
	PM 2.5	19	21	24	27	27	25
	SO <sub>2</sub>	18	7	19	17	17	16
	NO <sub>x</sub>	24	18	24	27	26	29
	CO	ND	ND	ND	0.78	ND	0.54
Haulage							
	PM 10	53	49	58	67	67	64.85
	PM 2.5	20	20	21	25	27	30
	SO <sub>2</sub>	19	7	13	17	17	20
	NO <sub>x</sub>	24	19	20	26	26	26
	CO	ND	ND	ND	0.4	ND	ND
Crushing & Screening							
	PM 10	58	52	53	65	66	66
	PM 2.5	21	23	20	26	27	28
	SO <sub>2</sub>	13	7	19	17	17	18
	NO <sub>x</sub>	20	19	24	26	25	26
	CO	ND	ND	ND	0.85	ND	ND
Labor Colony/Near Surgebin							
	PM 10	61	51	54	66	66	64
	PM 2.5	24	22	19	27	26	30
	SO <sub>2</sub>	19	7	18	17	17	16
	NO <sub>x</sub>	24	20	24	25	25	25
	CO	ND	ND	ND	0.84	ND	ND

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## ANNEXURE - VI

### Results of Ambient Noise Levels for the period October-2024 to March-2025

Ambient Noise Level Monitoring Report at surrounding Industrial Area of Mines FY (2024-25)								
		Day						
	Unit	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Avg
Crushing & Screening	LeqdB(A)	61.70	61.40	63.90	62.85	62.48	62.89	62.54
Mining Area	LeqdB(A)	62.30	65.90	68.45	62.19	63.88	62.36	64.18
CCR Office	LeqdB(A)	62.50	63.90	61.75	61.66	62.70	62.70	62.54
Labor Colony	LeqdB(A)	61.60	61.90	61.90	62.75	63.81	63.68	62.61
		62.03	63.28	64.00	62.36	63.22	62.91	62.96
		Night						
	Unit	Oct-24	Nov-24	Dec-24	Jan-25	Feb-25	Mar-25	Avg
Crushing & Screening	LeqdB(A)	53.80	59.50	59.90	49.36	44.58	36.26	50.57
Mining Area	LeqdB(A)	60.40	61.60	62.20	51.69	46.05	41.99	53.99
CCR Office	LeqdB(A)	58.80	55.85	56.90	46.73	41.77	40.07	50.02
Labor Colony	LeqdB(A)	54.70	58.40	57.80	46.43	45.27	41.89	50.75
		56.93	58.84	59.20	48.55	44.42	40.05	51.33



Ref: OCL/ENV/2025-26/1100

Date: 22.05.2025

To

Director-IA Division,  
Ministry of Environment, Forests & Climate Change,  
Indira Paryavaran Bhavan,  
Jor Bagh Road, New Delhi - 110 003.

Respected Sir,

**Sub: Amendment in existing Environmental clearance granted on 22.09.2014 by MoeF&CC w.r.t change in mine lease area from 512.354 ha (602.054 ha-89.70 ha to the executed ML area 519 ha for existing limestone mine with production capacity Of 3.0 MTPA (ROM) located village itagi & Mogla, taluka chittapur, district Kalaburagi , Karnataka in favor of M/s Orient cement limited -(proposal no:IA/KA/MIN/214419/2021:File No. J-11015/60/2011-IA-II(M)-Amendment in EC**

**1. Ref no: F. No. J-11015/60/2011-IA-II (M) Dated on 28.06.2022.**

\*\*\*\*\*

As mentioned in the above cited subject & vide Ref-(1) of our Amendment in EC condition, M/s Orient Cement Ltd, is hereby submitting your good self the point wise compliance to the conditions stipulated in amended EC for the period **October -2024 to March-2025.**

Kindly consider the compliance report & oblige.

Thanking You.

Yours faithfully

For Orient Cement Limited

Satyabrata Sharma

President-Manufacturing & Unit Head



Cc:

1. The Additional Principal Chief Conservator of Forests (C)  
Ministry of Environment, Forests & Climate change,  
4th Floor, E & F Wing, Kendriya Sedan  
Koramangala, Bangalore-560 034
2. Secretary to Government  
Department of Ecology & Environment  
Government of Karnataka  
7th floor, Multistoried Building,  
Bangalore 560001
3. Chairman,  
Central Pollution Control Board,  
Parivesh Bhawan, CBD-cum-Office Complex,  
East Arjun Nagar,  
New Delhi – 110 032
4. The Member Secretary,  
Karnataka State Pollution Control Board,  
# 49, 4th & 5th floor,  
Parisara Bhavana,  
Church Street,  
Bangalore – 560 001
- ✓ 5. Environmental officer,  
Karnataka State Pollution Control Board  
Regional office, Kalaburagi,  
Plot No. 12/2, Sy. No:19/P,  
Mansafdar Layout, M.G Road,  
Santraswadi, Kalaburgi-585 101





**Half Yearly Compliance Report****2024****01 Jun(01 Oct - 31 Mar)****Acknowledgement****Proposal Name**

Amendment in Existing Environmental Clearance granted on 22.09.2014 by MoEFCC w.r.t change in mine lease area from 512.354 ha (602.054 ha - 89.70 ha) to the executed ML area 519 ha for existing Limestone mine with production capacity 3.0 MTPA (ROM) located at villages Itgi and Mogla, taluk Chittapur, district Kalaburagi, Karnataka

**Name of Entity / Corporate Office**

Orient Cement Ltd, Chittapur, Karnataka

**Village(s)**

N/A

**District**

KALABURAGI

**Proposal No.**

IA/KA/MIN/214419/2021

**Plot / Survey / Khasra No.**

N/A

**State**

KARNATAKA

**MoEF File No.**

J-11015/60/2011-IA-II(M)

**Category**

Non-Coal Mining

**Sub-District**

N/A

**Entity's PAN**

\*\*\*\*\*5420A

**Entity name as per PAN**

ORIENT CEMENT LIMITED

**Compliance Reporting Details****Reporting Year**

2024

**Remarks (if any)****Reporting Period**

01 Jun(01 Oct - 31 Mar)

**Details of Production and Project Area****Name of Entity / Corporate Office**

Orient Cement Ltd, Chittapur, Karnataka

	Project Area as per EC Granted	Actual Project Area in Possession
Private	519	519
Revenue Land	0	0
Forest	0	0
Others	0	0
Total	519	519

**Production Capacity**

Sr. no	Product Name	units	Valid Upto	Capacity	Production last year	Capacity as per CTO
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**Conditions**

**Specific Conditions**

Sr.No.	Condition Type	Condition Details
1	MINING PLAN	Mining operations will be restricted to pit-1 and pit-2 areas only
<b>PPs Submission:</b> Complied Mining operations are restricted to Pit-1 and Pit-2 only.		Date: 22/05/2025
2	Human Health Environment	The project proponent should periodically monitor and maintain the health records of the mine workers digitally prior to mining operations at the time of operation of mine and post mining operation. Regular surveillance on Silicosis shall be carried through regular occupational health check-up every year for mine workers.
<b>PPs Submission:</b> Complied Noted and following the condition Annual medical check-up is being carried out for all the mine workmen at Orient Health Centre, Chittapur.		Date: 22/05/2025
3	WATER QUALITY MONITORING AND PRESERVATION	The project proponent shall monitor water quality with specific reference to Langelier saturation index to assess the impact of calcium carbonate on water quality.
<b>PPs Submission:</b> Complied Regular monitoring of water quality is being carried out by MoEFCC recognized and NABL accredited laboratory NAL LAB LLPs, Bangalore and record of monitoring data is being maintained and submitted to State Pollution Control Board. Recently submitted Report vide our letter No. OCL/ENV/ 2025-26/1076 dated 12/04/2025		Date: 22/05/2025
4	MISCELLANEOUS	The other terms and conditions mentioned in earlier EC letter dated 22.09.2014 shall remain unchanged.
<b>PPs Submission:</b> Complied The Compliance of EC letter No: (EC) F.NO, J-11015/60/2011-IA (M) dated: 22/9/2014 is complied		Date: 22/05/2025

**Visit Remarks****Last Site Visit Report Date:**

N/A

**Additional Remarks:**

**Note:** This acknowledgement is as per the details submitted by project proponent. In no way is this document to be considered as conclusion on any action on the compliance of the project. This is strictly for the project proponent's reference purpose.

**OCTOBER - 2024**

## TEST REPORT

Name of the Project  
Name & Address of the Customer

: M/s. Itagi Lime Stone Mine, Chittapur.  
: M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.

Particulars of sample  
Report Date  
Page No

: Ambient Air Quality Monitoring  
: 30/10/2024  
: 1/1

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collection										
		PM <sub>10</sub> (µg/m³)	PM <sub>2.5</sub> (µg/m³)	SO <sub>2</sub> (µg/m³)			NO <sub>2</sub> (µg/m³)			Carbon Monoxide (mg/m³)		
				I Shift	II Shift	III Shift	I Shift	II Shift	III Shift	I Shift	II Shift	III Shift
1. Near Lime Stone Crusher : (N 17°06'53.0", E 77°08'25.0")												
01.10.2024	01	58.0	19.0	11.0	13.0	12.2	20.0	21.2	20.4	ND	ND	ND
04.10.2024	13	57.2	20.2	12.0	14.2	14.8	19.8	20.8	20.3	ND	ND	ND
08.10.2024	37	55.4	21.1	13.0	16.0	12.3	21.4	20.3	19.8	ND	ND	ND
11.10.2024	52	57.0	19.8	11.4	14.0	14.2	18.4	19.2	17.9	ND	ND	ND
15.10.2024	69	56.2	18.4	12.1	12.0	16.8	18.0	20.4	21.0	ND	ND	ND
18.10.2024	80	59.1	26.8	11.0	13.0	12.3	18.4	19.8	22.0	ND	ND	ND
22.10.2024	98	57.0	19.4	11.4	14.3	13.7	21.0	19.9	21.2	ND	ND	ND
25.10.2024	110	62.0	23.8	11.8	13.7	12.0	20.3	21.0	22.0	ND	ND	ND
2. Near Surgebin Hopper : (N 17°06'56.2", E 77°08'16.4")												
01.10.2024	02	63.0	22.1	20.2	19.0	18.8	23.0	24.2	25.0	ND	ND	ND
04.10.2024	14	61.8	25.4	21.0	19.9	20.8	22.9	23.8	24.2	ND	ND	ND
08.10.2024	38	62.4	23.8	20.0	19.4	19.9	23.9	24.4	23.0	ND	ND	ND
11.10.2024	53	59.9	24.4	12.7	20.0	21.0	23.0	24.1	22.0	ND	ND	ND
15.10.2024	70	58.4	23.8	17.0	18.8	19.0	25.2	26.0	24.0	ND	ND	ND
18.10.2024	81	60.3	24.7	16.9	17.0	20.0	26.0	25.2	25.0	ND	ND	ND
22.10.2024	99	61.7	25.4	12.9	20.4	21.0	25.2	24.6	24.0	ND	ND	ND
25.10.2024	111	60.9	22.0	17.4	20.0	18.0	25.0	25.2	24.4	ND	ND	ND

### Test Method:

PM<sub>10</sub> - IS 5182 (Part-23) 2006 (RA - 2017)

PM<sub>2.5</sub> - IS 5182 (Part-24) 2019

Sulphur Dioxide (SO<sub>2</sub>) - IS 5182 (Part-22) 2001 (RA - 2022)

Nitrogen Dioxide (NO<sub>2</sub>) - IS 5182 (Part-6) 2006 (RA - 2017)

Carbon Monoxide - IS 5182 (Part-10) 1999 (RA - 2019)

Note: ND - Not Detected

\*\*\*\*\*End of the report\*\*\*\*\*

Verified By



Harshavardhana M  
Sr. Analyst  
Authorized Signatory

## TEST REPORT

Name of the Project  
Name & Address of the Customer

: M/s. Itagi Lime Stone Mine, Chittapur.  
: M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Mallesh Road,  
Chittapur - 585211.  
: Ambient Air Quality Monitoring  
: 03/10/2024  
: 1/1

Particulars of sample  
Report Date  
Page No

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collection										
		PM <sub>10</sub> (µg/m³)	PM <sub>2.5</sub> (µg/m³)	SO <sub>2</sub> (µg/m³)			NO <sub>2</sub> (µg/m³)			Carbon Monoxide (mg/m³)		
				I Shift	II Shift	III Shift	I Shift	II Shift	III Shift	I Shift	II Shift	III Shift
3. Near Mining Area: (N 17°07'00.3", E 77°08'50.9")												
01.10.2024	03	52.8	20.0	18.0	19.2	17.4	23.4	25.0	26.2	ND	ND	ND
04.10.2024	15	53.4	19.0	19.4	18.4	17.9	25.0	24.8	24.2	ND	ND	ND
08.10.2024	39	56.2	18.0	18.2	19.0	20.0	24.4	25.4	23.9	ND	ND	ND
11.10.2024	54	57.0	19.9	17.0	16.0	19.0	27.4	26.2	24.2	ND	ND	ND
15.10.2024	71	55.0	18.3	16.2	18.0	17.4	25.2	24.8	24.2	ND	ND	ND
18.10.2024	82	54.2	19.2	17.5	19.0	18.0	24.8	23.9	24.4	ND	ND	ND
22.10.2024	100	53.8	20.2	18.2	19.7	19.0	23.9	22.7	23.0	ND	ND	ND
25.10.2024	112	52.4	19.6	19.0	20.0	17.9	22.4	22.8	21.7	ND	ND	ND
4. Haulage : (N 17°06'50.8", E 77°08'36.7")												
01.10.2024	04	53.9	21.0	18.0	19.4	20.2	23.0	24.2	25.0	ND	ND	ND
04.10.2024	16	54.2	22.0	17.4	19.0	20.0	25.4	26.0	25.4	ND	ND	ND
08.10.2024	40	55.2	19.0	19.0	17.0	17.9	24.0	26.2	23.0	ND	ND	ND
11.10.2024	55	51.9	19.9	18.0	19.0	20.0	22.0	24.3	25.3	ND	ND	ND
15.10.2024	72	50.3	19.4	17.9	20.0	20.4	24.0	23.7	26.0	ND	ND	ND
18.10.2024	83	52.8	20.2	19.0	18.4	19.2	25.4	25.2	23.8	ND	ND	ND
22.10.2024	101	51.7	20.8	20.0	17.0	19.4	24.0	25.4	26.0	ND	ND	ND
25.10.2024	1123	52.0	21.0	22.0	19.0	18.0	22.0	23.9	22.0	ND	ND	ND

### Test Method:

PM<sub>10</sub> - IS 5182 (Part-23) 2006 (RA - 2017)

PM<sub>2.5</sub> - IS 5182 (Part-24) 2019

Sulphur Dioxide (SO<sub>2</sub>) - IS 5182 (Part-22) 2001 (RA - 2022)

Nitrogen Dioxide (NO<sub>2</sub>) - IS 5182 (Part-6) 2006 (RA - 2017)

Carbon Monoxide - IS 5182 (Part-10) 1999 (RA - 2019)

Note: ND - Not Detected

\*\*\*\*End of the report\*\*\*\*



Verified By

**Harshavardhana H**  
Sr. Analyst  
Authorized Signatory

## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
 Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
 Tq. Chittapur, Itagi PO, Malkhed Road,  
 Chittapur - 585211.  
 Particulars of Sample Collected : Stack Monitoring  
 Particular of Stack : Chimney attached to "Lime Stone Crusher"  
 Date of Collection : 19/10/2024  
 Date of Sample Receipt : 21/10/2024  
 Sample Code / ID : NAL/2024/10/ED/91  
 Date of Analysis Started : 21/10/2024  
 Date of Completion : 24/10/2024  
 Report No : NAL/2024/10/ED/91  
 Report Date : 24/10/2024  
 Page No : 1/1

### Instrument Used:

Instrument Name	Make	Model	Instrument Calibrated Date	Instrument calibration due Date
Stack Monitoring Kit	Greentech Instruments	ESS 100	11/03/2024	10/03/2025

### General Details

Date of Monitoring	19/10/2024
Ambient Temperature(°C)	30.0
Stack Diameter (m)	1.5
Quantity of flue gas discharged into the atmosphere (Nm <sup>3</sup> /Hr)	49627.89
Flue Gas Temperature	32.0
Exit Velocity of gas (Mts/Sec)	7.8

### STACK MONITORING RESULTS

Parameters	Unit	Result	Limits	Test Method
Particulate matter	mg/Nm <sup>3</sup>	3.8	-	IS 11255 (Part 1) 1985 RA 2019

\*\*\*\*\*End of the report\*\*\*\*\*

Verified By



Harshavardhana K  
Sr. Analyst  
Authorized Signatory

## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Noise Monitoring - Day Time  
Sample Code / ID : 08/10/2024 - NAL/2024/10/ED/41  
: 19/10/2024 - NAL/2024/10/ED/92  
Report Date : 30/10/2024  
Page No : 1/1

### Instrument Used:

Instrument Name	Make	SI No	Instrument Calibrated Date	Instrument Calibrated Due Date
Sound Level Meter	Lutron Instruments	Q703307	08/07/2024	07/07/2025

### NOISE MONITORING RESULTS

SI No	Date of Sample Collection	Sample Location	L min.	L max.	Results in dB (A)Leq	KSPCB Standards	Test Method
1	08/10/2024	Crushing & Screening	56.4	62.8	59.5	75 dB (A) Leq (Day Time)	IS 9889:1981 (Reaffirmed-2020)
	19/10/2024		61.5	66.4	63.8		
2	08/10/2024	Mining Area	57.2	65.6	61.3		
	19/10/2024		59.4	67.2	63.2		
3	08/10/2024	CCR Office	56.2	65.8	61.1		
	19/10/2024		61.2	66.7	63.8		
4	08/10/2024	Surgebin	57.6	65.2	61.4		
	19/10/2024		57.4	66.5	61.8		

\*\*\*\*\*End of the report\*\*\*\*\*

Verified By



Harshavardhana H  
Sr. Analyst  
Authorized Signatory

## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
 Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
 Tq. Chittapur, Itagi PO, Malkhed Road,  
 Chittapur - 585211.  
 Particulars of sample : Noise Monitoring - Night Time  
 Sample Code / ID : 08/10/2024 - NAL/2024/10/ED/42  
 : 19/10/2024 - NAL/2024/10/ED/93  
 Report Date : 30/10/2024  
 Page No : 1/1

### Instrument Used:

Instrument Name	Make	SI No	Instrument Calibrated Date	Instrument Calibrated Due Date
Sound Level Meter	Lutron Instruments	Q700307	08/07/2024	07/07/2025

### NOISE MONITORING RESULTS

Sl No	Date of Sample Collection	Sample Location	L min.	L max.	Results in dB (A) Leq	KSPCB Standards	Test Method
1	08/10/2024	Crushing & Screening	49.8	57.2	53.4	70 dB (A) Leq (Night Time)	IS 9989:1981 (Reaffirmed-2020)
	19/10/2024		51.4	56.8	54.2		
2	08/10/2024	Mining Area	56.5	63.2	59.8		
	19/10/2024		57.6	64.5	61.0		
3	08/10/2024	CCR Office	59.2	63.8	61.5		
	19/10/2024		53.7	58.4	56.1		
4	08/10/2024	Surgebin	51.5	57.6	54.6		
	19/10/2024		51.8	57.4	54.7		

\*\*\*\*\*End of the report\*\*\*\*\*

Verified By



Harshavardhana H  
Sr. Analyst

Authorized Signatory



## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/10/W/135
Particulars of Sample	Kagina River Water - Downstream (17.1749010 °N , 77.1047400 °E)	Report No	NAL/2024/10/W/135
Sample submitted by	Customer	Date of Sample Collection	19.10.2024
Sample collected by	Our Representative	Date of sample Receipt	19.10.2024
Sample Qty	2Ltrs	Date of Analysis Started	19.10.2024
Page No	1/2	Date of Completion	23.10.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	23.10.2024
Description	Slightly whitish coloured, odorless, turbid liquid.		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
01	Color, Hazen Units	BDL(DL=1.0)	IS 3025 (P-04)2021	-
02	Conductivity, µS/cm	710.0	IS 3025 (P-14)1984 RA 2019	-
03	Total Dissolved Solids, mg/L	426.0	IS 3025 (P-16)2023	-
04	pH Value	7.8	IS 3025 (P-11)2022	5.5 to 9.0
05	Turbidity, NTU	3.1	IS 3025 (P-10)2022	-
06	Total Suspended Solids	16.0	IS 3025(P-17) 2022	100
07	Calcium as Ca, mg/L	48.0	IS 3025 (P-40)1991 RA 2019	-
08	Magnesium as Mg, mg/L	19.0	IS 3025 (P-46)1994RA 2019	-
09	Total Hardness as CaCO <sub>3</sub> , mg/L	196.0	IS 3025 (P-21)2009 RA 2019	-
10	Chloride as Cl, mg/L	48.0	IS 3025 (P-32)1988 RA 2019	-
11	Sulphate as SO <sub>4</sub> , mg/L	16.0	APHA 23rd Edition4500SO <sub>4</sub>	-
12	Fluoride as F, mg/L	0.41	APHA 23rd Edition4500F- D	2
13	Nitrate as NO <sub>3</sub> , mg/L	5.8	APHA 23rd Edition NO <sub>3</sub> B	-
14	Total Alkalinity as CaCO <sub>3</sub> , mg/L	212.0	IS 3025 (P-23)1986 RA 2019	-
15	Iron as Fe, mg/L	0.96	APHA 23rd Edition 3500-Fe B	3

Note: BDL: Below Detection Limit, DL:- Detection Limit

\*\*\*\*\*End of the report\*\*\*\*\*

140  
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Authorized Signatory

Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.

## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/10/W/135
Particulars of Sample	Kagina River Water - Downstream (17.1749010 °N , 77.1047400 °E)	Report No	NAL/2024/10/W/135
Sample submitted by	Customer	Date of Sample Collection	19.10.2024
Sample collected by	Our Representative	Date of sample Receipt	19.10.2024
Sample Qty	500ml	Date of Analysis Started	19.10.2024
Page No	2/2	Date of Completion	23.10.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	23.10.2024
Description	Slightly whitish coloured, odorless, turbid liquid.		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
16	Total coliform bacteria CFU/100ml	62	IS 15185 2016 (RA-2021)	-
17	Escherichia Coli, CFU/100ml	33	IS 15185 2016 (RA-2021)	-

Note: ND: Not detected, DL: Detection

\*\*\*\*\*End of the report\*\*\*\*\*

Amulha  
Verified By



Authorized Signatory

**TEST REPORT**

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/10/W/152
Particulars of Sample	Mines Pit Water (17.1168160 °N , 77.1507060 °E)	Report No	NAL/2024/10/W/152
Sample submitted by	Customer	Date of Sample Collection	19.10.2024
Sample collected by	Our Representative	Date of sample Receipt	19.10.2024
Sample Qty	2Ltrs	Date of Analysis Started	19.10.2024
Page No	1/2	Date of Completion	23.10.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	23.10.2024
Description	Colorless, Odorless, transparent liquid		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
01	Color, Hazen Units	BDL(DL=1.0)	IS 3025 (P-04)2021	-
02	Conductivity, $\mu S/cm$	646.0	IS 3025 (P-14)1984 RA 2019	-
03	Total Dissolved Solids, mg/L	388.0	IS 3025 (P-16)2023	-
04	pH Value	8.1	IS 3025 (P-11)2022	5.5 to 9.0
05	Turbidity, NTU	4.8	IS 3025 (P-10)2022	-
06	Total Suspended Solids	9.0	IS 3025 (P-17) 2022	100
07	Calcium as Ca, mg/L	41.0	IS 3025 (P-40)1991 RA 2019	-
08	Magnesium as Mg, mg/L	19.0	IS 3025 (P-46)1994RA 2019	-
09	Total Hardness as CaCO <sub>3</sub> , mg/L	180.0	IS 3025 (P-21)2009 RA 2019	-
10	Chloride as Cl, mg/L	22.0	IS 3025 (P-32)1988 RA 2019	-
11	Sulphate as SO <sub>4</sub> , mg/L	39.0	APHA 23rd Edition4500SO4	-
12	Fluoride as F, mg/L	0.71	APHA 23rd Edition4500F- D	2
13	Nitrate as NO <sub>3</sub> , mg/L	12.6	APHA 23rd Edition NO3 B	-
14	Total Alkalinity as CaCO <sub>3</sub> , mg/L	160.0	IS 3025 (P-23)1986 RA 2019	-
15	Iron as Fe, mg/L	0.15	APHA 23rd Edition 3500-Fe B	3

Note: ND: Not detected, DL: Detection

\*\*\*\*\*End of the report\*\*\*\*\*

Verified By



Authorized Signatory

## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itaga PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/10/W/152
Particulars of Sample	Mines Pit Water (17.1168160 °N , 77.1507060 °E)	Report No	NAL/2024/10/W/152
Sample submitted by	Customer	Date of Sample Collection	19.10.2024
Sample collected by	Our Representative	Date of sample Receipt	19.10.2024
Sample Qty	500ml	Date of Analysis Started	19.10.2024
Page No	2/2	Date of Completion	23.10.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	23.10.2024
Description	Colorless, Odorless, transparent liquid		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
16	Total coliform bacteria CFU/100ml	82	IS 15185 2016 (RA-2021)	-
17	Escherichia Coli, CFU/100ml	41	IS 15185 2016 (RA-2021)	-

Note: ND: Not detected, DL: Detection

\*\*\*\*\*End of the report\*\*\*\*\*

Amul  
Verified By

  
Authorized Signatory

**NOVEMBER - 2024**

## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Ambient Air Quality Monitoring  
Report Date : 01/12/2024  
Page No : 1/1

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collection										
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )			NO <sub>2</sub> (µg/m <sup>3</sup> )			Carbon Monoxide (mg/m <sup>3</sup> )		
				I Shift	II Shift	III Shift	I Shift	II Shift	III Shift	I Shift	II Shift	III Shift
1. Near Lime Stone Crusher : (N 17°06'53.0", E 77°08'25.0")												
04.11.2024	15	48.8	20.4	6.9	7.0	7.4	18.4	20.8	21.6	ND	ND	ND
07.11.2024	38	52.6	24.4	7.0	7.6	7.8	16.2	22.6	20.4	ND	ND	ND
11.11.2024	52	54.2	26.2	7.4	7.4	7.2	15.8	20.4	18.2	ND	ND	ND
14.11.2024	114	52.4	22.8	7.8	6.9	7.4	18.6	21.2	19.6	ND	ND	ND
19.11.2024	148	46.8	21.4	6.9	7.2	7.6	14.2	18.8	22.0	ND	ND	ND
22.11.2024	158	54.2	23.2	7.2	7.6	7.4	16.4	18.4	16.6	ND	ND	ND
25.11.2024	254	52.6	22.6	7.6	7.4	7.6	17.0	20.2	18.2	ND	ND	ND
28.11.2024	310	56.8	24.2	7.4	7.7	7.2	16.2	20.0	20.8	ND	ND	ND
2. Near Surgebin Hopper : (N 17°06'56.2", E 77°08'16.4")												
04.11.2024	16	52.2	22.4	7.0	8.0	7.6	18.0	22.8	20.8	ND	ND	ND
07.11.2024	39	48.8	21.2	7.6	7.8	7.2	20.6	21.6	19.6	ND	ND	ND
11.11.2024	52	56.2	20.8	7.4	7.4	8.0	22.4	22.2	16.2	ND	ND	ND
14.11.2024	115	48.4	19.2	7.0	7.2	7.6	18.0	20.4	22.4	ND	ND	ND
19.11.2024	149	46.8	20.8	7.8	8.2	7.4	16.6	21.2	18.0	ND	ND	ND
22.11.2024	159	48.2	21.6	7.6	7.6	7.6	17.2	20.6	17.4	ND	ND	ND
25.11.2024	255	56.6	24.4	7.4	7.0	7.2	16.8	19.8	21.6	ND	ND	ND
28.11.2024	311	51.4	22.2	7.2	7.4	7.4	20.2	18.2	22.8	ND	ND	ND

### Test Method:

PM<sub>10</sub> - IS 5182 (Part-23) 2006 (RA - 2017)

PM<sub>2.5</sub> - IS 5182 (Part-24) 2019

Sulphur Dioxide (SO<sub>2</sub>) - IS 5182 (Part-22) 2001 (RA - 2022)

Nitrogen Dioxide (NO<sub>2</sub>) - IS 5182 (Part 6) 2006 (RA - 2017)

Carbon Monoxide - IS 5182 (Part 10) 1999 (RA - 2019)

Note: ND - Not Detected

\*\*\*\*\*End of the report\*\*\*\*\*

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## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Ambient Air Quality Monitoring  
Report Date : 01/12/2024  
Page No : 1/1

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collection										
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )			NO <sub>2</sub> (µg/m <sup>3</sup> )			Carbon Monoxide (mg/m <sup>3</sup> )		
				I Shift	II Shift	III Shift	I Shift	II Shift	III Shift	I Shift	II Shift	III Shift
3. Near Mining Area: (N 17°07'00.3", E 77°08'50.9")												
04.11.2024	17	46.4	18.2	7.2	7.8	7.4	16.8	18.0	18.6	ND	ND	ND
07.11.2024	38	48.6	20.6	7.6	7.4	7.2	14.2	20.6	19.4	ND	ND	ND
11.11.2024	53	52.2	22.4	7.2	7.6	7.6	16.4	18.4	20.6	ND	ND	ND
14.11.2024	116	51.4	18.2	7.4	7.0	7.8	17.6	19.0	18.2	ND	ND	ND
19.11.2024	150	44.8	20.8	6.8	7.4	7.0	16.2	16.8	20.8	ND	ND	ND
22.11.2024	160	50.6	22.6	7.1	6.9	7.7	19.0	17.2	18.2	ND	ND	ND
25.11.2024	256	46.2	21.4	7.6	7.2	7.0	19.2	18.6	17.8	ND	ND	ND
28.11.2024	312	44.0	22.2	7.2	7.6	7.6	18.0	20.8	18.0	ND	ND	ND
4. Haulage : (N 17°06'50.8", E 77°08'36.7")												
04.11.2024	18	48.8	20.4	7.2	7.4	7.8	18.8	20.8	18.2	ND	ND	ND
07.11.2024	39	46.6	19.6	7.8	8.0	7.6	16.6	19.6	17.6	ND	ND	ND
11.11.2024	54	54.2	18.8	7.6	7.1	6.8	20.2	20.2	18.8	ND	ND	ND
14.11.2024	117	46.8	17.2	7.0	7.4	7.2	16.0	18.8	20.2	ND	ND	ND
19.11.2024	151	44.4	18.0	7.4	6.8	7.6	18.8	19.4	16.4	ND	ND	ND
22.11.2024	161	46.2	19.4	7.6	7.2	7.0	16.6	18.2	19.6	ND	ND	ND
25.11.2024	257	52.4	22.6	7.8	7.4	7.8	18.4	17.6	20.2	ND	ND	ND
28.11.2024	313	49.2	20.2	6.9	7.8	7.4	18.6	16.8	18.4	ND	ND	ND

### Test Method:

PM<sub>10</sub> - IS 5182 (Part-23) 2006 (RA - 2017)

PM<sub>2.5</sub> - IS 5182 (Part-24) 2019

Sulphur Dioxide (SO<sub>2</sub>) - IS 5182 (Part-22) 2001 (RA - 2022)

Nitrogen Dioxide (NO<sub>2</sub>) - IS 5182 (Part-6) 2006 (RA - 2017)

Carbon Monoxide - IS 5182 (Part-10) 1999 (RA - 2019)

Note: ND - Not Detected

\*\*\*\*\*End of the report\*\*\*\*\*

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## TEST REPORT

Name of the Project  
Name & Address of the Customer

: M/s. Itagi Lime Stone Mine, Chittapur.  
: M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.

Particulars of Sample Collected

: Stack Monitoring

Particular of Stack

: Chimney attached to "Lime Stone Crusher"

Date of Collection

: 28/11/2024

Date of Sample Receipt

: 29/11/2024

Sample Code / ID

: NAL/2024/11/ED/268

Date of Analysis Started

: 29/11/2024

Date of Completion

: 03/12/2024

Report No

: NAL/2024/11/ED/268

Report Date

: 03/12/2024

Page No

: 1/1

### Instrument Used:

Instrument Name	Make	Model	Instrument Calibrated Date	Instrument calibration due Date
Stack Monitoring Kit	Greentech Instruments	ESS 100	11/03/2024	10/03/2025

### General Details

Date of Monitoring	28/11/2024
Ambient Temperature(°C)	29.0
Stack Diameter (m)	1.5
Quantity of flue gas discharged into the atmosphere (Nm <sup>3</sup> /Hr)	233280.00
Flue Gas Temperature	28.0
Exit Velocity of gas (Mts/Sec)	7.2

### STACK MONITORING RESULTS

Parameters	Unit	Result	Limits	Test Method
Particulate matter	mg/Nm <sup>3</sup>	3.6	-	IS 11255 (Part 1) 1985 RA 2019

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## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Noise Monitoring - Day Time  
Sample Code / ID : 11/11/2024 - NAL/2024/11/ED/55  
: 22/11/2024 - NAL/2024/11/ED/162  
Report Date : 01/12/2024  
Page No : 1/1

### Instrument Used:

Instrument Name	Make	Sl No	Instrument Calibrated Date	Instrument Calibrated Due Date
Sound Level Meter	Lutron Instruments	Q703307	08/07/2024	07/07/2025

## NOISE MONITORING RESULTS

Sl No	Date of Sample Collection	Sample Location	L min.	L max.	Results in dB (A)Leq	KSPCB Standards	Test Method
1	11/11/2024	Crushing & Screening	56.8	64.4	60.4	75 dB (A) Leq (Day Time)	IS 9989:1981 (Reaffirmed-2020)
	22/11/2024		57.6	67.0	62.4		
2	11/11/2024	Mining Area	63.0	67.4	65.2		
	22/11/2024		64.8	68.8	66.6		
3	11/11/2024	CCR Office	65.4	67.2	66.4		
	22/11/2024		57.2	66.0	61.4		
4	11/11/2024	Surgebin	55.8	66.4	61.0		
	22/11/2024		58.2	67.6	62.8		

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NALFF01/AD  
Issue Date : 20-05-2024

## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/11/W/262
Particulars of Sample	Mines Pit Water (17.1168160 °N , 77.1507060 °E)	Report No	NAL/2024/11/W/262
Sample submitted by	Customer	Date of Sample Collection	30.11.2024
Sample collected by	Customer	Date of sample Receipt	30.11.2024
Sample Qty	300ml	Date of Analysis Started	30.11.2024
Page No	2/2	Date of Completion	04.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	04.12.2024
Description	Colorless, Odorless, transparent liquid		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
16	Total coliform bacteria CFU/100ml	64	IS 15185 2016 (RA-2021)	-
17	Escherichia Coli, CFU/100ml	40	IS 15185 2016 (RA-2021)	-

Note: ND: Not detected, DL: Detection

\*\*\*\*\*End of the report\*\*\*\*\*

*Anusha*  
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## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/11/W/262
Particulars of Sample	<b>Mines Pit Water</b> <b>(17.1168160 °N , 77.1507060 °E)</b>	Report No	NAL/2024/11/W/262
Sample submitted by	Customer	Date of Sample Collection	30.11.2024
Sample collected by	Customer	Date of sample Receipt	30.11.2024
Sample Qty	2Ltrs	Date of Analysis Started	30.11.2024
Page No	1/2	Date of Completion	04.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	04.12.2024
Description	Colorless, Odorless, transparent liquid		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
01	Color, Hazen Units	BDL(DL=1.0)	IS 3025 (P-04)2021	-
02	Conductivity, $\mu S/cm$	630.0	IS 3025 (P-14)1984 RA 2019	-
03	Total Dissolved Solids, mg/L	378.0	IS 3025 (P-16)2023	-
04	pH Value	8.0	IS 3025 (P-11)2022	5.5 to 9.0
05	Turbidity, NTU	3.2	IS 3025 (P-10)2022	-
06	Total Suspended Solids	9.0	IS 3025(P-17) 2022	100
07	Calcium as Ca, mg/L	44.0	IS 3025 (P-40)1991 RA 2019	-
08	Magnesium as Mg, mg/L	15.0	IS 3025 (P-46)1994RA 2019	-
09	Total Hardness as CaCO <sub>3</sub> , mg/L	170.0	IS 3025 (P-21)2009 RA 2019	-
10	Chloride as Cl, mg/L	26.0	IS 3025 (P-32)1988 RA 2019	-
11	Sulphate as SO <sub>4</sub> , mg/L	28.0	APHA 24th Edition4500SO <sub>4</sub>	-
12	Fluoride as F, mg/L	0.66	APHA 24th Edition4500F- D	2
13	Nitrate as NO <sub>3</sub> , mg/L	13.2	APHA 24th Edition NO <sub>3</sub> B	-
14	Total Alkalinity as CaCO <sub>3</sub> , mg/L	152.0	IS 3025 (P-23)1986 RA 2019	
15	Iron as Fe, mg/L	0.44	APHA 24th Edition 3500-Fe B	

Note: ND: Not detected, DL: Detection

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## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/11/W/262
Particulars of Sample	<b>Mines Pit Water</b> (17.1168160 °N , 77.1507060 °E)	Report No	NAL/2024/11/W/262
Sample submitted by	Customer	Date of Sample Collection	30.11.2024
Sample collected by	Customer	Date of sample Receipt	30.11.2024
Sample Qty	500ml	Date of Analysis Started	30.11.2024
Page No	2/2	Date of Completion	04.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	04.12.2024
Description	Colorless, Odorless, transparent liquid		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
16	Total coliform bacteria CFU/100ml	64	IS 15185 2016 (RA-2021)	-
17	Escherichia Coli, CFU/100ml	40	IS 15185 2016 (RA-2021)	-

Note: ND: Not detected, DL: Detection

\*\*\*\*\*End of the report\*\*\*\*\*

Amruba  
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## TEST REPORT

Name & Address of the Customer	M/s. ORIENT CEMENT LIMITED Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	M/s. Itagi Lime Stone Mine, Chittapur.		
Discipline	Chemical	Sample ID	NAL/2024/11/W/263
Particulars of Sample	Kagina River Water - Upstream (17.199196 °N , 77.157332 °E)	Report No	NAL/2024/11/W/263
Sample submitted by	Customer	Date of Sample Collection	30.11.2024
Sample collected by	Customer	Date of sample Receipt	30.11.2024
Sample Qty	2Ltrs	Date of Analysis Started	30.11.2024
Page No	1/2	Date of Completion	04.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	04.12.2024
Description	Slightly whitish coloured, odorless, turbid liquid.		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
01	Color, Hazen Units	10.0	IS 3025 (P-04)2021	-
02	Conductivity, $\mu\text{S}/\text{cm}$	880.0	IS 3025 (P-14)1984 RA 2019	-
03	Total Dissolved Solids, mg/L	536.0	IS 3025 (P-16)2023	-
04	pH Value	7.7	IS 3025 (P-11)2022	5.5 to 9.0
05	Turbidity, NTU	12.2	IS 3025 (P-10)2022	-
06	Total Suspended Solids	28.0	IS 3025(P-17) 2022	100
07	Calcium as Ca, mg/L	52.0	IS 3025 (P-40)1991 RA 2019	-
08	Magnesium as Mg, mg/L	19.0	IS 3025 (P-46)1994RA 2019	-
09	Total Hardness as $\text{CaCO}_3$ , mg/L	210.0	IS 3025 (P-21)2009 RA 2019	-
10	Chloride as Cl, mg/L	68.0	IS 3025 (P-32)1988 RA 2019	-
11	Sulphate as $\text{SO}_4$ , mg/L	22.0	APHA 23rd Edition4500SO4	-
12	Fluoride as F, mg/L	0.80	APHA 23rd Edition4500F- D	2
13	Nitrate as $\text{NO}_3$ , mg/L	13.6	APHA 23rd Edition NO3 B	-
14	Total Alkalinity as $\text{CaCO}_3$ , mg/L	180.0	IS 3025 (P-23)1986 RA 2019	-
15	Iron as Fe, mg/L	1.2	APHA 23rd Edition 3500-Fe B	3

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NAL/FF/01/A0  
Issue Date : 20-08-2024

## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/11/W/263
Particulars of Sample	Kagina River Water - Upstream (17.199196 °N , 77.157332 °E)	Report No	NAL/2024/11/W/263
Sample submitted by	Customer	Date of Sample Collection	30.11.2024
Sample collected by	Customer	Date of sample Receipt	30.11.2024
Sample Qty	500ml	Date of Analysis Started	30.11.2024
Page No	2/2	Date of Completion	04.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	04.12.2024
Description	Slightly whitish coloured, odorless, turbid liquid.		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
16	Total coliform bacteria CFU/100ml	72	IS 15185 2016 (RA-2021)	-
17	Escherichia Coli, CFU/100ml	30	IS 15185 2016 (RA-2021)	-

Note: ND: Not detected, DL: Detection

\*\*\*\*\*End of the report\*\*\*\*\*

*Amrisha*  
Verified By



*h.r.b.*  
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NAL/FF/01/AQ  
Issue Date : 20-08-2024



## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/11/W/264
Product or Material	Ground Water	Report No	NAL/2024/11/W/264
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Diggaon	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	2Ltrs	Report Date	04.12.2024
Page No	1/3		
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl. No	Test parameter	Unit	Result	Maximum Acceptable Limit	Maximum Permissible Limits in The Absence of Alternate Source	Test method
				As per IS:10500-2012		
01	Color	H <sub>z</sub>	BDL (DL=1.0)	5.0	15.0	IS 3025 (part 04): 2021
02	Odor	---	Agreeable	Agreeable	Agreeable	IS:3025(Part-05)-2018
03	Taste	---	Agreeable	Agreeable	Agreeable	IS:3025(Part-07)-2017
04	pH value	---	7.5	6.5 - 8.5	No relaxation	IS:3025(Part-11)-2022
05	Turbidity	NTU	0.5	1.0	5.0	IS:3025(Part-10)-2023
06	Conductivity	µS/cm	1280.0	---	---	IS:3025(Part-14)-2013
07	Total Dissolved Solids	mg/L	770.0	500	2000	IS:3025(Part-16)-2023
08	Total Alkalinity as CaCO <sub>3</sub>	mg/L	310.0	200	600	IS:3025(Part-23)-2023
09	Total Hardness as CaCO <sub>3</sub>	mg/L	330.0	200	600	IS:3025(Part-21)-2009
10	Calcium as Ca	mg/L	80.0	75	200	IS:3025(Part-40)-1991
11	Magnesium as Mg	mg/L	32.0	30	100	IS:3025(Part-46)-2023
12	Chloride as Cl	mg/L	96.0	250	1000	IS:3025(Part-32)-1988
13	Sulphate as SO <sub>4</sub>	mg/L	26.0	200	400	APHA 4500 SO <sub>4</sub> -F 24 <sup>th</sup> Edition 2023
14	Nitrates as NO <sub>3</sub>	mg/L	22.8	45	No relaxation	APHA 24th Edition 4500 NO <sub>3</sub> B: 2023
15	Fluoride as F	mg/L	0.76	1.0	1.5	APHA 4500-F 24 <sup>th</sup> Edition 2023
16	Iron as Fe	mg/L	BDL (DL=0.075)	1.0	No relaxation	APHA 24th Edition 4500 F D: 2023
17	Residual free chlorine	mg/L	BDL (DL=0.2)	Min 0.2	Min 1.0	IS:3025(Part-26)-2021
18	Boron (as B)	mg/L	BDL (DL=0.1)	0.5	2.4	APHA 24th Edition 4500 B B:2023
19	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	BDL(DL=0.001)	0.001	0.002	APHA 24th Edition 5530 C: 2023

Note: Min: Minimum, BDL: Below detection Limit DL: Detection Limit;  
NOTE: The Test Residual free Chlorine is applicable only when water is chlorinated.

Note: Min: Minimum, BDL: Below detection Limit DL: Detection Limit;

NOTE: The Test Residual free Chlorine is applicable only when water is chlorinated.

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NAL/FF/01/A0  
Issue Date : 20-08-2024

## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/11/W/264
Product or Material	Ground Water	Report No	NAL/2024/11/W/264
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Diggaon	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	2Ltrs	Report Date	04.12.2024
Page No	2/3		
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl. No	Test parameter	Unit	Result	Maximum Acceptable Limit	Maximum Permissible Limits in The Absence of Alternate Source	Test method
				As per IS:10500-2012		
20	Aluminium (as Al)	mg/L	0.013	0.03	0.2	IS 3025 P-02: 2019
21	Barium (as Ba)	mg/L	0.038	0.7	No relaxation	IS 3025 P-02: 2019
22	Copper (as Cu)	mg/L	0.011	0.05	1.5	IS 3025 P-02: 2019
23	Manganese (as Mn)	mg/L	0.014	0.1	0.3	IS 3025 P-02: 2019
24	Selenium (as Se)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
25	Zinc (as Zn)	mg/L	0.024	5.0	15.0	IS 3025 P-02: 2019
26	Lead (as Pb)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
27	Nickel (as Ni)	mg/L	BLQ (LOQ=0.01)	0.02	No relaxation	IS 3025 P-02: 2019
28	Total arsenic (as As)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
29	Total chromium (as Cr)	mg/L	BLQ (LOQ=0.01)	0.05	No relaxation	IS 3025 P-02: 2019
Note: BLQ: Below Limit of Quantification ; LOQ: Limit of Quantification						
Remarks: The Above Sample meets to Permissible Limits as Per IS 10500:2012 for the above Physico-chemical tests						

  
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Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.

NAL/TF/01/00  
Issue Date : 20-08-2024



## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	M/s. Itagi Lime Stone Mine, Chittapur.		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/11/W/264
Product or Material	Ground Water	Report No	NAL/2024/11/W/264
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Diggaoon	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Simple collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	500 ml	Report Date	04.12.2024
Page No	3/3		
Sample package	Water Sample Collected in Sterilized Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl. No	Test parameter	Unit	Result	Maximum Permissible Limits in The Absence of Alternate Source As per IS:10500-2012	Test method
30	Escherichia coli	CFU/100 ml	<1	Shall not be detectable in 100 ml sample	IS : 15185 :2016
31	Total Coliforms	CFU/100 ml	<1		IS : 15185 :2016

Remarks: The Above sample meets the permissible limits as per IS 10500:2012 for the above microbiological tests

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

*Anusha*  
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Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.

NAL/FF01/M0  
Issue Date : 20-06-2024

## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/11/W/265
Product or Material	Ground Water	Report No	NAL/2024/11/W/265
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Itagi	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	2Ltrs	Report Date	04.12.2024
Page No	1/3		
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless, Odorless, transparent liquid		

SL No	Test parameter	Unit	Result	Maximum Acceptable Limit	Maximum Permissible Limits in The Absence of Alternate Source	Test method
				As per IS:10500-2012		
01	Color	Hz	BDL (DL=1.0)	5.0	15.0	IS 3025 (part 04): 2021
02	Odor	---	Agreeable	Agreeable	Agreeable	IS:3025(Part-05)-2018
03	Taste	---	Agreeable	Agreeable	Agreeable	IS:3025(Part-07)-2017
04	pH value	---	7.6	6.5 - 8.5	No relaxation	IS:3025(Part-11)-2022
05	Turbidity	NTU	2.4	1.0	5.0	IS:3025(Part-10)-2023
06	Conductivity	µS/cm	1210.0	---	---	IS:3025(Part-14)-2013
07	Total Dissolved Solids	mg/L	724.0	500	2000	IS:3025(Part-16)-2023
08	Total Alkalinity as CaCO <sub>3</sub>	mg/L	266.0	200	600	IS:3025(Part-23)-2023
09	Total Hardness as CaCO <sub>3</sub>	mg/L	288.0	200	600	IS:3025(Part-21)-2009
10	Calcium as Ca	mg/L	76.0	75	200	IS:3025(Part-40)-1991
11	Magnesium as Mg	mg/L	24.0	30	100	IS:3025(Part-46)-2023
12	Chloride as Cl	mg/L	86.0	250	1000	IS:3025(Part-32)-1988
13	Sulphate as SO <sub>4</sub>	mg/L	32.0	200	400	APHA 4500 SO <sub>4</sub> -F 24 <sup>th</sup> Edition 2023
14	Nitrates as NO <sub>3</sub>	mg/L	30.6	45	No relaxation	APHA 24th Edition 4500 NO <sub>3</sub> B: 2023
15	Fluoride as F	mg/L	0.74	1.0	1.5	APHA 4500-F 24 <sup>th</sup> Edition 2023
16	Iron as Fe	mg/L	0.28	1.0	No relaxation	APHA 24th Edition 4500 F D: 2023
17	Residual free chlorine	mg/L	BDL (DL=0.2)	Min 0.2	Min 1.0	IS:3025(Part-26)-2021
18	Boron (as B)	mg/L	BDL (DL=0.1)	0.5	2.4	APHA 24th Edition 4500 B B:2023
19	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	BDL(DL=0.001)	0.001	0.002	APHA 24th Edition 5530 C: 2023

Note: Min. Minimum, BDL: Below detection Limit DL: Detection Limit;  
NOTE: The Test Residual free Chlorine is applicable only when water is chlorinated.

Note: Min. Minimum, BDL: Below detection Limit DL: Detection Limit;  
NOTE: The Test Residual free Chlorine is applicable only when water is chlorinated.

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NAL/FF/01/A0  
Issue Date : 20-08-2024



## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/11/W/265
Product or Material	Ground Water	Report No	NAL/2024/11/W/265
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Itagi	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	2Ltrs	Report Date	04.12.2024
Page No	2/3		
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl. No	Test parameter	Unit	Result	Maximum Acceptable Limit	Maximum Permissible Limits in The Absence of Alternate Source	Test method
				As per IS:10500-2012		
20	Aluminium (as Al)	mg/L	0.018	0.03	0.2	IS 3025 P-02: 2019
21	Barium (as Ba)	mg/L	0.038	0.7	No relaxation	IS 3025 P-02: 2019
22	Copper (as Cu)	mg/L	0.014	0.05	1.5	IS 3025 P-02: 2019
23	Manganese (as Mn)	mg/L	0.032	0.1	0.3	IS 3025 P-02: 2019
24	Selenium (as Se)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
25	Zinc (as Zn)	mg/L	0.048	5.0	15.0	IS 3025 P-02: 2019
26	Lead (as Pb)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
27	Nickel (as Ni)	mg/L	BLQ (LOQ=0.01)	0.02	No relaxation	IS 3025 P-02: 2019
28	Total arsenic (as As)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
29	Total chromium (as Cr)	mg/L	BLQ (LOQ=0.01)	0.05	No relaxation	IS 3025 P-02: 2019
Note: BLQ: Below Limit of Quantification ; LOQ: Limit of Quantification						
Remarks: The Above Sample meets to Permissible Limits as Per IS 10500:2012 for the above Physico- chemical tests						

  
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## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/11/W/265
Product or Material	Ground Water	Report No	NAL/2024/11/W/265
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Itagi	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Simple collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	500 ml	Report Date	04.12.2024
Page No	3/3		
Sample package	Water Sample Collected in Sterilized Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl. No	Test parameter	Unit	Result	Maximum Permissible Limits in The Absence of Alternate Source As per IS:10500-2012	Test method
30	Escherichia coli	CFU/100 ml	<1	Shall not be detectable in 100 ml sample	IS : 15185 :2016
31	Total Coliforms	CFU/100 ml	<1		IS : 15185 :2016
Remarks: The Above sample meets the permissible limits as per IS 10500:2012 for the above microbiological tests					

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

*Amrisha*  
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*Amrisha*  
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NAL/ET/01/A0  
Issue Date : 20-08-2024



## TEST REPORT

Name & Address of the Customer	M/s. ORIENT CEMENT LIMITED Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	M/s. Itagi Lime Stone Mine, Chittapur.		
Discipline	Chemical	Sample ID	NAL/2024/11/W/266
Product or Material	Ground Water	Report No	NAL/2024/11/W/266
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Mogla Tande	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	2Ltrs	Report Date	04.12.2024
Page No	1/3		
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl. No	Test parameter	Unit	Result	Maximum Acceptable Limit	Maximum Permissible Limits in The Absence of Alternate Source	Test method
				As per IS:10500-2012		
		Hz	BDL (DL=1.0)	5.0	15.0	IS 3025 (part 04): 2021
01	Color	---	Agreeable	Agreeable	Agreeable	IS 3025(Part-05)-2018
02	Odor	---	Agreeable	Agreeable	Agreeable	IS 3025(Part-07)-2017
03	Taste	---	7.3	6.5 - 8.5	No relaxation	IS 3025(Part-11)-2022
04	pH value	NTU	1.6	1.0	5.0	IS 3025(Part-10)-2023
05	Turbidity	μS/cm	1086.0	---	---	IS 3025(Part-14)-2013
06	Conductivity	mg/L	650.0	500	2000	IS 3025(Part-16)-2023
07	Total Dissolved Solids	mg/L	210.0	200	600	IS 3025(Part-23)-2023
08	Total Alkalinity as CaCO <sub>3</sub>	mg/L	256.0	200	600	IS 3025(Part-21)-2009
09	Total Hardness as CaCO <sub>3</sub>	mg/L	60.0	75	200	IS 3025(Part-40)-1991
10	Calcium as Ca	mg/L	26.0	30	100	IS 3025(Part-46)-2023
11	Magnesium as Mg	mg/L	68.0	250	1000	IS 3025(Part-32)-1988
12	Chloride as Cl	mg/L	30.0	200	400	APHA 4500 SO <sub>4</sub> -F 24 <sup>th</sup> Edition 2023
13	Sulphate as SO <sub>4</sub>	mg/L	19.6	45	No relaxation	APHA 24th Edition 4500 NO <sub>3</sub> B: 2023
14	Nitrates as NO <sub>3</sub>	mg/L	0.47	1.0	1.5	APHA 4500-F 24 <sup>th</sup> Edition 2023
15	Fluoride as F	mg/L	0.20	1.0	No relaxation	APHA 24th Edition 4500 F D: 2023
16	Iron as Fe	mg/L	BDL (DL=0.2)	Min 0.2	Min 1.0	IS 3025(Part-26)-2021
17	Residual free chlorine	mg/L	BDL (DL=0.1)	0.5	2.4	APHA 24th Edition 4500 B B: 2023
18	Boron (as B)	mg/L	BDL(DL=0.001)	0.001	0.002	APHA 24th Edition 5530 C: 2023
19	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)					

Note: Min: Minimum, BDL: Below detection Limit DL: Detection Limit;  
NOTE: The Test Residual free Chlorine is applicable only when water is chlorinated.

Note: Min: Minimum, BDL: Below detection Limit DL: Detection Limit;  
NOTE: The Test Residual free Chlorine is applicable only when water is chlorinated.

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## TEST REPORT

Name & Address of the Customer	M/s. ORIENT CEMENT LIMITED Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	M/s. Itagi Lime Stone Mine, Chittapur.		
Discipline	Chemical	Sample ID	NAL/2024/11/W/266
Product or Material	Ground Water	Report No	NAL/2024/11/W/266
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Mogla Tande	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	2Ltrs	Report Date	04.12.2024
Page No	2/3		
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl. No	Test parameter	Unit	Result	Maximum Acceptable Limit	Maximum Permissible Limits in The Absence of Alternate Source	Test method
				As per IS: 10500-2012		
20	Aluminium (as Al)	mg/L	0.011	0.03	0.2	IS 3025 P-02: 2019
21	Barium (as Ba)	mg/L	0.031	0.7	No relaxation	IS 3025 P-02: 2019
22	Copper (as Cu)	mg/L	0.011	0.05	1.5	IS 3025 P-02: 2019
23	Manganese (as Mn)	mg/L	0.011	0.1	0.3	IS 3025 P-02: 2019
24	Selenium (as Se)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
25	Zinc (as Zn)	mg/L	0.024	5.0	15.0	IS 3025 P-02: 2019
26	Lead (as Pb)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
27	Nickel (as Ni)	mg/L	BLQ (LOQ=0.01)	0.02	No relaxation	IS 3025 P-02: 2019
28	Total arsenic (as As)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
29	Total chromium (as Cr)	mg/L	BLQ (LOQ=0.01)	0.05	No relaxation	IS 3025 P-02: 2019
Note: BLQ: Below Limit of Quantification ; LOQ: Limit of Quantification						
Remarks: The Above Sample meets to Permissible Limits as Per IS 10500:2012 for the above Physico-chemical tests						

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## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/11/W/266
Product or Material	Ground Water	Report No	NAL/2024/11/W/266
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Mogla Tande	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	500 ml	Report Date	04.12.2024
Page No	3/3		
Sample package	Water Sample Collected in Sterilized Bottle		
Description	Colorless, Odorless, transparent liquid		

SL No	Test parameter	Unit	Result	Maximum Permissible Limits in The Absence of Alternate Source As per IS:10500-2012	Test method
30	Escherichia coli	CFU/100 ml	<1	Shall not be detectable in 100 ml sample	IS : 15185 :2016
31	Total Coliforms	CFU/100 ml	<1		IS : 15185 :2016
Remarks: The Above sample meets the permissible limits as per IS 10500:2012 for the above microbiological tests					

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

Amulya  
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## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itaga PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/11/W/267
Product or Material	Ground Water	Report No	NAL/2024/11/W/267
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Chittapur	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	2Litrs	Report Date	04.12.2024
Page No	1/3		
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl No	Test parameter	Unit	Result	Maximum Acceptable Limit	Maximum Permissible Limits in The Absence of Alternate Source	Test method
				As per IS:10500-2012		
01	Color	Hz	BDL (DL=1.0)	5.0	15.0	IS 3025 (part 04)- 2021
02	Odor	---	Agreeable	Agreeable	Agreeable	IS-3025(Part-05)-2018
03	Taste	---	Agreeable	Agreeable	Agreeable	IS-3025(Part-07)-2017
04	pH value	---	7.5	6.5 - 8.5	No relaxation	IS:3025(Part-11)-2022
05	Turbidity	NTU	1.5	1.0	5.0	IS:3025(Part-10)-2023
06	Conductivity	µS/cm	1410.0	---	---	IS-3025(Part-14)-2013
07	Total Dissolved Solids	mg/L	852.0	500	2000	IS-3025(Part-16)-2023
08	Total Alkalinity as CaCO <sub>3</sub>	mg/L	310.0	200	600	IS-3025(Part-23)-2023
09	Total Hardness as CaCO <sub>3</sub>	mg/L	330.0	200	600	IS-3025(Part-21)-2009
10	Calcium as Ca	mg/L	84.0	75	200	IS-3025(Part-40)-1991
11	Magnesium as Mg	mg/L	29.0	30	100	IS-3025(Part-46)-2023
12	Chloride as Cl	mg/L	160.0	250	1000	IS-3025(Part-32)-1988
13	Sulphate as SO <sub>4</sub>	mg/L	30.0	200	400	APHA 4500 SO <sub>4</sub> -F 24 <sup>th</sup> Edition 2023
14	Nitrates as NO <sub>3</sub>	mg/L	19.6	45	No relaxation	APHA 24th Edition 4500 NO <sub>3</sub> B- 2023
15	Fluoride as F	mg/L	0.26	1.0	1.5	APHA 4500-F 24 <sup>th</sup> Edition 2023
16	Iron as Fe	mg/L	0.14	1.0	No relaxation	APHA 24th Edition 4500 F D- 2023
17	Residual free chlorine	mg/L	BDL (DL=0.2)	Min 0.2	Min 1.0	IS-3025(Part-26)-2021
18	Boron (as B)	mg/L	BDL (DL=0.1)	0.5	2.4	APHA 24th Edition 4500 B B-2023
19	Phenolic compounds (as C <sub>6</sub> H <sub>5</sub> OH)	mg/L	BDL(DL=0.001)	0.001	0.002	APHA 24th Edition 5530 C- 2023
Note: Min: Minimum, BDL: Below detection Limit, DL: Detection Limit;						
NOTE: The Test Residual free Chlorine is applicable only when water is chlorinated.						

Note: Min: Minimum, BDL: Below detection Limit DL: Detection Limit;  
NOTE: The Test Residual free Chlorine is applicable only when water is chlorinated.

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**TEST REPORT**

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/11/W/267
Product or Material	Ground Water	Report No	NAL/2024/11/W/267
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Chittapur	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Sample collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	2Ltrs	Report Date	04.12.2024
Page No	2/3		
Sample package	Water Sample Collected in PET Bottle		
Description	Colorless, Odorless, transparent liquid		

Sl. No	Test parameter	Unit	Result	Maximum Acceptable Limit	Maximum Permissible Limits in The Absence of Alternate Source	Test method
					As per IS: 10500-2012	
20	Aluminium (as Al)	mg/L	0.015	0.03	0.2	IS 3025 P-02: 2019
21	Barium (as Ba)	mg/L	0.048	0.7	No relaxation	IS 3025 P-02: 2019
22	Copper (as Cu)	mg/L	0.011	0.05	1.5	IS 3025 P-02: 2019
23	Manganese (as Mn)	mg/L	0.025	0.1	0.3	IS 3025 P-02: 2019
24	Selenium (as Se)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
25	Zinc (as Zn)	mg/L	0.035	5.0	15.0	IS 3025 P-02: 2019
26	Lead (as Pb)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
27	Nickel (as Ni)	mg/L	BLQ (LOQ=0.01)	0.02	No relaxation	IS 3025 P-02: 2019
28	Total arsenic (as As)	mg/L	BLQ (LOQ=0.01)	0.01	No relaxation	IS 3025 P-02: 2019
29	Total chromium (as Cr)	mg/L	BLQ (LOQ=0.01)	0.05	No relaxation	IS 3025 P-02: 2019
Note: BLQ: Below Limit of Quantification ; LOQ: Limit of Quantification						
Remarks: The Above Sample meets to Permissible Limits as Per IS 10500:2012 for the above Physico-chemical tests						

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## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/11/W/267
Product or Material	Ground Water	Report No	NAL/2024/11/W/267
Particulars of Sample	Borewell Water	Date of Sample Collection	30.11.2024
Sampling Point	Chittapur	Date of sample Receipt	30.11.2024
Sample submitted by	Customer	Date of Analysis Started	30.11.2024
Simple collected by	Our Representative	Date of Completion	04.12.2024
Sample Qty	500 ml	Report Date	04.12.2024
Page No	3/3		
Sample package	Water Sample Collected in Sterilized Bottle		
Description	Colorless, Odorless, transparent liquid		

SL No	Test parameter	Unit	Result	Maximum Permissible Limits in The Absence of Alternate Source As per IS:10500-2012	Test method
30	Escherichia coli	CFU/100 ml	<1	Shall not be detectable in 100 ml sample	IS : 15185 :2016
31	Total Coliforms	CFU/100 ml	<1		IS : 15185 :2016

Remarks: The Above sample meets the permissible limits as per IS 10500:2012 for the above microbiological tests

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

Verified By



Authorized Signatory

Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.

NAL/FP/01/103  
Issue Date : 20-06-2024

## TEST REPORT

Name & Address of the Customer	M/s. ORIENT CEMENT LIMITED Tq. Chittapur, Itga PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	M/s. Itagi Lime Stone Mine, Chittapur.		
Discipline	Chemical	Sample ID	NAL/2024/11/G/75
Particulars of Sample	Wells Depths (Piezometer)	Report No	NAL/2024/11/G/75
Sample submitted by	Customer	Date of Sample Collection	28.11.2024
Sample collected by	Our Representative	Date of sample Receipt	28.11.2024
Page No	1/1	Report Date	30.11.2024

SI No	Locations Name	Bore Wells Depths in meters
01	Itga Village	8.2
02	Mogla Village	7.9
03	Diggove Village	12.4
04	Chittapur	8.6

\*\*\*\*\*End of the report\*\*\*\*\*

  
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Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.



## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Noise Monitoring - Night Time  
Sample Code / ID : 11/11/2024 - NAL/2024/11/ED/56  
: 22/11/2024 - NAL/2024/11/ED/163  
Report Date : 01/12/2024  
Page No : 1/1

### Instrument Used:

Instrument Name	Make	SI No	Instrument Calibrated Date	Instrument Calibrated Due Date
Sound Level Meter	Lutron Instruments	Q703307	08/07/2024	07/07/2025

## NOISE MONITORING RESULTS

Sl No	Date of Sample Collection	Sample Location	L min.	L max.	Results in dB (A) Leq	KSPCB Standards	Test Method
1	11/11/2024	Crushing & Screening	55.8	63.2	59.6	70 dB (A) Leq (Night Time)	IS 9989:1981 (Reaffirmed-2020)
	22/11/2024		56.6	62.4	59.4		
2	11/11/2024	Mining Area	57.0	66.8	61.8		
	22/11/2024		57.4	65.2	61.4		
3	11/11/2024	CCR Office	50.8	57.2	54.2		
	22/11/2024		51.6	63.2	57.5		
4	11/11/2024	Surgebin	51.8	63.4	57.6		
	22/11/2024		55.2	63.0	59.2		

\*\*\*\*\*End of the report\*\*\*\*\*

  
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**DECEMBER - 2024**

## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Ambient Air Quality Monitoring  
Report Date : 01/01/2025  
Page No : 1/1

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collection										
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )			NO <sub>2</sub> (µg/m <sup>3</sup> )			Carbon Monoxide (mg/m <sup>3</sup> )		
				I Shift	II Shift	III Shift	I Shift	II Shift	III Shift	I Shift	II Shift	III Shift
1. Near Lime Stone Crusher : (N 17°06'53.0", E 77°08'25.0")												
02.12.2024	29	53.9	21.0	18.0	19.4	20.2	23.0	24.2	25.0	ND	ND	ND
06.12.2024	57	54.2	22.0	17.4	19.0	20.0	25.4	26.0	25.4	ND	ND	ND
09.12.2024	92	55.2	19.0	19.0	17.0	17.9	24.0	26.2	23.0	ND	ND	ND
13.12.2024	142	51.9	19.9	18.0	19.0	20.0	22.0	24.3	25.3	ND	ND	ND
16.12.2024	204	50.3	19.4	17.9	20.0	20.4	24.0	23.7	26.0	ND	ND	ND
20.12.2024	258	52.8	20.2	19.0	18.4	19.2	25.4	25.2	23.8	ND	ND	ND
23.12.2024	297	51.7	20.8	20.0	17.0	19.4	24.0	25.4	26.0	ND	ND	ND
27.12.2024	330	52.0	21.0	22.0	19.0	18.0	22.0	23.9	22.0	ND	ND	ND
2. Near Surghin Hopper : (N 17°06'56.2", E 77°08'16.4")												
02.12.2024	30	52.8	20.0	18.0	19.2	17.4	23.4	25.0	26.2	ND	ND	ND
06.12.2024	58	53.4	19.0	19.4	18.4	17.9	25.0	24.8	24.2	ND	ND	ND
09.12.2024	93	56.2	18.0	18.2	19.0	20.0	24.4	25.4	23.9	ND	ND	ND
13.12.2024	143	57.0	19.9	17.0	16.0	19.0	27.4	26.2	24.2	ND	ND	ND
16.12.2024	205	55.0	18.3	16.2	18.0	17.4	25.2	24.8	24.2	ND	ND	ND
20.12.2024	259	54.2	19.2	17.5	19.0	18.0	24.8	23.9	24.4	ND	ND	ND
23.12.2024	298	53.8	20.2	18.2	19.7	19.0	23.9	22.7	23.0	ND	ND	ND
27.12.2024	331	52.4	19.6	19.0	20.0	17.9	22.4	22.8	21.7	ND	ND	ND

### Test Method:

PM<sub>10</sub> - IS 5182 (Part-23) 2006 (RA - 2017)

PM<sub>2.5</sub> - IS 5182 (Part-24) 2019

Sulphur Dioxide (SO<sub>2</sub>) - IS 5182 (Part-22) 2001 (RA - 2022)

Nitrogen Dioxide (NO<sub>2</sub>) - IS 5182 (Part 6) 2006 (RA - 2017)

Carbon Monoxide - IS 5182 (Part 10) 1999 (RA - 2019)

Note: ND - Not Detected

\*\*\*\*\*End of the report\*\*\*\*\*



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## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Ambient Air Quality Monitoring  
Report Date : 01/01/2025  
Page No : 1/1

Name of the Station/ Date of Sample Collection	Lab Sample Code	Particulars of Sample Collection										
		PM <sub>10</sub> (µg/m <sup>3</sup> )	PM <sub>2.5</sub> (µg/m <sup>3</sup> )	SO <sub>2</sub> (µg/m <sup>3</sup> )			NO <sub>2</sub> (µg/m <sup>3</sup> )			Carbon Monoxide (mg/m <sup>3</sup> )		
				I Shift	II Shift	III Shift	I Shift	II Shift	III Shift	I Shift	II Shift	III Shift
3. Near Mining Area: (N 17°07'00.3", E 77°08'50.9")												
02.12.2024	31	63.0	22.1	20.2	19.0	18.8	23.0	24.2	25.0	ND	ND	ND
06.12.2024	59	61.8	25.4	21.0	19.9	20.8	22.9	23.8	24.2	ND	ND	ND
09.12.2024	94	62.4	23.8	20.0	19.4	19.9	23.9	24.4	23.0	ND	ND	ND
13.12.2024	144	59.9	24.4	12.7	20.0	21.0	23.0	24.1	22.0	ND	ND	ND
16.12.2024	206	58.4	23.8	17.0	18.8	19.0	25.2	26.0	24.0	ND	ND	ND
20.12.2024	260	60.3	24.7	16.9	17.0	20.0	26.0	25.2	25.0	ND	ND	ND
23.12.2024	299	61.7	25.4	12.9	20.4	21.0	25.2	24.6	24.0	ND	ND	ND
27.12.2024	332	60.9	22.0	17.4	20.0	18.0	25.0	25.2	24.4	ND	ND	ND
4. Haulage : (N 17°06'50.8", E 77°08'36.7")												
02.12.2024	32	58.0	19.0	11.0	13.0	12.2	20.0	21.2	20.4	ND	ND	ND
06.12.2024	60	57.2	20.2	12.0	14.2	14.8	19.8	20.8	20.3	ND	ND	ND
09.12.2024	95	55.4	21.1	13.0	16.0	12.3	21.4	20.3	19.8	ND	ND	ND
13.12.2024	145	57.0	19.8	11.4	14.0	14.2	18.4	19.2	17.9	ND	ND	ND
16.12.2024	207	56.2	18.4	12.1	12.0	16.8	18.0	20.4	21.0	ND	ND	ND
20.12.2024	261	59.1	26.8	11.0	13.0	12.3	18.4	19.8	22.0	ND	ND	ND
23.12.2024	300	57.0	19.4	11.4	14.3	13.7	21.0	19.9	21.2	ND	ND	ND
27.12.2024	333	62.0	23.8	11.8	13.7	12.0	20.3	21.0	22.0	ND	ND	ND

### Test Method:

PM<sub>10</sub> - IS 5182 (Part-23) 2006 (RA - 2017)

PM<sub>2.5</sub> - IS 5182 (Part-24) 2019

Sulphur Dioxide (SO<sub>2</sub>) - IS 5182 (Part-22) 2001 (RA - 2022)

Nitrogen Dioxide (NO<sub>2</sub>) - IS 5182 (Part 6) 2006 (RA - 2017)

Carbon Monoxide - IS 5182 (Part 10) 1999 (RA - 2019)

Note: ND - Not Detected

\*\*\*\*\*End of the report\*\*\*\*\*

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## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of Sample Collected : Ambient Air Quality Monitoring  
Date of Collection : 23/12/2024  
Date of Sample Receipt : 24/12/2024  
Sample Code / ID : NAL/2024/12/ED/297-300  
Date of Analysis Started : 24/12/2024  
Date of Completion : 27/12/2024  
Report No : NAL/2024/12/ED/297-300  
Report Date : 27/12/2024  
Page No : 1/1

SL. NO	PARAMETER	UNIT	Near Lime Stone Crusher	Near Surgbin Hopper	Near Mining Area	Haulage	STANDARD LIMITS AS PER NAAQS	TEST METHOD
1	Lead as Pb	µg/m <sup>3</sup>	BDL (DL=0.01)	BDL (DL=0.01)	BDL (DL=0.01)	BDL (DL=0.01)	1.0 Max	IS 5182 (Part 22) 2004 (RA 2019)
2	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	23.8	22.6	21.4	24.6	400.0 Max	IS 5182 (P-25) 2018
3	Arsenic as As	ng/m <sup>3</sup>	BDL (DL=1.0)	BDL (DL=1.0)	BDL (DL=1.0)	BDL (DL=1.0)	6.0 Max	NALRC/SOP/ AJR-19 2022
4	Nickel as Ni	ng/m <sup>3</sup>	BDL (DL=0.01)	BDL (DL=0.01)	BDL (DL=0.01)	BDL (DL=0.01)	20.0 max	IS 5182 (Part 26) 2020
5	Ozone as O <sub>3</sub>	µg/m <sup>3</sup>	12.0	16.0	8.6	10.2	100.0 Max	IS 5182 (P 9) 1974 (RA 2019)
6	Mercury as Hg	µg/m <sup>3</sup>	BDL (DL=0.01)	BDL (DL=0.01)	BDL (DL=0.01)	BDL (DL=0.01)	Not Specified	NALRC/SOP/ AJR-19 2022
7	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	BDL (DL=5.0)	BDL (DL=5.0)	BDL (DL=5.0)	BDL (DL=5.0)	5.0 Max	IS 5182 (Part 11) 2006 (RA 2017)
8	Benzo (a) Pyrene	ng/m <sup>3</sup>	BDL (DL=1.0)	BDL (DL=1.0)	BDL (DL=1.0)	BDL (DL=1.0)	1.0 Max	IS 5182 (Part 12) 2004 (RA 2019)

Note : BDL - Below Detection Limit  
DL - Detection Limit

\*\*\*\*\*End of the report\*\*\*\*\*

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## TEST REPORT

Name of the Project	: M/s. Itagi Lime Stone Mine, Chittapur.
Name & Address of the Customer	: M/s. ORIENT CEMENT LIMITED Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.
Particulars of Sample Collected	: Stack Monitoring
Particular of Stack	: Chimney attached to "Lime Stone Crusher"
Date of Collection	: 23/12/2024
Date of Sample Receipt	: 24/12/2024
Sample Code / ID	: NAL/2024/12/ED/301
Date of Analysis Started	: 24/12/2024
Date of Completion	: 27/12/2024
Report No	: NAL/2024/12/ED/301
Report Date	: 07/12/2024
Page No	: 1/1

### Instrument Used:

Instrument Name	Make	Model	Instrument Calibrated Date	Instrument calibration due Date
Stack Monitoring Kit	Greentech Instruments	ESS 100	11/03/2024	10/03/2025

### General Details

Date of Monitoring	23/12/2024
Ambient Temperature(°C)	30.0
Stack Diameter (m)	1.5
Quantity of flue gas discharged into the atmosphere (Nm <sup>3</sup> /Hr)	43265.34
Flue Gas Temperature	49.0
Exit Velocity of gas (Mts/Sec)	6.8

## STACK MONITORING RESULTS

Parameters	Unit	Result	Limits	Test Method
Particulate matter	mg/Nm <sup>3</sup>	3.2	-	IS 11255 (Part 1) 1985 RA 2019

\*\*\*\*\*End of the report\*\*\*\*\*

  
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## TEST REPORT

Name of the Project	: M/s. Itagi Lime Stone Mine, Chittapur.
Name & Address of the Customer	: M/s. ORIENT CEMENT LIMITED Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.
Particulars of sample	: Fugitive Emission Monitoring
Date of Collection	: 23/12/2024
Date of Sample Receipt	: 24/12/2024
Sample Code / ID	: NAL/2024/12/ED/304-307
Date of Analysis Started	: 24/12/2024
Date of Completion	: 27/12/2024
Report No	: NAL/2024/12/ED/304-307
Report Date	: 27/12/2024
Page No	: 1/1

### Environmental Conditions

Temperature (°C)	30.0
Humidity (%)	46.0
Climate	Clear Sky
Wind Flow	Normal

### FUGITIVE EMISSION MONITORING RESULTS

Sl No	Parameter	Locations	Unit	Results	Standard as per KSPCB	Test Method
1	Particulate Matter	Near Lime Stone Crusher: (N 17°06'53.4", E 77°08'24.7")	µg/m³	468.4	600	IS 5182 (Part 4) 1999 RA 2019
2		Near Weigh Bridge at Haulage Road: (N 17°06'50.7", E 77°08'36.2")	µg/m³	410.8		
3		Near Over Burden Dump: (N 17°06'57.9", E 77°08'45.8")	µg/m³	384.6		
4		Near Drilling / Excavation at Mines: (N 17°07'00.5", E 77°09'02.5")	µg/m³	512.0		

\*\*\*\*\*End of the report\*\*\*\*\*

Verified By



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## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Noise Monitoring - Day Time  
Sample Code / ID : 09/12/2024 - NAL/2024/12/ED/96  
: 23/12/2024 - NAL/2024/12/ED/302  
Report Date : 01/01/2025  
Page No : 1/1

### Instrument Used:

Instrument Name	Make	SI No	Instrument Calibrated Date	Instrument Calibrated Due Date
Sound Level Meter	Lutron Instruments	Q703307	08/07/2024	07/07/2025

## NOISE MONITORING RESULTS

Sl No	Date of Sample Collection	Sample Location	L min.	L max.	Results in dB (A)Leq	KSPCB Standards	Test Method
1	09/12/2024	Crushing & Screening	58.3	68.4	63.3	75 dB (A) Leq (Day Time)	IS 9989:1981 (Reaffirmed-2020)
	23/12/2024		59.8	69.2	64.5		
2	09/12/2024	Mining Area	65.4	70.8	68.1		
	23/12/2024		66.2	71.4	68.8		
3	09/12/2024	CCR Office	58.6	65.4	62.0		
	23/12/2024		57.2	65.8	61.5		
4	09/12/2024	Surgebin	57.6	65.2	61.4		
	23/12/2024		58.4	66.5	62.4		

\*\*\*\*\*End of the report\*\*\*\*\*

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## TEST REPORT

Name of the Project : M/s. Itagi Lime Stone Mine, Chittapur.  
Name & Address of the Customer : M/s. ORIENT CEMENT LIMITED  
Tq. Chittapur, Itagi PO, Malkhed Road,  
Chittapur - 585211.  
Particulars of sample : Noise Monitoring - Night Time  
Sample Code / ID : 09/12/2024 - NAL/2024/12/ED/97  
: 23/12/2024 - NAL/2024/12/ED/303  
Report Date : 01/01/2025  
Page No : 1/1

### Instrument Used:

Instrument Name	Make	SI No	Instrument Calibrated Date	Instrument Calibrated Due Date
Sound Level Meter	Lutron Instruments	Q703307	08/07/2024	07/07/2025

## NOISE MONITORING RESULTS

Sl No	Date of Sample Collection	Sample Location	L min.	L max.	Results in dB (A)Leq	KSPCB Standards	Test Method
1	09/12/2024	Crushing & Screening	56.4	64.8	60.6	70 dB (A) Leq (Night Time)	IS 9989:1981 (Reaffirmed-2020)
	23/12/2024		55.8	62.6	59.2		
2	09/12/2024	Mining Area	58.2	66.4	62.3		
	23/12/2024		57.5	66.8	62.1		
3	09/12/2024	CCR Office	51.4	58.3	54.8		
	23/12/2024		55.6	62.5	59.0		
4	09/12/2024	Surgebin	55.7	60.8	58.2		
	23/12/2024		53.6	61.2	57.4		

\*\*\*\*\*End of the report\*\*\*\*\*

  
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## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/12/W/165
Particulars of Sample	Mines Pit Water (17.1168160 °N , 77.1507060 °E)	Report No	NAL/2024/12/W/165
Sample submitted by	Customer	Date of Sample Collection	23.12.2024
Sample collected by	Our Representative	Date of sample Receipt	23.12.2024
Sample Qty	2Ltrs	Date of Analysis Started	23.12.2024
Page No	1/2	Date of Completion	27.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	27.12.2024
Description	Colorless, Odorless, transparent liquid		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
01	Color, Hazen Units	BDL(DL=1.0)	IS 3025 (P-04)2021	-
02	Conductivity, $\mu\text{S}/\text{cm}$	680.0	IS 3025 (P-14)1984 RA 2019	-
03	Total Dissolved Solids, mg/L	435.0	IS 3025 (P-16)2023	-
04	pH Value	8.2	IS 3025 (P-11)2022	5.5 to 9.0
05	Turbidity, NTU	2.6	IS 3025 (P-10)2022	-
06	Total Suspended Solids	7.0	IS 3025(P-17) 2022	100
07	Calcium as Ca, mg/L	53.0	IS 3025 (P-40)1991 RA 2019	-
08	Magnesium as Mg, mg/L	12.0	IS 3025 (P-46)1994RA 2019	-
09	Total Hardness as $\text{CaCO}_3$ , mg/L	181.0	IS 3025 (P-21)2009 RA 2019	-
10	Chloride as Cl, mg/L	33.0	IS 3025 (P-32)1988 RA 2019	-
11	Sulphate as $\text{SO}_4$ , mg/L	26.0	APHA 24th Edition4500SO4	-
12	Fluoride as F, mg/L	0.72	APHA 24th Edition4500F- D	2
13	Nitrate as $\text{NO}_3$ , mg/L	12.2	APHA 24th Edition NO3 B	-
14	Total Alkalinity as $\text{CaCO}_3$ , mg/L	180.0	IS 3025 (P-23)1986 RA 2019	-
15	Iron as Fe, mg/L	0.23	APHA 24th Edition 3500-Fe B	-

Note: BDL: Below Detection Limit, DL: Detection Limit

\*\*\*\*\*End of the report\*\*\*\*\*

*Handwritten Signature*  
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*Handwritten Signature*  
Authorized Signatory

## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/12/W/165
Particulars of Sample	Mines Pit Water (17.1168160 °N , 77.1507060 °E)	Report No	NAL/2024/12/W/165
Sample submitted by	Customer	Date of Sample Collection	23.12.2024
Sample collected by	Our Representative	Date of sample Receipt	23.12.2024
Sample Qty	500ml	Date of Analysis Started	23.12.2024
Page No	2/2	Date of Completion	27.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	27.12.2024
Description	Colorless, Odorless, transparent liquid		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
16	Total coliform bacteria CFU/100ml	80	IS 15185 2016 (RA-2021)	-
17	Escherichia Coli, CFU/100ml	45	IS 15185 2016 (RA-2021)	-

\*\*\*\*\*End of the report\*\*\*\*\*



  
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Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.

NAL/FF/01/AQ  
Issue Date : 29-08-2024



## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Chemical</b>	Sample ID	NAL/2024/12/W/166
Particulars of Sample	Kagina River Water - Downstream (17.1749010 °N , 77.1047400°E)	Report No	NAL/2024/12/W/166
Sample submitted by	Customer	Date of Sample Collection	23.12.2024
Sample collected by	Our Representative	Date of sample Receipt	23.12.2024
Sample Qty	2Ltrs	Date of Analysis Started	23.12.2024
Page No	1/2	Date of Completion	27.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	27.12.2024
Description	Slightly whitish coloured, odorless, turbid liquid.		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
01	Color, Hazen Units	BDL(DL=1.0)	IS 3025 (P-04)2021	-
02	Conductivity, $\mu\text{S}/\text{cm}$	740.0	IS 3025 (P-14)1984 RA 2019	-
03	Total Dissolved Solids, mg/L	474.0	IS 3025 (P-16)2023	-
04	pH Value	7.7	IS 3025 (P-11)2022	5.5 to 9.0
05	Turbidity, NTU	3.4	IS 3025 (P-10)2022	-
06	Total Suspended Solids	14.0	IS 3025(P-17) 2022	100
07	Calcium as Ca, mg/L	58.0	IS 3025 (P-40)1991 RA 2019	-
08	Magnesium as Mg, mg/L	13.0	IS 3025 (P-46)1994RA 2019	-
09	Total Hardness as $\text{CaCO}_3$ , mg/L	197.0	IS 3025 (P-21)2009 RA 2019	-
10	Chloride as Cl, mg/L	44.0	IS 3025 (P-32)1988 RA 2019	-
11	Sulphate as $\text{SO}_4$ , mg/L	20.0	APHA 24 <sup>th</sup> Edition 4500 $\text{SO}_4$	-
12	Fluoride as F, mg/L	0.56	APHA 24 <sup>th</sup> Edition 4500F- D	2
13	Nitrate as $\text{NO}_3$ , mg/L	7.2	APHA 24 <sup>th</sup> Edition $\text{NO}_3$ B	-
14	Total Alkalinity as $\text{CaCO}_3$ , mg/L	208.0	IS 3025 (P-23)1986 RA 2019	-
15	Iron as Fe, mg/L	0.88	APHA 24 <sup>th</sup> Edition 3500-Fe	3

Note: BDL: Below Detection Limit, DL: Detection Limit

\*\*\*\*\*End of the report\*\*\*\*\*

Verified By



Authorized Signatory

Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.

## TEST REPORT

Name & Address of the Customer	<b>M/s. ORIENT CEMENT LIMITED</b> Tq. Chittapur, Itagi PO, Malkhed Road, Chittapur - 585211.		
Name of the Project	<b>M/s. Itagi Lime Stone Mine, Chittapur.</b>		
Discipline	<b>Biological</b>	Sample ID	NAL/2024/11/W/263
Particulars of Sample	Kagina River Water - Downstream (17.1749010 °N , 77.1047400°E)	Report No	NAL/2024/11/W/263
Sample submitted by	Customer	Date of Sample Collection	30.11.2024
Sample collected by	Our Representative	Date of sample Receipt	30.11.2024
Sample Qty	500ml	Date of Analysis Started	30.11.2024
Page No	2/2	Date of Completion	04.12.2024
Sample package	Water Sample Collected in PET Bottle	Report Date	04.12.2024
Description	Slightly whitish coloured, odorless, turbid liquid,		

Sl No	Parameters	Results	Test Method	General standards for Inland Surface water Schedule - VI (EPA-'86)
16	Total coliform bacteria CFU/100ml	72	IS 15185 2016 (RA-2021)	-
17	Escherichia Coli, CFU/100ml	30	IS 15185 2016 (RA-2021)	-

\*\*\*\*\*End of the report\*\*\*\*\*

Amula  
Verified By



*[Signature]*  
Authorized Signatory

Note: 1. The results listed above pertain only to the tested samples and applicable parameters. 2. Samples will be stored for a period of 15 days. 3. Sampling not done by us unless specified. 4. This report is not to be reproduced either wholly or in part and can not be used evidence in the court of law and should not be used in any advertising media without prior written permission.



**JANUARY - 2025**

# SHRI KRISHNA AQUA ENGINEERING WORKS

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**Environmental Lab, Pollution Control Consultants**

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Mobile : +91 94480 51534, +91 94800 28018,  
E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



## TEST REPORT

Report No.: SKAEWIA/2025/JAN/07,08,09 & 10	Date of Sampling	06.01.2025
Name of the Organisation : M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Receipt	07.01.2025
	Date of Analysis Started	08.01.2025
	Date of Analysis Completed	10.01.2025
	Date of Report	05.02.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene Container

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2008	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

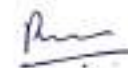
## RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	66.25	29.54	19.20	18.70	25.20	26.70	0.25	0.85
				15.90	---	22.90	---	0.51	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	64.28	27.34	15.20	17.50	20.40	19.70	0.34	0.65
				18.40	---	25.60	---	0.84	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	61.87	26.47	16.2	17.5	23.6	28.4	0.3	0.78
				18.40	---	25.80	---	0.40	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	66.32	29.31	13.50	17.40	21.40	26.30	0.40	0.32
				15.80	---	20.80	---	0.15	---

## INFERENCE

As Per NAAQ Standards,  
Report Status :- The above tested results are within the limits.

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

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Mobile : +91 94480 51534, +91 94800 28018,  
E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



## TEST REPORT

Report No.: SKAEWA/2025/JAN/11,12,13 & 14	Date of Sampling	08.01.2025
Name of the Organisation :	Date of Receipt	09.01.2025
MVS. ORIENT CEMENT LIMITED.,	Date of Analysis Started	10.01.2025
Malkhed Road Chittapur - 585211	Date of Analysis Completed	12.01.2025
Particulars of Sample Collected : Ambient	Date of Report	05.02.2025
Sampling Method : IS-5182	Duration of Sampling	24 Hours
	Sample Description	Polyethylene Container

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS-5182 (Part 23): 2006	CPCB Manual	IS-5182 (Part 2): 2001 (Reaffirmed -2014)	IS-5182 (Part 6):2006 (Reaffirmed -2014)	IS-5182 (Part 10): 1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

## RESULTS

SL NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher Latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	67.54	25.79	15.20	19.40	22.40	27.40	0.70	0.85
				13.40		26.50	—	0.50	—
2	Near Surgbin Hopper Latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	62.89	25.34	18.40	16.50	24.20	22.60	0.80	0.49
				16.90		28.60	—	0.14	—
3	Near mining Area Latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	66.54	27.49	12.40	13.50	27.80	25.60	0.4	0.62
				15.90	—	29.40	—	0.84	—
4	Main Haulage Road Latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	68.12	23.64	14.80	15.20	24.10	24.70	0.20	0.47
				16.80	—	22.90	—	0.40	—

## INFERENCE

As Per NAAQ Standards,  
Report Status :- The above tested results are with in the limits.

Verified By  
ibeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



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Mobile : +91 94480 51534, +91 94800 28018,  
E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



## TEST REPORT

Report No.: SKAEWA/2025/JAN/15,16,17 & 18	Date of Sampling	10.01.2025
Name of the Organisation :	Date of Receipt	11.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Analysis Started	12.01.2025
Malkhed Road Chittapur - 585211	Date of Analysis Completed	14.01.2025
	Date of Report	05.02.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene Container

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

## RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	62.54	25.87	15.20	19.50	22.50	27.40	0.91	0.84
				17.80	---	26.90	---	0.84	---
2	Near Surbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	66.89	25.36	16.20	20.50	24.80	25.60	0.62	0.49
				12.80	---	27.90	---	0.56	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	64.78	26.98	19.40	17.50	26.50	23.60	0.14	0.25
				15.80	---	22.10	---	0.13	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	65.32	24.87	16.80	19.40	24.90	27.90	0.20	0.94
				17.20	---	29.80	---	0.40	---

## INFERENCE

As Per NAAQ Standards,  
Report Status :- The above tested results are with in the limits.

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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Mobile : +91 94480 51534, +91 94800 28018,

E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



## TEST REPORT

Report No.: SKAEWA/2025/JAN/19,20,21 & 22	Date of Sampling	13.01.2025
Name of the Organisation :	Date of Receipt	14.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Analysis Started	15.01.2025
Malhed Road Chittapur - 585211	Date of Analysis Completed	17.01.2025
	Date of Report	06.02.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polysthylene Container

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed - 2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0


## RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	67.48	25.89	14.20	16.70	22.60	26.50	0.89	0.38
				16.20		25.40	—	0.99	—
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	66.98	25.78	18.70	19.60	24.70	27.40	0.86	0.10
				16.50		25.30	—	0.92	—
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	65.24	24.81	19.80	20.40	26.80	29.40	0.1	0.2
				17.20	—	27.80	—	0.20	—
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	63.87	26.32	14.20	18.20	29.40	30.20	0.30	0.51
				16.30	—	27.30	—	0.10	—

## INFERENCE

As Per NAAQ Standards,  
Report Status :- The above tested results are with in the limits.

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No.: SKAEW/A/2025/EG/JAN/23,24,25 & 26	Date of Sampling	15.01.2025
Name of the Organisation :	Date of Receipt	16.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Analysis Started	17.01.2025
Malkhed Road Chittapur - 585211	Date of Analysis Completed	20.01.2025
Particulars of Sample Collected : Ambient	Date of Report	05.02.2025
Sampling Method : IS-5182	Duration of Sampling	24 Hours
	Sample Description	Polyethylene

### GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23):2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10):1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

### RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	64.25	26.35	14.50	19.80	22.50	28.40	0.40	0.70
				16.80	---	24.70	---	0.50	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	67.59	29.78	18.70	17.50	26.50	29.70	0.30	0.60
				20.40	---	23.50	---	0.40	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	67.42	29.84	12.50	18.40	22.50	28.70	0.30	0.4
				15.80	---	24.10	---	0.10	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	69.20	27.57	16.50	16.25	28.40	29.60	0.40	0.20
				14.80	---	23.40	---	0.50	---

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com

**TEST REPORT**

Report No.: SKAEW/A/2025/EGUJAN/27,28,29 & 30	Date of Sampling	17.01.2025
Name of the Organisation :	Date of Receipt	18.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Analysis Started	20.01.2025
Malkhed Road Chittapur - 585211	Date of Analysis Completed	23.01.2025
	Date of Report	05.02.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene

**GENERAL DETAILS**

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23):2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10):1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

**RESULTS**

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	65.49	28.49	15.20	16.50	25.40	29.70	0.20	0.80
				17.80	—	27.90	—	0.10	—
2	Near Surghin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	66.35	25.46	15.20	18.70	26.30	28.60	0.09	0.40
				17.40	—	24.50	—	0.20	—
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	67.98	27.69	18.50	19.80	27.40	30.40	0.45	0.8
				17.90	—	28.90	—	0.60	—
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	68.51	26.35	18.90	20.60	24.60	27.60	0.40	0.58
				16.50	—	26.80	—	0.30	—

Verified By

Ribeka ( Chemist)

Authorised Signatory

Mrs. Radha M Bengeri



**SHRI KRISHNA AQUA ENGINEERING WORKS**

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com

**TEST REPORT**

Report No.: SKAEW/A/2025/EG/JAN/31,32,33 & 34	Date of Sampling	20.01.2025
Name of the Organisation :	Date of Receipt	21.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Analysis Started	22.01.2025
Malikhed Road Chittapur - 585211	Date of Analysis Completed	24.01.2025
	Date of Report	05.02.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene

**GENERAL DETAILS**

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23):2005	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10):1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

**RESULTS**

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	62.87	25.98	16.50	18.70	25.60	27.40	0.24	0.78
				17.40	---	26.50	---	0.36	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	66.59	27.48	15.60	16.80	22.70	26.70	0.62	0.54
				12.30	---	25.60	---	0.54	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	64.98	25.36	15.80	18.50	24.90	25.50	0.21	0.2
				14.60	---	23.50	---	0.30	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	65.29	22.34	17.90	19.70	28.70	29.70	0.14	0.41
				16.30	---	27.60	---	0.22	---

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

# SHRI KRISHNA AQUA ENGINEERING WORKS

ISO 9001:2015, ISO 45001:2018

MoEFCC Recognized, NABL Accredited Laboratory.

**Environmental Lab, Pollution Control Consultants**

"Shri Krishna" Building, 1<sup>st</sup> Cross, Pragati Colony,

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



## TEST REPORT

Report No.: SKAEW/A/2025/EG/JAN/35,36,37 & 38	Date of Sampling	22.01.2025
Name of the Organisation : M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Receipt	23.01.2025
	Date of Analysis Started	24.01.2025
	Date of Analysis Completed	27.01.2025
	Date of Report	05.02.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23):2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10):1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

## RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	62.54	22.46	15.26	18.46	25.40	27.54	0.54	0.78
				17.87	—	26.30	—	0.69	—
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	65.89	27.69	19.60	20.45	22.40	26.80	0.78	0.63
				18.30	—	24.50	—	0.84	—
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	68.49	25.69	16.50	19.78	27.60	29.70	0.56	0.47
				14.90	—	28.60	—	0.66	—
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	66.35	23.15	18.70	19.60	23.50	26.50	0.48	0.25
				16.30	—	25.60	—	0.68	—

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No. : SKAEW/S/2025/JAN/06	Date of Monitoring	28.01.2025
Name of the Organisation :	Date of Receipt	29.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Analysis Started	30.01.2025
Malkhed Road Chittapur - 585211	Date of Analysis Completed	01.02.2025
	Date of Report	05.02.2025
Sample Description: Polyethylene Container	Sample Description	Stack Emission
Stack ID : Lime Stone Crusher	Sampling Method	IS-11255

### GENERAL DETAILS

Fuel Used	---
Temperature (°C)	43
Velocity (m/s)	16.6
Height (m)	---
Diameter (m)	1.5

### RESULTS

S.NO	PARAMETERS	PROTOCOL	UNITS	RESULTS	STANDARD
1	Particulate Matter	IS:1125(Part-1)	mg/Nm <sup>3</sup>	8.64	30 Max
2	Flow/Discharge rate	Calculation Method	Nm <sup>3</sup> /hr	54824.09	NS

INFERENCE	As Per KSPCB Standards,
	Report Status :- The above tested results are with in the limits.

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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**TEST REPORT**

Report No SKAEW/W/2024/JAN/05			Date of Sampling		29.01.2025	
Name of the Organisation : M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Receipt		30.01.2025	
			Date of Analysis Started		31.01.2025	
			Date of Analysis Completed		05.02.2025	
			Date of Report		05.02.2025	
Sample Particulars : RO Water Latitude - 17°6'44.65" Logitude - 77°8'32.98"N			Condition of the Sample		Satisfactory	
Source of Collection : Mines Rest Shelter			Sampling Method : APHA 23 <sup>rd</sup> Edition -1060			
RESULTS						
SL.NO	PARAMETERS		PROTOCOL	RESULTS	Standards IS : 10500-2012	
					Desirable Limits	Permissible Limits
1	pH Value		APHA 23rd Edition 4500-H+,B	7.70	6.5-8.5	No Relaxation
2	Colour Hazen Unit		IS 3025 (Part - 4):1983	< 5	5.0 Max	15.0
3	Ambient Temperature* C		APHA 23rd EDITION – 2012 ,2550 B	27	—	—
4	Turbidity,NTU		APHA 23rd Edition 2130-B	1	1.0 Max	5.0 Max
5	Conductivity,µS/cm		APHA 23rd Edition 5520-B	628	..	..
6	Total Dissolved Solids ,mg/L		APHA 23rd Edition 2540-C	322	500 Max	2000 Max
7	Total Hardnes as CaCO <sub>3</sub> ,mg/L		APHA 23rd Edition 2340-C	178.51	200 Max	600 Max
8	Total Suspended Soilds,mg/L		APHA 23rd Edition 2540-D	1.19	—	—
9	Chemical Oxygen Demand - COD		APHA 23rd Edition 5220-B	ND	—	—
10	Biochemical Oxygen Demand- BOD (3 days at 27°C)		IS 3025 (Part 44):1993 Reaffirmed 2009	ND	—	—
11	Disolved Oxygen		APHA 23 <sup>rd</sup> EDITION ,4500 O	5.6	—	—
12	Phosphorus as P		APHA 23rd EDITION ,4500-P, D	0.07	—	—
13	Sodium as Na		APHA 23rd EDITION 3500 Na, B	9.62	—	—
14	Potassium as K		APHA 23rd EDITION 3500 K, B	1.15	—	—
15	Calcium as Ca		APHA 23rd EDITION–2017 ,3500 Ca B	32.47	75	200
16	Chlorides as Cl		APHA 23rd EDITION – 2017 , 4500 Cl B	23.0	250	1000

Contd...2

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SL.NO	PARAMETERS		PROTOCOL	RESULTS	Standards IS : 10500-2012	
					Desirable Limits	Permissible Limits
17	Sulphates as SO <sub>4</sub>		APHA 23rd EDITION-2017,4500 SO <sub>4</sub> D	4.15	200	400
18	Magnesium as Mg		APHA 23rd EDITION-2017 ,3500 Mg B	23.65	30	100
19	Fluoride as F		APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	0.14	1	1.5
20	Nitrates as NO <sub>3</sub>		APHA 23rd EDITION-2017 ,4500 NO <sub>3</sub> E, IS:3025(Part-34)-1958	2.21	15	No relaxation
21	Total Alkalinity		APHA 23rd EDITION-2017,2320 B	214	200	600
22	Acidity		APHA 23 <sup>rd</sup> EDITION - 2012 ,2310B	ND	—	—
23	Oil & Grease		APHA 23rd EDITION - 2017 ,5520 D	ND	—	—
24	Iron as Fe		APHA 23rd EDITION-2017,3500 Fe B	0.08	0.3	No relaxation
25	Nickel as Ni		APHA 23rd EDITION 3111B	ND	—	—
26	Manganese as Mn		APHA 23rd EDITION 3111B	ND	0.1	0.3
27	Copper as Cu		APHA 23rd EDITION 3111B	ND	0.05	1.5
28	Zinc as Zn		APHA 23rd EDITION 3111B	ND	—	15
29	Lead as Pb		APHA 23rd EDITION 3111B	ND	0.05	No relaxation
30	Silver as Ag		APHA 23rd EDITION 3111B	ND	—	—
31	Chromium as Cr		APHA 23rd EDITION 3111B	ND	0.05	No relaxation
32	*Mercury		IS 3025 (Part 48)	ND	0.001	No relaxation
33	Aluminium		IS 3025 (Part 55)	ND	0.03	0.2

**Microbiological Parameters**

34	*E.Coli,MPN/100ml	APHA 9222 B Member filter technique	Not detected	Not Detectable	Not Detectable
35	*Total Coliforms,MPN/100ml	APHA 9221 B Member filter technique	Not detected	Not Detectable	Not Detectable

INFERENCE : As per IS Standards 10500 - 2012, The above tested results are within the limits

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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### TEST REPORT

Report No. : SKAEW/A/2025/JAN/07	Date of Sampling	06.01.2025
Name of the Organisation :	Date of Receipt	07.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Analysis Started	08.01.2025
Malkhed Road Chittapur - 585211	Date of Analysis Completed	10.01.2025
	Date of Report	05.02.2025
	Duration of Sampling	24 Hours
Name of the Location : Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	Sample Description	Polyethylene Container
Particulars of Sample Collected : Ambient	Sampling Method	IS-5182

### RESULTS

SL.NO	PARAMETERS	UNITS	PROTOCOL	RESULTS	NAAQ STANDARDS
6	Lead (Pb)	µg/m <sup>3</sup>	IS:5182(Part 22) 2006	BDL	1.0
7	Arsenic (As)	ng/m <sup>3</sup>	CPCB Manual	BDL	6.0
8	Nickel (Ni)	ng/m <sup>3</sup>	CPCB Manual	BDL	20.0
9	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	CPCB Manual	11.5	100.0
10	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	CPCB Manual	24.9	400.0
11	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	IS:5182(Part 11)	ND	5.0
12	Benzo(a),pyrene(BaP)	ng/m <sup>3</sup>	IS:5182(Part 12)	ND	1.0
13	Mercury (Hg)	µg/m <sup>3</sup>	USEPA Method	ND	...

INFERENCE	As Per NAAQ Standards, Report Status :- The above tested results are with in the limits.
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Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

# SHRI KRISHNA AQUA ENGINEERING WORKS

ISO 9001:2015, ISO 45001:2018

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### TEST REPORT

Report No. : SKAEW/A/2025/JAN/08		Date of Sampling		06.01.2025	
Name of the Organisation : M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211		Date of Receipt		07.01.2025	
		Date of Analysis Started		08.01.2025	
		Date of Analysis Completed		10.01.2025	
		Date of Report		05.02.2025	
		Duration of Sampling		24 Hours	
Name of the Location : Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E		Sample Description		Polyethylene Container	
Particulars of Sample Collected : Ambient		Sampling Method		IS-5182	
RESULTS					
SL.NO	PARAMETERS	UNITS	PROTOCOL	RESULTS	NAAQ STANDARDS
6	Lead (Pb)	µg/m <sup>3</sup>	IS:5182(Part 22) 2006	BDL	1.0
7	Arsenic (As)	ng/m <sup>3</sup>	CPCB Manual	BDL	6.0
8	Nickel (Ni)	ng/m <sup>3</sup>	CPCB Manual	BDL	20.0
9	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	CPCB Manual	8.9	100.0
10	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	CPCB Manual	22.6	400.0
11	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	IS:5182(Part 11)	ND	5.0
12	Benzo(a),pyrene(BaP)	ng/m <sup>3</sup>	IS:5182(Part 12)	ND	1.0
13	Mercury (Hg)	µg/m <sup>3</sup>	USEPA Method	ND	...

#### INFERENCE

As Per NAAQ Standards,  
Report Status :- The above tested results are within the limits.



Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



**SHRI KRISHNA AQUA ENGINEERING WORKS**

ISO 9001:2015, ISO 45001:2018

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**TEST REPORT**

Report No. : SKAEW/A/2025/JAN/09			Date of Sampling		06.01.2025
Name of the Organisation : M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Receipt		07.01.2025
			Date of Analysis Started		08.01.2025
			Date of Analysis Completed		10.01.2025
			Date of Report		05.02.2025
			Duration of Sampling		24 Hours
Name of the Location : Near Mining area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E			Sample Description		Polyethylene Container
Particulars of Sample Collected : Ambient			Sampling Method		IS-5182
RESULTS					
SL.NO	PARAMETERS	UNITS	PROTOCOL	RESULTS	NAAQ STANDARDS
6	Lead (Pb)	µg/m <sup>3</sup>	IS:5182(Part 22) 2006	BDL	1.0
7	Arsenic (As)	ng/m <sup>3</sup>	CPCB Manual	BDL	6.0
8	Nickel (Ni)	ng/m <sup>3</sup>	CPCB Manual	BDL	20.0
9	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	CPCB Manual	10.5	100.0
10	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	CPCB Manual	23.8	400.0
11	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	IS:5182(Part 11)	ND	5.0
12	Benzo(a),pyrene(BaP)	ng/m <sup>3</sup>	IS:5182(Part 12)	ND	1.0
13	Mercury (Hg)	µg/m <sup>3</sup>	USEPA Method	ND	...

**INFERENCE**

As Per NAAQ Standards,  
Report Status :- The above tested results are with in the limits.

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No. : SKAEW/A/2025/JAN/10	Date of Sampling	06.01.2025
Name of the Organisation : M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Receipt	07.01.2025
	Date of Analysis Started	08.01.2025
	Date of Analysis Completed	10.01.2025
	Date of Report	05.02.2025
	Duration of Sampling	24 Hours
Name of the Location : Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	Sample Description	Polyethylene Container
Particulars of Sample Collected : Ambient	Sampling Method	IS-5182

### RESULTS

SL.NO	PARAMETERS	UNITS	PROTOCOL	RESULTS	NAAQ STANDARDS
6	Lead (Pb)	µg/m <sup>3</sup>	IS:5182(Part 22) 2006	BDL	1.0
7	Arsenic (As)	ng/m <sup>3</sup>	CPCB Manual	BDL	6.0
8	Nickel (Ni)	ng/m <sup>3</sup>	CPCB Manual	BDL	20.0
9	Ozone (O <sub>3</sub> )	µg/m <sup>3</sup>	CPCB Manual	8.4	100.0
10	Ammonia (NH <sub>3</sub> )	µg/m <sup>3</sup>	CPCB Manual	22.7	400.0
11	Benzene (C <sub>6</sub> H <sub>6</sub> )	µg/m <sup>3</sup>	IS:5182(Part 11)	BDL	5.0
12	Benzo(a),pyrene(BaP)	ng/m <sup>3</sup>	IS:5182(Part 12)	BDL	1.0
13	Mercury (Hg)	µg/m <sup>3</sup>	USEPA Method	BDL	...

INFERENCE	As Per NAAQ Standards, Report Status :- The above tested results are with in the limits.
-----------	---



Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No. : SKAEWW/2025/JAN01		Date of Sampling	29.01.2025	
Name of the Organisation :		Date of Receipt	30.01.2025	
M/S. ORIENT CEMENT LIMITED.,		Date of Analysis Started	31.01.2025	
Malkhed Road Chittapur - 585211		Date of Analysis Completed	05.02.2025	
		Date of Report	05.02.2025	
Sample Particulars : Rain Water Harvesting - 1 (inlet) Latitude - 17° 6'49.27"N Longitude - 77° 8'45.44"E		Condition of the Sample	Satisfactory	
Source of Collection : —		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+,B	8.44	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	—
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	—
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	630	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	338	2100 Max
6	Total Hardness as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	187.38	—
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	35.64	—
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	23.9	—
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	187	—
10	Chlorides as Cl,mg/L	APHA 23rd Edition 4500-Cl-B	63.59	600 Max
11	Sulphates as SO <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-So <sup>2-</sup> <sub>4</sub> ,E	43.95	1000 Max
12	Nitrates as NO <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> ,B	24.59	—
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	0.48	—
14	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	—
15	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.39	2 Max
16	Total Suspended Solids,mg/L	APHA 23rd Edition 2540-D	8.32	—
17	Total solids	APHA 23rd Edition 2540.D	5.19	—
18	Oil & Grease	APHA 23rd Edition 5520 B	13.7	—
19	Chemical Oxygen Demand	IS 3025 Part - 58	208	—
20	Biochemical Oxygen Demand 3 Days @ 27°C	IS 3025 Part - 44	52	—
21	Dissolved Oxygen	IS 3025 Part - 38	4.4	—
22	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	—
23	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	—
24	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	—
25	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	—
26	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	—
27	Lead as Pb mg/L	APHA 23rd Edition 3500 Cd	BDL	—
28	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	—

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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### TEST REPORT

Report No. : SKAEWW/2025/JAN/02		Date of Sampling	29.01.2025	
Name of the Organisation :		Date of Receipt	30.01.2025	
M/S. ORIENT CEMENT LIMITED,		Date of Analysis Started	31.01.2025	
Malikhed Road Chittapur - 585211		Date of Analysis Completed	05.02.2025	
		Date of Report	05.02.2025	
Sample Particulars : Rain Water Harvesting - 1 (Outlet)		Condition of the Sample	Satisfactory	
Latitude - 17° 6'52.56"N				
Longitude - 77° 8'41.44"E				
Source of Collection : Near Nala		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled
1	pH Value	APHA 23rd Edition 4500-H+,B	8.4	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	—
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	—
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	670	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	340	2100 Max
6	Total Hardness as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	190.4	—
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	39.6	—
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	21.7	—
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	200.2	—
10	Chlorides as Cl,mg/L	APHA 23rd Edition 4500-Cl-B	58.06	600 Max
11	Sulphates as SO <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-SO <sub>4</sub> -E	38.51	1000 Max
12	Nitrates as NO <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> -B	22.65	—
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 4500 F,D	0.36	—
14	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	—
15	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.19	2 Max
16	Total Suspended Solids,mg/L	APHA 23rd Edition 2540-D	8.52	—
17	Total solids	APHA 23rd Edition 2540-D	3	—
18	Oil & Grease	APHA 23rd Edition 5520 B	11.8	—
19	Chemical Oxygen Demand	IS 3025 Part - 58	40	—
20	Biochemical Oxygen Demand 3 Days @ 27°C	IS 3025 Part - 44	9	—
21	Dissolved Oxygen	IS 3025 Part - 38	7.2	—
22	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1998)	BDL	—
23	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	—
24	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	—
25	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	—
26	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	—
27	Lead as Pb mg/L	APHA 23rd Edition 3500 Cd	BDL	—
28	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	—

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No. : SKAEWW/2025/JAN/03		Date of Sampling		29.01.2025
Name of the Organisation : M/S. ORIENT CEMENT LIMITED.,  Malkhed Road Chittapur - 585211		Date of Receipt		30.01.2025
		Date of Analysis Started		31.01.2025
		Date of Analysis Completed		05.02.2025
		Date of Report		05.02.2025
Sample Particulars : Mines Pit  Latitude - 17° 7'8.91"N Longitude - 77° 8'53.85"E		Condition of the Sample		Satisfactory
Source of Collection : —		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+ B	8.4	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	—
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	—
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	630	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	336	2100 Max
6	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	207.58	—
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	50.44	—
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	19.8	—
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	186	—
10	Chlorides as Cl,mg/L	APHA 23rd Edition 4500-Cl-B	28.57	600 Max
11	Sulphates as So <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-So <sup>3</sup> <sub>4</sub> ,E	42.24	1000 Max
12	Nitrates as No <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> ,B	19.57	—
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION – 2017 ,4500 F,D	0.28	—
14	Iron as Fe	IS 3025 Part - 53	0.24	—
15	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	—
16	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.33	2 Max
17	Total Suspended Solids,mg/L	APHA 23rd Edition 2540-D	2.00	—
18	Total solids	APHA 23rd Edition 2540-D	1.24	—
19	Oil & Grease	APHA 23rd Edition 5520 B	2.84	—
20	Chemical Oxygen Demand	IS 3025 Part - 58	24	—
21	Biochemical Oxygen Demand	IS 3025 Part - 44	6	—
22	Dissolved Oxygen	IS 3025 Part - 38	6.1	—
23	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	—
24	Arsenic as As mg/L	IS 3025 (Part 37) 1986 (RA2003)	BDL	—
25	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	—
26	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	—
27	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	—
28	Lead as Ld mg/L	APHA 23rd Edition 3500 Cd	BDL	—
29	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	—

  
Verified By  
Ribeka ( Chemist )

  
Authorised Signatory  
Mrs. Radha M Bengeri

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No. : SKAEW/2025/JAN/04		Date of Sampling	29.01.2025	
Name of the Organisation : M/S. ORIENT CEMENT LIMITED.,  Malkhed Road Chittapur - 585211		Date of Receipt	30.01.2025	
		Date of Analysis Started	31.01.2025	
		Date of Analysis Completed	05.02.2025	
		Date of Report	05.02.2025	
Sample Particulars : River Upstream Latitude - 17° 11'59.70"N Longitude - 77° 8'26.38"E		Condition of the Sample	Satisfactory	
Source of Collection : Malkhed Road Bridge		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for irrigation, Industrial cooling and Controlled
1	pH Value	APHA 23rd Edition 4500-H+,B	8.45	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	—
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	—
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	602	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	308	2100 Max
6	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	188.18	—
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	25.6	—
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	30.2	—
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	258	—
10	Chlorides as Cl,mg/L	APHA 23rd Edition 4500-Cl-B	29.49	600 Max
11	Sulphates as So <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-So <sub>4</sub> ,E	47.67	1000 Max
12	Nitrates as No <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> ,B	25.62	—
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION – 2017 ,4500 F,D	0.62	—
14	Iron as Fe	IS 3025 Part - 53	0.30	—
15	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	—
16	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.67	2 Max
17	Total Suspended Solids,mg/L	APHA 23rd Edition 2540-D	1.15	—
18	Total solids	APHA 23rd Edition 2540-D	2.51	—
19	Oil & Grease	APHA 23rd Edition 5520 B	3.24	—
20	Chemical Oxygen Demand	IS 3025 Part - 58	8	—
21	Biochemical Oxygen Demand 3 Days @ 27°C	IS 3025 Part - 44	2	—
22	Dissolved Oxygen	IS 3025 Part - 38	7.3	—
23	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	—
24	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	—
25	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	—
26	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	—
27	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	—
28	Lead as Pb mg/L	APHA 23rd Edition 3500 Cd	BDL	—
29	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	—

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No. : SKAEW/N/2025/JAN/13,14	Date of Sampling	30.01.2025
Name of the Organisation :	Date of Receipt	31.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Data Downloaded	31.01.2025
Malhed Road Chittapur - 585211	Date of Completed	31.01.2025
	Date of Report	05.02.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

### RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVERAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Mining Area	10.50am to 12.05 pm	IS -9989-1981 (Reaffirmed 2008)	60.2	72.6	62.11	75.0dB (A) Day Time
2	CCR Office	12.30pm to 12.45 pm		57.3	72	60.81	
3	Mining Area	10.15pm to 10.30 pm		46.5	63.8	50.17	70.0dB (A) Night Time
4	CCR Office	11.00pm to 11:15 pm		45.3	57.1	45.18	

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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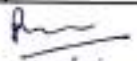
## TEST REPORT

Report No. : SKAEW/N/2025/JAN/21,22	Date of Sampling	07.01.2025
Name of the Organisation :	Date of Receipt	08.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Data Downloaded	08.01.2025
Malikhed Road Chittapur - 585211	Date of Completed	08.01.2025
	Date of Report	05.02.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

## RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVERAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Mining Area	10.50am to 12.05 pm	IS -9989-1981 (Reaffirmed 2005)	57.3	73.8	62.27	75.0dB (A) Day Time
2	CCR Office	12.30pm to 12.45 pm		54.2	72.8	62.51	
3	Mining Area	10.15pm to 10.30 pm		47.5	66.4	53.21	70.0dB (A) Night Time
4	CCR Office	11.00pm to 11.15 pm		45.3	63.5	48.27	

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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## TEST REPORT

Report No. : SKAEWIN/2025/JAN/19_20	Date of Sampling	06.01.2025
Name of the Organisation : M/S. ORIENT CEMENT LIMITED, Malkhed Road Chittapur - 585211	Date of Receipt	07.01.2025
	Date of Data Downloaded	07.01.2025
	Date of Completed	07.01.2025
	Date of Report	05.02.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

## RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVERAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Crushing Area	10.50am to 12:05 pm	IS -9989-1981 (Reaffirmed 2008)	61.5	72.6	62.11	75.0dB (A) Day Time
2	Surgbin	12:30pm to 12:45 pm		57.9	72.1	62.28	
3	Crushing Area	10.15pm to 10:30 pm		44.5	63.8	49.13	70.0dB (A) Night Time
4	Surgbin	11:00pm to 11:15 pm		47.5	62.7	49.49	

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No. : SKAEWIN/2025JAN/11,12	Date of Sampling	29.01.2025
Name of the Organisation :	Date of Receipt	30.01.2025
M/S. ORIENT CEMENT LIMITED.,	Date of Data Downloaded	30.01.2025
Malkhed Road Chittapur - 585211	Date of Completed	30.01.2025
	Date of Report	05.02.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

### RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVARAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Crushing Area	10.50am to 12.05 pm	IS -9989-1981 (Reaffirmed 2008)	60	73.5	63.58	75.0dB (A) Day Time
2	Surgebin	12.30pm to 12.45 pm		59.3	73.6	63.21	
1	Crushing Area	10.15pm to 10.30 pm	IS -9989-1981 (Reaffirmed 2008)	50.2	62.8	49.58	70.0dB (A) Night Time
2	Surgebin	11.00pm to 11.15 pm		39.5	58.4	43.37	

  
verified by  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

**FEBRUARY - 2025**

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### TEST REPORT

Report No.: SKAEWA/2025/Feb/18,19,20,21	Date of Sampling	04.02.2025
Name of the Organisation :	Date of Receipt	05.02.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	06.02.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	08.02.2025
Particulars of Sample Collected : Ambient	Date of Report	08.03.2025
Sampling Method : IS-5182	Duration of Sampling	24 Hours
	Sample Description	Polyethylene Container

### GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed - 2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

### RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	68.25	31.15	16.50	19.30	23.50	22.65	0.22	0.79
				14.30		24.15	---	0.48	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	66.32	29.68	14.80	18.52	18.65	20.05	0.39	0.68
				16.90		26.36	---	0.62	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	63.14	26.51	15.8	16.54	20.06	26.65	0.28	0.73
				18.10	---	24.15	---	0.36	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	62.46	27.46	13.30	18.43	22.65	29.60	0.34	0.40
				16.30	---	21.86	---	0.19	---

### INFERENCE

As Per NAAQ Standards,  
Report Status :- The above tested results are with in the limits.

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



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## TEST REPORT

Report No.: SKAEWA/2025/Feb/22,23,24,25	Date of Sampling	06.02.2025
Name of the Organisation :	Date of Receipt	07.02.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	08.02.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	10.02.2025
	Date of Report	08.03.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene Container

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2005 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

## RESULTS

SLNO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 8'53.64"N Longitude - 77° 8'24.91"E	69.30	29.65	14.80	21.10	20.60	26.80	0.65	0.81
				13.90		24.90	---	0.48	---
2	Near Surbin Hopper latitude - 17° 8'56.35"N Longitude - 77° 8'16.07"E	64.58	26.35	17.70	19.60	26.60	21.40	0.76	0.53
				16.20		27.40	---	0.16	---
3	Near mining Area latitude - 17° 8'57.75"N Longitude - 77° 8'45.91"E	63.35	25.14	11.80	15.60	25.10	28.60	0.44	0.59
				16.30	---	26.30	---	0.73	---
4	Main Haulage Road latitude - 17° 8'50.75"N Longitude - 77° 8'36.91"E	70.06	29.96	15.50	17.90	22.00	21.40	0.22	0.42
				17.40	---	22.40	---	0.36	---

## INFERENCE

As Per NAAQ Standards,  
Report Status :- The above tested results are with in the limits.

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No.: SKAEW/A/2025/Feb/26,27,28,29	Date of Sampling	11.02.2025
Name of the Organisation :	Date of Receipt	12.02.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	13.02.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	15.02.2025
	Date of Report	08.03.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene Container

### GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed -2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

### RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	64.95	27.52	15.50	19.10	21.60	28.40	0.86	0.80
				17.40		25.30	—	0.78	—
2	Near Surbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	69.63	29.34	15.90	18.60	23.50	26.00	0.66	0.52
				13.20		28.40	—	0.58	—
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	62.41	24.15	18.70	16.70	27.10	25.40	0.19	0.29
				16.30	—	23.60	—	0.17	—
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	68.63	28.63	17.40	18.60	25.50	29.40	0.25	0.91
				17.60	—	30.10	—	0.38	—

### INFERENCE

As Per NAAQ Standards,  
Report Status :- The above tested results are within the limits.

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

# SHRI KRISHNA AQUA ENGINEERING WORKS

ISO 9001:2015, ISO 45001:2018

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**Environmental Lab, Pollution Control Consultants**

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Mobile : +91 94480 51534, +91 94800 28018,  
E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



## TEST REPORT

Report No.: SKAEW/A/2025/Feb/30,31,32,33	Date of Sampling	13.02.2025
Name of the Organisation :	Date of Receipt	14.02.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	15.02.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	17.02.2025
Particulars of Sample Collected : Ambient	Date of Report	08.03.2025
Sampling Method : IS-5182	Duration of Sampling	24 Hours
	Sample Description	Polyethylene Container

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed - 2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0


## RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	65.14	27.51	14.50	19.60	21.80	28.60	0.78	0.46
				16.80		24.60	---	0.94	---
2	Near Surbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	63.35	23.32	19.30	21.70	23.60	29.40	0.88	0.28
				17.10		24.80	---	0.78	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	68.14	29.64	20.20	22.60	27.10	31.10	0.25	0.17
				21.60	---	28.60	---	0.28	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	65.69	27.41	16.40	19.40	30.10	32.60	0.35	0.47
				18.60	---	29.40	---	0.14	---

## INFERENCE

As Per NAAQ Standards,

Report Status :- The above tested results are within the limits.

  
Verified By  
Ribeka ( Chemist )

  
Authorised Signatory  
Mrs. Radha M Bengeri



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### TEST REPORT

Report No.: SKAEWIA/2025/EG/Feb/34,35,36,37			Date of Sampling		18.02.2025				
Name of the Organisation :			Date of Receipt		19.02.2026				
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Analysis Started		20.02.2027				
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur			Date of Analysis Completed		22.02.2025				
			Date of Report		08.03.2025				
Particulars of Sample Collected : Ambient			Duration of Sampling		24 Hours				
Sampling Method : IS-5182			Sample Description		Polyethylene Container				
GENERAL DETAILS									
PARAMETERS		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO			
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>			
PROTOCOLS		IS:5182 (Part 23) 2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10):1999(Reaffirmed -2014)			
NAAQ STANDARDS		100.0	60.0	80.0	80.0	2.0			
RESULTS									
SLNO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	62.58	25.41	14.10	20.40	22.80	28.90	0.38	0.66
				16.50	---	23.60	---	0.46	---
2	Near Surgbin Hopper latitude - 17° 8'56.35"N Longitude - 77° 8'16.07"E	65.14	26.31	18.40	18.10	26.10	30.10	0.27	0.57
				19.60	---	24.20	---	0.36	---
3	Near mining Area latitude - 17° 8'57.75"N Longitude - 77° 8'45.91"E	69.32	30.04	12.80	18.90	23.60	29.30	0.37	0.35
				16.30	---	24.40	---	0.16	---
4	Main Haulage Road latitude - 17° 8'50.75"N Longitude - 77° 8'36.91"E	66.31	28.64	16.90	15.40	27.60	28.70	0.34	0.24
				15.20	---	22.90	---	0.47	---

Verified By

Ribeka ( Chemist )

Authorised Signatory

Mrs. Radha M Bengeri



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### TEST REPORT

Report No.: SKAEW/A/2025/EG/Feb/38,39,40,41			Date of Sampling		20.02.2025				
Name of the Organisation :			Date of Receipt		21.02.2025				
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Analysis Started		22.02.2025				
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur			Date of Analysis Completed		24.02.2025				
			Date of Report		08.03.2025				
Particulars of Sample Collected : Ambient			Duration of Sampling		24 Hours				
Sampling Method : IS-5182			Sample Description		Polyethylene Container				
GENERAL DETAILS									
PARAMETERS		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>		NO <sub>2</sub>		CO	
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>		µg/m <sup>3</sup>		mg/m <sup>3</sup>	
PROTOCOLS		IS:5182 (Part 23):2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)		IS:5182 (Part 6):2006 (Reaffirmed -2014)		IS:5182 (Part 10):1999/Reaffirmed 2014)	
NAAQ STANDARDS		100.0	60.0	80.0		80.0		2.0	
RESULTS									
SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	67.51	26.62	15.60	16.90	24.80	30.10	0.20	0.80
				18.20	---	26.90	---	0.10	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	63.51	22.84	15.60	19.10	25.40	28.20	0.09	0.40
				17.80	---	23.90	---	0.20	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	65.14	25.16	18.60	20.20	26.60	29.60	0.45	0.8
				18.10	---	28.40	---	0.60	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	67.92	27.75	17.80	21.10	23.30	27.90	0.40	0.58
				16.90	---	25.70	---	0.30	---

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No.: SKAEWIA/2025/EG/Feb/42,43,44,45			Date of Sampling		25.02.2025				
Name of the Organisation :			Date of Receipt		26.02.2025				
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Analysis Started		27.02.2025				
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur			Date of Analysis Completed		01.03.2025				
			Date of Report		08.03.2025				
Particulars of Sample Collected : Ambient			Duration of Sampling		24 Hours				
Sampling Method : IS-5182			Sample Description		Polyethylene Container				
GENERAL DETAILS									
PARAMETERS		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO			
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>			
PROTOCOLS		IS:5182 (Part 23) 2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 15):1999(Reaffirmed -2014)			
NAAQ STANDARDS		100.0	60.0	80.0	80.0	2.0			
RESULTS									
SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher	60.47	22.64	16.20	18.50	24.30	25.70	0.21	0.75
	latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E			17.10	---	25.60	---	0.33	---
2	Near Surgbin Hopper	63.52	24.16	15.80	16.60	21.00	26.30	0.58	0.58
	latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E			12.10	---	24.80	---	0.51	---
3	Near mining Area	61.15	23.32	16.30	18.10	23.30	25.10	0.26	0.26
	latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E			15.20	---	22.10	---	0.28	---
4	Main Haulage Road	62.58	22.14	17.60	20.10	26.90	28.60	0.16	0.37
	latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E			16.10	---	26.10	---	0.25	---

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No.: SKAEW/A/2025/EG/Feb/46,47,48,49			Date of Sampling		27.02.2025				
Name of the Organisation :			Date of Receipt		28.02.2025				
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Analysis Started		01.03.2025				
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur			Date of Analysis Completed		03.03.2025				
			Date of Report		08.03.2025				
Particulars of Sample Collected : Ambient			Duration of Sampling		24 Hours				
Sampling Method : IS-5182			Sample Description		Polyethylene Container				
GENERAL DETAILS									
PARAMETERS		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO			
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>			
PROTOCOLS		IS:5182 (Part 23):2005	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10):1999(Reaffirmed -2014)			
NAAQ STANDARDS		100.0	60.0	80.0	80.0	2.0			
RESULTS									
SLNO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)	CO		
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	65.82	25.48	15.14	18.20	24.30	26.80	0.51	0.75
				17.50	---	25.80	---	0.66	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	69.36	29.62	19.20	19.60	21.80	25.40	0.73	0.60
				18.50	---	23.90	---	0.81	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	71.41	30.25	16.30	17.10	26.40	28.70	0.58	0.45
				14.20	---	27.80	---	0.69	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	68.51	27.53	18.30	18.30	22.90	26.30	0.51	0.31
				16.80	---	24.60	---	0.70	---

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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Mobile : +91 94480 51534, +91 94800 28018,  
E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com

**TEST REPORT**

Report No. : SKAEWW/2025/Feb/01	Date of Sampling	28.02.2025
Name of the Organisation :	Date of Receipt	01.03.2025
M/S. ORIENT CEMENT LIMITED., Mallesh Road Chittapur - 585211	Date of Analysis Started	02.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	08.03.2025
	Date of Report	08.03.2025
Sample Particulars : Rain Water Harvesting - 1 (Inlet) Latitude - 17° 6'49.27"N Longitude - 77° 8'45.44"E	Condition of the Sample	Satisfactory
Source of Collection : ---	Sampling Method : APHA 23 <sup>rd</sup> Edition -1060	

**RESULTS**

SLNO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+B	7.41	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	---
3	Turbidity, NTU	APHA 23rd Edition 2130-B	Nil	---
4	Conductivity, $\mu$ S/cm	APHA 23rd Edition 5520-B	1130	2250 Max
5	Total Dissolved Solids, mg/L	APHA 23rd Edition 2540-C	720	2100 Max
6	Total Hardness as $\text{CaCO}_3$ , mg/L	APHA 23rd Edition 2340-C	412.8	---
7	Calcium as Ca, mg/L	APHA 23rd Edition 3500-Ca, B	92.16	---
8	Magnesium as Mg, mg/L	APHA 23rd Edition 3500-Mg, B	77.9	---
9	Alkalinity as $\text{CaCO}_3$ , mg/L	APHA 23rd Edition 2320-B	430	---
10	Chlorides as Cl, mg/L	APHA 23rd Edition 4500-Cl-B	97.48	600 Max
11	Sulphates as $\text{SO}_4$ , mg/L	APHA 23rd Edition 4500- $\text{SO}_4$ , E	91.86	1000 Max
12	Nitrates as $\text{NO}_3$ , mg/L	APHA 23rd Edition 4500- $\text{NO}_3$ , B	16.23	---
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017, 4500 F, D	1.72	---
14	Residual Free Chlorine, mg/L	APHA 23rd Edition 4500-Cl, B	Nil	---
15	Boron as B, mg/L	APHA 23rd Edition 4500-B, B	1.05	2 Max
16	Total Suspended Solids, mg/L	APHA 23rd Edition 2540-D	5.58	---
17	Total solids	APHA 23rd Edition 2540-D	4.52	---
18	Oil & Grease	APHA 23rd Edition 5520 B	9.68	---
19	Chemical Oxygen Demand	IS 3025 Part - 58	288	---
20	Biochemical Oxygen Demand 3 Days	IS 3025 Part - 44	72	---
21	Dissolved Oxygen	IS 3025 Part - 38	3.1	---
22	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	---
23	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	---
24	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	---
25	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	---
26	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	---
27	Lead as Pb mg/L	APHA 23rd Edition 3500 Cd	BDL	---
28	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	---

Verified By  
Ribeka (Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



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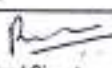
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## TEST REPORT

Report No. : SKAEWW/2025/Feb/02		Date of Sampling	28.02.2025	
Name of the Organisation :		Date of Receipt	01.03.2025	
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211		Date of Analysis Started	02.03.2025	
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur		Date of Analysis Completed	08.03.2025	
		Date of Report	08.03.2025	
Sample Particulars : Rain Water Harvesting - 1 (Outlet) Latitude - 17° 6'52.58"N Longitude - 77° 8'41.44"E		Condition of the Sample	Satisfactory	
Source of Collection : Near Nala		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H <sup>+</sup> /B	8.12	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	---
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	---
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	772	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	370	2100 Max
6	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	220.8	---
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	44.91	---
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	42.7	---
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	210	---
10	Chlorides as Cl(mg/L	APHA 23rd Edition 4500-Cl-B	398.81	600 Max
11	Sulphates as So <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-So <sup>2-</sup> <sub>4</sub> ,E	43.01	1000 Max
12	Nitrates as No <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> ,B	29.22	---
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	1.16	---
14	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	---
15	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.56	2 Max
16	Total Suspended Solids,mg/L	APHA 23rd Edition 2540-D	6.35	---
17	Total solids	APHA 23rd Edition 2540-D	3.45	---
18	Oil & Grease	APHA 23rd Edition 5520 B	11.05	---
19	Chemical Oxygen Demand	IS 3025 Part - 58	176	---
20	Biochemical Oxygen Demand 3 Days	IS 3025 Part - 44	44	---
21	Dissolved Oxygen	IS 3025 Part - 36	3.7	---
22	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	---
23	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	---
24	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	---
25	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	---
26	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	---
27	Lead as Ld mg/L	APHA 23rd Edition 3500 Cd	BDL	---
28	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	---

  
Verified by  
Ribeka (Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

# SHRI KRISHNA AQUA ENGINEERING WORKS

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## Environmental Lab, Pollution Control Consultants

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No. : SKAEWW/2025/Feb/03	Date of Sampling	28.02.2025
Name of the Organisation :	Date of Receipt	01.03.2025
M/S. ORIENT CEMENT LIMITED., Malhed Road Chittapur - 585211	Date of Analysis Started	02.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	08.03.2025
Sample Particulars : Mines Pit Latitude - 17° 78.91'N Longitude - 77° 8'53.65'E	Date of Report	08.03.2025
Source of Collection : --	Condition of the Sample	Satisfactory
Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		

### RESULTS

SL NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+B	8.28	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	---
3	Turbidity, NTU	APHA 23rd Edition 2130-B	Nil	---
4	Conductivity, $\mu$ S/cm	APHA 23rd Edition 5520-B	670	2250 Max
5	Total Dissolved Solids, mg/L	APHA 23rd Edition 2540-C	369	2100 Max
6	Total Hardness as $\text{CaCO}_3$ , mg/L	APHA 23rd Edition 2340-C	204.29	---
7	Calcium as Ca, mg/L	APHA 23rd Edition 3500-Ca, B	40.85	---
8	Magnesium as Mg, mg/L	APHA 23rd Edition 3500-Mg, B	24.8	---
9	Alkalinity as $\text{CaCO}_3$ , mg/L	APHA 23rd Edition 2320-B	195.8	---
10	Chlorides as Cl, mg/L	APHA 23rd Edition 4500-Cl-B	78.34	600 Max
11	Sulphates as $\text{SO}_4$ , mg/L	APHA 23rd Edition 4500- $\text{SO}_4$ , E	38.65	1000 Max
12	Nitrates as $\text{NO}_3$ , mg/L	APHA 23rd Edition 4500- $\text{NO}_3$ , B	22.41	---
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017, 4500 F, D	0.39	---
14	Iron as Fe	IS 3025 Part - 53	0.42	---
15	Residual Free Chlorine, mg/L	APHA 23rd Edition 4500-Cl, B	Nil	---
16	Boron as B, mg/L	APHA 23rd Edition 4500-B, B	0.69	2 Max
17	Total Suspended Solids, mg/L	APHA 23rd Edition 2540-D	1.15	---
18	Total solids	APHA 23rd Edition 2540-D	0.96	---
19	Oil & Grease	APHA 23rd Edition 5520 B	2.16	---
20	Chemical Oxygen Demand	IS 3025 Part - 55	16	---
21	Biochemical Oxygen Demand	IS 3025 Part - 44	3	---
22	Dissolved Oxygen	IS 3025 Part - 38	4.2	---
23	Mercury as Hg, mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	---
24	Arsenic as As, mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	---
25	Cadmium as Cd, mg/L	APHA 23rd Edition 3500 Cd	BDL	---
26	Zinc as Zn, mg/L	APHA 23rd Edition 3500 Cr, B	BDL	---
27	Manganese as Mn, mg/L	APHA 23rd Edition 3500 B	BDL	---
28	Lead as Pb, mg/L	APHA 23rd Edition 3500 Cd	BDL	---
29	Mercury as Hg, mg/L	APHA 23rd Edition 3500 Hg	BDL	---

  
Verified By  
Ribeka | Chemist

  
Authorised Signatory  
Mrs. Radha M Bengeri



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### TEST REPORT

Report No. : SKAEWW/2025/Feb/04		Date of Sampling	28.02.2025	
Name of the Organisation :		Date of Receipt	01.03.2025	
M/S. ORIENT CEMENT LIMITED., Malhed Road Chittapur - 585211		Date of Analysis Started	02.03.2025	
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur		Date of Analysis Completed	08.03.2025	
		Date of Report	08.03.2025	
Sample Particulars : River Upstream Latitude - 17° 11'59.70"N Longitude - 77° 8'26.38"E		Condition of the Sample	Satisfactory	
Source of Collection : Kagina River		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SLNO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+B	8.27	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	---
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	---
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	692	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	330	2100 Max
6	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	164.65	---
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	32.93	---
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	20.0	---
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	226.6	---
10	Chlorides as Cl,mg/L	APHA 23rd Edition 4500-Cl-B	42.39	600 Max
11	Sulphates as So <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-So <sup>3</sup> <sub>4</sub> ,E	43.51	1000 Max
12	Nitrates as No <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> ,B	22.16	---
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	0.78	---
14	Iron as Fe	IS 3025 Part - 53	0.46	---
15	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	---
16	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.82	2 Max
17	Total Suspended Solids,mg/L	APHA 23rd Edition 2540-D	1.05	---
18	Total solids	APHA 23rd Edition 2540-D	1.68	---
19	Oil & Grease	APHA 23rd Edition 5520 B	2.54	---
20	Chemical Oxygen Demand	IS 3025 Part - 58	24	---
21	Biochemical Oxygen Demand 3 Days @ 27°C	IS 3025 Part - 44	6	---
22	Dissolved Oxygen	IS 3025 Part - 38	3.4	---
23	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	---
24	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	---
25	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	---
26	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	---
27	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	---
28	Lead as Ld mg/L	APHA 23rd Edition 3500 Cd	BDL	---
29	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	---

Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

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**TEST REPORT**

Report No SKAEWW/2024/Feb/05	Date of Sampling	28.02.2025
Name of the Organisation :	Date of Receipt	01.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	02.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	08.03.2025
	Date of Report	08.03.2025
Sample Particulars : RO Water Latitude - 17°6'44.65" Longitude - 77°8'32.98"N	Condition of the Sample	Satisfactory
Source of Collection : Mines Rest Shelter	Sampling Method : APHA 23 <sup>rd</sup> Edition -1060	

**RESULTS**

SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards IS : 10500-2012	
				Desirable Limits	Permissible Limits
1	pH Value	APHA 23rd Edition 4500-H+,B	6.74	6.5-8.5	No Relaxation
2	Colour Hazen Unit	IS 3025 (Part - 4):1983	1	5.0 Max	15.0
3	Ambient Temperature* C	APHA 23rd EDITION - 2012 ,2550 B	27	----	----
4	Turbidity,NTU	APHA 23rd Edition 2130-B	1	1.0 Max	5.0 Max
5	Conductivity,µS/cm	APHA 23rd Edition 5520-B	148	--	--
6	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	71	500 Max	2000 Max
7	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	45.12	200 Max	600 Max
8	Magnesium as Mg	APHA 23rd EDITION-2017 ,3500 Mg B	5.48	30	100
9	Sulphates as SO <sub>4</sub>	APHA 23rd EDITION-2017,4500 SO <sub>4</sub> D	2.95	200	400
10	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	0.11	1	1.5
11	Nitrates as NO <sub>3</sub>	APHA 23rd EDITION-2017 ,4500 NO <sub>3</sub> E, IS:3025(Part-34)-1958	1.52	15	No relaxation
12	Total Alkalinity	APHA 23rd EDITION-2017,2320 B	35.2	200	600
13	Sodium as Na	APHA 23rd EDITION 3500 Na, B	2.65	----	----
14	Potassium as K	APHA 23rd EDITION 3500 K, B	0.68	----	----
15	Calcium as Ca	APHA 23rd EDITION-2017 ,3500 Ca B	9.02	75	200
16	Chlorides as Cl	APHA 23rd EDITION - 2017 , 4500 Cl B	37.8	250	1000
17	Iron as Fe	APHA 23rd EDITION-2017,3500 Fe B	0.1	0.3	No relaxation
18	*E.Coli,MPN/100ml	APHA 9222 B Member filter technique	Not detected	Not Detectable	Not Detectable
19	*Total Coliforms,MPN/100ml	APHA 9221 B Member filter technique	Not detected	Not Detectable	Not Detectable

Inference	The Above Tested Parameters Complies with the Standard Specified
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Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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**TEST REPORT**

Report No SKAEW/W/2024/Feb/06	Date of Sampling	28.02.2025
Name of the Organisation :	Date of Receipt	01.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	02.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	08.03.2025
	Date of Report	08.03.2025
Sample Particulars : Borewell Water Latitude - 17° 8' 17.6244" Longitude - 77° 7' 54.6636"	Condition of the Sample	Satisfactory
Source of Collection : Mogla Village	Sampling Method : APHA 23 <sup>rd</sup> Edition -1060	


**RESULTS**

SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards IS : 10500-2012	
				Desirable Limits	Permissible Limits
1	pH Value	APHA 23rd Edition 4500-H+,B	7.41	6.5-8.5	No Relaxation
2	Colour Hazen Unit	IS 3025 (Part - 4):1983	2.85	5.0 Max	15.0
3	Ambient Temperature* C	APHA 23rd EDITION - 2012 ,2550 B	27	---	---
4	Turbidity,NTU	APHA 23rd Edition 2130-B	1	1.0 Max	5.0 Max
5	Conductivity,µS/cm	APHA 23rd Edition 5520-B	614	--	--
6	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	350	500 Max	2000 Max
7	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	187.22	200 Max	600 Max
8	Magnesium as Mg	APHA 23rd EDITION-2017 ,3500 Mg B	22.74	30	100
9	Sulphates as SO <sub>4</sub>	APHA 23rd EDITION-2017,4500 SO <sub>4</sub> D	3.65	200	400
10	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	0.17	1	1.5
11	Nitrates as NO <sub>3</sub>	APHA 23rd EDITION-2017 ,4500 NO <sub>3</sub> E, IS:3025(Part-34)-1958	3.65	15	No relaxation
12	Total Alkalinity	APHA 23rd EDITION-2017,2320 B	220	200	600
13	Sodium as Na	APHA 23rd EDITION 3500 Na, B	7.54	---	---
14	Potassium as K	APHA 23rd EDITION 3500 K, B	2.61	---	---
15	Calcium as Ca	APHA 23rd EDITION-2017 ,3500 Ca B	37.44	75	200
16	Chlorides as Cl	APHA 23rd EDITION - 2017 , 4500 Cl B	106.9	250	1000
17	Iron as Fe	APHA 23rd EDITION-2017,3500 Fe B	0.16	0.3	No relaxation
18	*E.Coli(MPN/100ml)	APHA 9222 B Member filter technique	Not detected	Not Detectable	Not Detectable
19	*Total Coliforms,MPN/100ml	APHA 9221 B Member filter technique	Not detected	Not Detectable	Not Detectable

Inference	The Above Tested Parameters Complies with the Standard Specified
-----------	--

Verified By

Ribeka ( Chemist)

  
 Authorised Signatory  
 Mrs. Radha M Bengeri

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**TEST REPORT**

Report No SKAEW/W/2024/Feb/07	Date of Sampling	28.02.2025
Name of the Organisation :	Date of Receipt	01.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	02.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	08.03.2025
	Date of Report	08.03.2025
Sample Particulars : Borewell Water Latitude - 17° 7' 12.2556" Longitude - 77° 5' 14.3556"	Condition of the Sample	Satisfactory
Source of Collection : Chittapur Town	Sampling Method : APHA 23 <sup>rd</sup> Edition -1060	

**RESULTS**

SLNO	PARAMETERS	PROTOCOL	RESULTS	Standards IS : 10500-2012	
				Desirable Limits	Permissible Limits
1	pH Value	APHA 23rd Edition 4500-H+,B	7.43	6.5-8.5	No Relaxation
2	Colour Hazen Unit	IS 3025 (Part - 4):1983	2.98	5.0 Max	15.0
3	Ambient Temperature° C	APHA 23rd EDITION - 2012 ,2550 B	27	---	---
4	Turbidity,NTU	APHA 23rd Edition 2130-B	1	1.0 Max	5.0 Max
5	Conductivity,µS/cm	APHA 23rd Edition 5520-B	1380	--	--
6	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	580	500 Max	2000 Max
7	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	336	200 Max	600 Max
8	Magnesium as Mg	APHA 23rd EDITION-2017 ,3500 Mg B	2.33	30	100
9	Sulphates as SO <sub>4</sub>	APHA 23rd EDITION-2017,4500 SO <sub>4</sub> D	59.85	200	400
10	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	1.2	1	1.5
11	Nitrates as NO <sub>3</sub>	APHA 23rd EDITION-2017 ,4500 NO <sub>3</sub> E, IS:3025(Part-34)-1968	27.34	15	No relaxation
12	Total Alkalinity	APHA 23rd EDITION-2017,2320 B	350	200	600
13	Sodium as Na	APHA 23rd EDITION 3500 Na, B	11.52	----	----
14	Potassium as K	APHA 23rd EDITION 3500 K, B	4.63	----	----
15	Calcium as Ca	APHA 23rd EDITION-2017 ,3500 Ca B	130.56	75	200
16	Chlorides as Cl	APHA 23rd EDITION - 2017 , 4500 Cl B	146.23	250	1000
17	Iron as Fe	APHA 23rd EDITION-2017,3500 Fe B	Not detected	0.3	No relaxation
18	*E.Coli,MPN/100ml	APHA 9222 B Member filter technique	Not detected	Not Detectable	Not Detectable
19	*Total Coliforms,MPN/100ml	APHA 9221 B Member filter technique	Not detected	Not Detectable	Not Detectable

Inference

The Above Tested Parameters Complies with the Standard Specified

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



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### TEST REPORT

Report No SKAEW/W/2024/Feb/08	Date of Sampling	28.02.2025
Name of the Organisation :	Date of Receipt	01.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	02.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	08.03.2025
	Date of Report	08.03.2025
Sample Particulars : Borewell Water Latitude - 17° 5' 35.1348" Longitude - 77° 9' 44.5284"	Condition of the Sample	Satisfactory
Source of Collection : Diggaon Village	Sampling Method : APHA 23 <sup>rd</sup> Edition -1060	

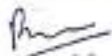
### RESULTS

SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards IS : 10500-2012	
				Desirable Limits	Permissible Limits
1	pH Value	APHA 23rd Edition 4500-H+,B	7.30	6.5-8.5	No Relaxation
2	Colour Hazen Unit	IS 3025 (Part - 4):1983	2.46	5.0 Max	15.0
3	Ambient Temperature° C	APHA 23rd EDITION - 2012 ,2550 B	27	----	----
4	Turbidity,NTU	APHA 23rd Edition 2130-B	1	1.0 Max	5.0 Max
5	Conductivity,µS/cm	APHA 23rd Edition 5520-B	915	..	..
6	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	435	500 Max	2000 Max
7	Total Hardness as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	279.00	200 Max	600 Max
8	Magnesium as Mg	APHA 23rd EDITION-2017 ,3500 Mg B	33.89	30	100
9	Sulphates as SO <sub>4</sub>	APHA 23rd EDITION-2017,4500 SO <sub>4</sub> D	26.65	200	400
10	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	1.38	1	1.5
11	Nitrates as NO <sub>3</sub>	APHA 23rd EDITION-2017 ,4500 NO <sub>3</sub> E, IS:3025(Part-34)-1958	6.65	15	No relaxation
12	Total Alkalinity	APHA 23rd EDITION-2017,2320 B	239.8	200	600
13	Sodium as Na	APHA 23rd EDITION 3500 Na, B	11.52	----	----
14	Potassium as K	APHA 23rd EDITION 3500 K, B	3.35	----	----
15	Calcium as Ca	APHA 23rd EDITION-2017 ,3500 Ca B	55.8	75	200
16	Chlorides as Cl	APHA 23rd EDITION - 2017 , 4500 Cl B	127.2	250	1000
17	Iron as Fe	APHA 23rd EDITION-2017,3500 Fe B	0.16	0.3	No relaxation
18	*E.Coli,MPN/100ml	APHA 9222 B Member filter technique	Not detected	Not Detectable	Not Detectable
19	*Total Coliforms,MPN/100ml	APHA 9221 B Member filter technique	Not detected	Not Detectable	Not Detectable

Inference

The Above Tested Parameters Complies with the Standard Specified

  
Verified By  
Ribeka ( Chemist)

  
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Mrs. Radha M Bengeri

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### TEST REPORT

Report No. : SKAEWN/2025/Feb/10,11	Date of Sampling	04.02.2025
Name of the Organisation :	Date of Receipt	05.02.2025
M/S. ORIENT CEMENT LIMITED., Malhed Road Chittapur - 585211	Date of Data Downloaded	05.02.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Completed	05.02.2025
	Date of Report	08.03.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

### RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVERAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Crushing Area	10.50am to 12.05 pm	IS -9509-1981 (Reaffirmed 2008)	56.3	73.2	60.90	75.0dB (A) Day Time
2	Surgbin	12.30pm to 12.45 pm		58.6	74.5	63.61	
3	Crushing Area	10.15pm to 10.30 pm		42.1	56.3	43.02	70.0dB (A) Night Time
4	Surgbin	11.00pm to 11.15 pm		43.2	59.6	46.01	

  
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Mobile : +91 94480 51534, +91 94800 28018,  
E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No. : SKAEWN/2025/Feb/14,15	Date of Sampling	05.02.2025
Name of the Organisation :	Date of Receipt	06.02.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Data Downloaded	06.02.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Completed	06.02.2025
	Date of Report	06.03.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

### RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVARAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Mining Area	10.50am to 12.05 pm	IS -9989-1981 (Reaffirmed 2008)	57.7	74.5	63.73	75.0dB (A) Day Time
2	CCR Office	12:30pm to 12:45 pm		56.3	73.2	62.92	
3	Mining Area	10.15pm to 10:20 pm		43.2	60.1	46.47	70.0dB (A) Night Time
4	CCR Office	11:00pm to 11:15 pm		39.6	59.6	44.57	

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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## TEST REPORT

Report No. : SKAEWN/2025/Feb/16,17	Date of Sampling	26.02.2025
Name of the Organisation :	Date of Receipt	27.02.2025
M/S. ORIENT CEMENT LIMITED, Malkhed Road Chittapur - 585211	Date of Data Downloaded	27.02.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Completed	27.02.2025
	Date of Report	08.03.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

## RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVERAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Mining Area	10:50am to 12:05 pm	IS -9909-1981 (Reaffirmed 2008)	59.6	72.5	64.02	75.0dB (A) Day Time
2	CCR Office	12:30pm to 12:45 pm		57.4	73.9	62.48	
3	Mining Area	10:15pm to 10:30 pm		43.2	59	45.62	70.0dB (A) Night Time
4	CCR Office	11:00pm to 11:15 pm		38.2	52.6	38.96	

  
verified By

Ribeka ( Chemist)



Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No. : SKAEWN/2025/Feb/12,13	Date of Sampling	28.02.2025
Name of the Organisation :	Date of Receipt	01.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Data Downloaded	01.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Completed	01.03.2025
	Date of Report	08.03.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

### RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVERAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Crushing Area	10.55am to 12:05 pm	IS -9989-1981 (Reaffirmed 2008)	59.1	72.1	64.06	75.0dB (A) Day Time
2	Surgebin	12:30pm to 12:45 pm		60	73.5	64.01	
1	Crushing Area	10.15pm to 10:30 pm	IS -9989-1981 (Reaffirmed 2008)	44.1	59.2	46.14	70.0dB (A) Night Time
2	Surgebin	11:00pm to 11:15 pm		40.3	58.4	44.53	

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



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## TEST REPORT

Report No SKAEW/W/2024/Feb/50		Date of Sampling		28.02.2025		
Name of the Organisation : M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211		Date of Receipt		01.03.2025		
		Date of Analysis Started		02.03.2025		
		Date of Analysis Completed		08.03.2025		
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur		Date of Report		08.03.2025		
Sample Particulars :Borewell Water		Condition of the Sample		Satisfactory		
Source of Collection : Itagi Village		Sampling Method : APHA 23 <sup>rd</sup> Edition -1080				
RESULTS						
SL.NO	PARAMETERS		PROTOCOL	RESULTS	Standards IS : 10500-2012	
					Desirable Limits	Permissible Limits
1	pH Value		APHA 23rd Edition 4500-H+,B	7.40	6.5-8.5	No Relaxation
2	Colour Hazen Unit		IS 3025 (Part - 4):1983	1	5.0 Max	15.0
3	Ambient Temperature* C		APHA 23rd EDITION – 2012 ,2550 B	27	----	----
4	Turbidity,NTU		APHA 23rd Edition 2130-B	1	1.0 Max	5.0 Max
5	Conductivity,µS/cm		APHA 23rd Edition 5520-B	1070	--	--
6	Total Dissolved Solids ,mg/L		APHA 23rd Edition 2540-C	540	500 Max	2000 Max
7	Total Hardnes as CaCO <sub>3</sub> ,mg/L		APHA 23rd Edition 2340-C	211.50	200 Max	600 Max
8	Magnesium as Mg		APHA 23rd EDITION-2017 ,3500 Mg B	4.73	30	100
9	Sulphates as SO <sub>4</sub>		APHA 23rd EDITION-2017,4500 SO <sub>4</sub> D	82.65	200	400
10	Fluoride as F		APHA 23 <sup>rd</sup> EDITION – 2017 ,4500 F,D	0.29	1	1.5
11	Nitrates as NO <sub>3</sub>		APHA 23rd EDITION-2017 ,4500 NO <sub>3</sub> E, IS 3025(Part-34)-1958	26.58	15	No relaxation
12	Total Alkalinity		APHA 23rd EDITION-2017,2320 B	390	200	600
13	Sodium as Na		APHA 23rd EDITION 3500 Na, B	8.57	----	----
14	Potassium as K		APHA 23rd EDITION 3500 K, B	2.64	----	----
15	Calcium as Ca		APHA 23rd EDITION-2017 ,3500 Ca B	76.8	75	200
16	Chlorides as Cl		APHA 23rd EDITION – 2017 , 4500 Cl B	119.6	250	1000
17	Iron as Fe		APHA 23rd EDITION-2017,3500 Fe B	0.33	0.3	No relaxation
18	*E.Coli,MPN/100ml		APHA 9222 B Member filter technique	Not detected	Not Detectable	Not Detectable
19	*Total Coliforms,MPN/100ml		APHA 9221 B Member filter technique	Not detected	Not Detectable	Not Detectable

Inference	The Above Tested Parameters Complies with the Standard Specified
-----------	--

Verified By  
Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



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**TEST REPORT**

Report No. : SKAEW/S/2025/Feb/09	Date of Monitoring	27.02.2025
Name of the Organisation :	Date of Receipt	28.02.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	01.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	02.03.2025
	Date of Report	08.03.2025
Sample Description: Polyethylene Container	Sample Description	Stack Emission
Stack ID : Lime Stone Crusher	Sampling Method	IS-11255

**GENERAL DETAILS**

Fuel Used	----
Temperature ( $^{\circ}\text{C}$ )	47 $^{\circ}\text{C}$
Velocity (m/s)	13.65
Height (m)	---
Diameter (m)	1.5

**RESULTS**

S.NO	PARAMETERS	PROTOCOL	UNITS	RESULTS	STANDARD
1	Particulate Matter	IS:1125(Part-1)	mg/Nm <sup>3</sup>	10.18	30 Max
2	Flow/Discharge rate	Calculation Method	Nm <sup>3</sup> /hr	51243.35	NS

INFERENCE	As Per KSPCB Standards,
	Report Status :- The above tested results are within the limits.

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri

**MARCH - 2025**

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### TEST REPORT

Report No.: SKAEW/A/2025/MAR/27,28,29,30	Date of Sampling	13.03.2025
Name of the Organisation :	Date of Receipt	14.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	15.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	17.03.2025
Particulars of Sample Collected : Ambient	Date of Report	04.04.2025
Sampling Method : IS-5182	Duration of Sampling	24 Hours
	Sample Description	Polyethylene Container

### GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed - 2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

### RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	67.85	29.65	16.58	22.26	23.35	27.52	0.85	0.56
				18.65		26.68	---	1.05	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	65.16	26.52	21.15	23.96	24.46	30.05	0.75	0.48
				19.53		26.63	---	0.63	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	71.16	31.26	23.35	25.62	29.63	33.32	0.41	0.33
				20.05	---	30.05	---	0.39	
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	69.63	29.61	17.54	21.16	28.64	35.52	0.46	0.67
				19.63	---	27.10	---	0.34	---

### INFERENCE

As Per NAAQ Standards,

Report Status :- The above tested results are with in the limits.

Verified By

Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No.: SKAEW/A/2025/EG/MAR/31,32,33,34			Date of Sampling		17.03.2025				
Name of the Organisation :			Date of Receipt		18.03.2025				
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Analysis Started		19.03.2025				
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur			Date of Analysis Completed		21.03.2025				
			Date of Report		04.04.2025				
Particulars of Sample Collected : Ambient			Duration of Sampling		24 Hours				
Sampling Method : IS-5182			Sample Description		Polyethylene Container				
GENERAL DETAILS									
PARAMETERS		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>		NO <sub>2</sub>		CO	
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>		µg/m <sup>3</sup>		mg/m <sup>3</sup>	
PROTOCOLS		IS:5182 (Part 23):2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)		IS:5182 (Part 6):2006 (Reaffirmed -2014)		IS:5182 (Part 10):1999(Reaffirmed -2014)	
NAAQ STANDARDS		100.0	60.0	80.0		80.0		2.0	
RESULTS									
SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	65.58	27.51	17.52	21.15	25.62	30.05	0.27	0.76
				14.52	---	25.63	---	0.63	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	63.32	28.65	17.65	19.68	28.62	32.24	0.46	0.63
				16.35	---	26.31	---	0.29	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	67.45	26.65	13.69	20.05	22.05	28.51	0.44	0.51
				17.48	---	23.35	---	0.35	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	64.15	26.49	13.25	18.54	24.52	26.61	0.24	0.46
				11.06	---	25.16	---	0.56	---

Verified By

Ribeka ( Chemist )

Authorised Signatory  
Mrs. Radha M Bengeri



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### TEST REPORT

Report No.: SKAEW/A/2025/EG/MAR/35,36,37,38			Date of Sampling		20.03.2025				
Name of the Organisation :			Date of Receipt		21.03.2025				
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Analysis Started		22.03.2025				
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur			Date of Analysis Completed		24.03.2025				
			Date of Report		04.04.2025				
Particulars of Sample Collected : Ambient			Duration of Sampling		24 Hours				
Sampling Method : IS-5182			Sample Description		Polyethylene Container				
GENERAL DETAILS									
PARAMETERS		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>		NO <sub>2</sub>		CO	
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>		µg/m <sup>3</sup>		mg/m <sup>3</sup>	
PROTOCOLS		IS:5182 (Part 23):2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)		IS:5182 (Part 6):2006 (Reaffirmed -2014)		IS:5182 (Part 10):1999(Reaffirmed -2014)	
NAAQ STANDARDS		100.0	60.0	80.0		80.0		2.0	
RESULTS									
SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher	69.38	29.64	17.58	19.64	21.15	27.52	0.43	0.96
	latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E			16.35	---	24.62	---	0.32	---
2	Near Surgbin Hopper	66.26	25.16	14.05	21.16	28.63	31.15	0.24	0.65
	latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E			15.32	---	23.35	---	0.36	---
3	Near mining Area	67.51	27.56	16.23	23.35	24.52	33.32	0.56	0.71
	latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E			19.65	----	26.31	----	0.72	----
4	Main Haulage Road	64.15	24.16	20.05	19.64	22.01	29.63	0.56	0.41
	latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E			18.65	----	22.00	----	0.49	----

Verified By

Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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## TEST REPORT

Report No.: SKAEW/A/2025/EG/MAR/39,40,41,42				Date of Sampling		24.03.2025			
Name of the Organisation :				Date of Receipt		25.03.2025			
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211				Date of Analysis Started		26.03.2025			
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur				Date of Analysis Completed		28.03.2025			
				Date of Report		04.04.2025			
Particulars of Sample Collected : Ambient				Duration of Sampling		24 Hours			
Sampling Method : IS-5182				Sample Description		Polyethylene Container			
GENERAL DETAILS									
PARAMETERS		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>		NO <sub>2</sub>		CO	
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>		µg/m <sup>3</sup>		mg/m <sup>3</sup>	
PROTOCOLS		IS:5182 (Part 23):2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)		IS:5182 (Part 6):2006 (Reaffirmed -2014)		IS:5182 (Part 10):1999(Reaffirmed -2014)	
NAAQ STANDARDS		100.0	60.0	80.0		80.0		2.0	
RESULTS									
SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher	60.05	20.06	18.65	21.15	21.15	22.65	0.48	0.82
	latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E			19.63	---	23.35	---	0.65	---
2	Near Surgbin Hopper	62.14	24.52	17.51	19.65	17.52	28.65	0.82	0.63
	latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E			14.52	---	21.16	---	0.49	---
3	Near mining Area	61.05	23.32	17.58	20.05	20.05	24.00	0.63	0.42
	latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E			12.32	----	25.32	----	0.51	----
4	Main Haulage Road	58.53	23.16	15.24	18.65	25.10	24.56	0.34	0.19
	latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E			13.35	----	24.16	---	0.46	----

Verified By

Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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## TEST REPORT

Report No.: SKAEW/A/2025/EG/MAR/43,44,45,46				Date of Sampling		27.03.2025			
Name of the Organisation :				Date of Receipt		28.03.2025			
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211				Date of Analysis Started		29.03.2025			
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur				Date of Analysis Completed		31.03.2025			
				Date of Report		04.04.2025			
Particulars of Sample Collected : Ambient				Duration of Sampling		24 Hours			
Sampling Method : IS-5182				Sample Description		Polyethylene Container			
GENERAL DETAILS									
PARAMETERS		PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>		NO <sub>2</sub>		CO	
UNITS		µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>		µg/m <sup>3</sup>		mg/m <sup>3</sup>	
PROTOCOLS		IS:5182 (Part 23):2006	CPCB Manual	IS:5182 (Part 2):2001 (Reaffirmed -2014)		IS:5182 (Part 6):2006 (Reaffirmed -2014)		IS:5182 (Part 10):1999(Reaffirmed -2014)	
NAAQ STANDARDS		100.0	60.0	80.0		80.0		2.0	
RESULTS									
SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher	60.05	24.96	13.52	20.05	22.24	28.65	0.72	0.91
	latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E			19.65	---	23.63	---	0.82	---
2	Near Surgbin Hopper	57.40	22.16	21.15	21.16	20.05	27.65	0.96	0.83
	latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E			17.52	---	25.42	---	0.68	---
3	Near mining Area	55.63	26.68	14.25	20.06	28.65	30.05	0.35	0.66
	latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E			13.35	----	29.63	----	0.41	----
4	Main Haulage Road	59.63	24.52	16.64	19.65	25.25	28.46	0.33	0.54
	latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E			15.48	----	26.65	----	0.58	----

Verified By

Ribeka ( Chemist )

Authorised Signatory  
Mrs. Radha M Bengeri

# SHRI KRISHNA AQUA ENGINEERING WORKS

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## Environmental Lab, Pollution Control Consultants

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No.: SKAEW/A/2025/MAR/15,16,17,18	Date of Sampling	03.03.2025
Name of the Organisation :	Date of Receipt	04.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	05.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	07.03.2025
	Date of Report	04.04.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene Container

### GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed - 2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

### RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	66.30	28.45	14.50	17.80	21.50	25.62	0.25	0.66
				12.60		22.60	---	0.53	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	64.25	30.05	13.30	16.35	20.52	22.36	0.44	0.74
				15.80		24.50	---	0.93	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	65.35	24.63	14.9	15.42	19.63	28.64	0.35	0.54
				16.40	---	22.35	---	0.45	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	64.85	29.64	12.90	19.63	20.05	26.33	0.27	0.46
				15.30	---	22.63	---	0.21	---

### INFERENCE

As Per NAAQ Standards,

Report Status :- The above tested results are with in the limits.



Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



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## TEST REPORT

Report No.: SKAEW/A/2025/MAR/19,20,21,22	Date of Sampling	06.03.2025
Name of the Organisation :	Date of Receipt	07.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	08.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	10.03.2025
	Date of Report	04.04.2025
Particulars of Sample Collected : Ambient	Duration of Sampling	24 Hours
Sampling Method : IS-5182	Sample Description	Polyethylene Container

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed - 2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

## RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E	71.50	31.16	15.28	23.34	18.54	27.85	0.82	0.99
				14.62		22.26	---	0.63	---
2	Near Surgbin Hopper latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E	66.69	29.64	15.95	21.16	25.62	28.65	0.75	0.63
				17.56		24.48	---	0.26	---
3	Near mining Area latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E	65.15	27.48	12.06	17.56	26.35	30.05	0.63	0.48
				18.61	---	25.41	---	0.91	---
4	Main Haulage Road latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E	67.52	33.36	17.59	15.53	20.05	24.53	0.41	0.53
				19.65	---	19.63	---	0.27	---

## INFERENCE

As Per NAAQ Standards,

Report Status :- The above tested results are with in the limits.

Verified By

Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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## TEST REPORT

Report No.: SKAEW/A/2025/MAR/23,24,25,26	Date of Sampling	10.03.2025
Name of the Organisation :	Date of Receipt	11.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	12.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	14.03.2025
Particulars of Sample Collected : Ambient	Date of Report	04.04.2025
Sampling Method : IS-5182	Duration of Sampling	24 Hours
	Sample Description	Polyethylene Container

## GENERAL DETAILS

PARAMETERS	PM <sub>10</sub>	PM <sub>2.5</sub>	SO <sub>2</sub>	NO <sub>2</sub>	CO
UNITS	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	µg/m <sup>3</sup>	mg/m <sup>3</sup>
PROTOCOLS	IS:5182 (Part 23) : 2006	CPCB Manual	IS:5182 (Part 2) : 2001 (Reaffirmed -2014)	IS:5182 (Part 6):2006 (Reaffirmed -2014)	IS:5182 (Part 10) :1999(Reaffirmed - 2014)
NAAQ STANDARDS	100.0	60.0	80.0	80.0	2.0

## RESULTS

SL.NO	LOCATIONS	PM <sub>10</sub> (24 Hrs)	PM <sub>2.5</sub> (24 Hrs)	SO <sub>2</sub> (4 Hrs)		NO <sub>2</sub> (4 Hrs)		CO	
1	Limestone Crusher	67.58	29.62	13.65	21.15	19.65	30.05	0.69	0.64
	latitude - 17° 6'53.64"N Longitude - 77° 8'24.91"E			15.24		22.16	---	0.61	---
2	Near Surgbin Hopper	73.25	32.24	17.65	16.35	26.35	28.53	0.75	0.82
	latitude - 17° 6'56.35"N Longitude - 77° 8'16.07"E			15.63		30.05	---	0.63	---
3	Near mining Area	65.51	26.64	19.65	18.52	24.52	26.35	0.35	0.33
	latitude - 17° 6'57.75"N Longitude - 77° 8'45.91"E			18.52	---	26.35	---	0.26	---
4	Main Haulage Road	70.05	31.16	16.32	19.63	22.05	31.16	0.39	0.76
	latitude - 17° 6'50.75"N Longitude - 77° 8'36.91"E			15.24	---	27.83	---	0.52	---

## INFERENCE

As Per NAAQ Standards,

Report Status :- The above tested results are with in the limits.

Verified By

Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

# SHRI KRISHNA AQUA ENGINEERING WORKS

ISO 9001:2015, ISO 45001:2018

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### TEST REPORT

Report No. : SKAEW/N/2025/MAR/07,08	Date of Sampling	03.03.2025
Name of the Organisation :	Date of Receipt	04.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Data Downloaded	04.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Completed	04.03.2025
	Date of Report	04.04.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

### RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequenvy	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVARAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Crushing Area	10.50am to 12:05 pm	IS -9989-1981 (Reaffirmed 2008)	58.2	73.5	62.89	75.0dB (A) Day Time
2	Surgbin	12:30pm to 12:45 pm		59.6	74.1	63.68	
3	Crushing Area	10.15pm to 10:30 pm		37.5	49.6	36.26	70.0dB (A) Night Time
4	Surgbin	11:00pm to 11:15 pm		39.6	59.6	41.89	

  
Verified By

Ribeka ( Chemist)



Authorised Signatory  
Mrs. Radha M Bengeri

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## TEST REPORT

Report No. : SKAEW/N/2025/MAR/11,12	Date of Sampling	06.03.2025
Name of the Organisation :	Date of Receipt	07.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Data Downloaded	07.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Completed	07.03.2025
	Date of Report	04.04.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

## RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVERAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Mining Area	10.50am to 12:05 pm	IS -9989-1981 (Reaffirmed 2008)	58.2	73.8	62.36	75.0dB (A) Day Time
2	CCR Office	12:30pm to 12:45 pm		59.4	74.3	62.70	
3	Mining Area	10.15pm to 10:30 pm		39.6	56.3	41.99	70.0dB (A) Night Time
4	CCR Office	11:00pm to 11:15 pm		37.5	54.3	40.07	

  
Verified By

Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri



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## TEST REPORT

Report No. : SKAEW/N/2025/MAR/13,14	Date of Sampling	25.03.2025
Name of the Organisation :	Date of Receipt	26.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Data Downloaded	26.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Completed	26.03.2025
	Date of Report	04.04.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

## RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequency	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVERAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Mining Area	10.50am to 12:05 pm	IS -9989-1981 (Reaffirmed 2008)	58.6	72.4	63.68	75.0dB (A) Day Time
2	CCR Office	12:30pm to 12:45 pm		59.7	73.9	64.43	
3	Mining Area	10.15pm to 10:30 pm		40.2	55.9	42.30	70.0dB (A) Night Time
4	CCR Office	11:00pm to 11:15 pm		38.6	56.2	42.96	

Verified By

Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No. : SKAEW/N/2025/MAR/09,10	Date of Sampling	27.03.2025
Name of the Organisation :	Date of Receipt	28.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Data Downloaded	28.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Completed	28.03.2025
	Date of Report	04.04.2025
Sample Particulars : Noise Level Monitoring	Sample collected by	Lab representative

### RESULTS

S.NO	SOURCE OF COLLECTION	Time Frequenvy	Protocol	MIN LEVEL dB(A) Min	MAX LEVEL dB(A) Max	AVARAGE LEVEL dB(A) Leq	KSPCB STANDARDS
1	Crushing Area	10.50am to 12:05 pm	IS -9989-1981 (Reaffirmed 2008)	58.6	73.8	62.98	75.0dB (A) Day Time
2	Surgbin	12:30pm to 12:45 pm		59.7	72.6	62.76	
1	Crushing Area	10.15pm to 10:30 pm	IS -9989-1981 (Reaffirmed 2008)	40.2	58.4	44.26	70.0dB (A) Night Time
2	Surgbin	11:00pm to 11:15 pm		39.6	54.9	41.54	

  
Verified By

Ribeka ( Chemist)



Authorised Signatory  
Mrs. Radha M Bengeri

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### TEST REPORT

Report No SKAEW/W/2024/MAR/05			Date of Sampling		28.03.2025		
Name of the Organisation : M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211			Date of Receipt		29.03.2025		
			Date of Analysis Started		30.03.2025		
			Date of Analysis Completed		04.04.2025		
			Date of Report		04.04.2025		
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur							
Sample Particulars : RO Water Latitude - 17°6'44.65" Longitude - 77°8'32.98"N			Condition of the Sample		Satisfactory		
Source of Collection : Mines Rest Shelter			Sampling Method : APHA 23 <sup>rd</sup> Edition -1060				
RESULTS							
SL.NO	PARAMETERS		PROTOCOL		RESULTS	Standards IS : 10500-2012	
						Desirable Limits	Permissible Limits
1	pH Value		APHA 23rd Edition 4500-H+,B		6.94	6.5-8.5	No Relaxation
2	Colour Hazen Unit		IS 3025 (Part - 4):1983		1	5.0 Max	15.0
3	Ambient Temperature° C		APHA 23rd EDITION – 2012 ,2550 B		26	---	---
4	Turbidity,NTU		APHA 23rd Edition 2130-B		1	1.0 Max	5.0 Max
5	Conductivity,µS/cm		APHA 23rd Edition 5520-B		168	..	..
6	Total Dissolved Solids ,mg/L		APHA 23rd Edition 2540-C		91	500 Max	2000 Max
7	Total Hardnes as CaCo <sub>3</sub> ,mg/L		APHA 23rd Edition 2340-C		48.14	200 Max	600 Max
8	Magnesium as Mg		APHA 23rd EDITION–2017 ,3500 Mg B		5.85	30	100
9	Sulphates as SO <sub>4</sub>		APHA 23rd EDITION–2017,4500 SO <sub>4</sub> D		3.02	200	400
10	Fluoride as F		APHA 23 <sup>rd</sup> EDITION – 2017 ,4500 F,D		0.18	1	1.5
11	Nitrates as NO <sub>3</sub>		APHA 23rd EDITION–2017 ,4500 NO <sub>3</sub> E, IS:3025(Part-34),1958		1.63	15	No relaxation
12	Total Alkalinity		APHA 23rd EDITION–2017,2320 B		38	200	600
13	Sodium as Na		APHA 23rd EDITION 3500 Na, B		2.65	----	----
14	Potassium as K		APHA 23rd EDITION 3500 K, B		0.72	-----	----
15	Calcium as Ca		APHA 23rd EDITION–2017 ,3500 Ca B		9.63	75	200
16	Chlorides as Cl		APHA 23rd EDITION – 2017 , 4500 Cl B		39.9	250	1000
17	Iron as Fe		APHA 23rd EDITION–2017,3500 Fe B		0.2	0.3	No relaxation
18	*E.Coil,MPN/100ml		APHA 9222 B Member filter technique		Not detected	Not Detectable	Not Detectable
19	*Total Coliforms,MPN/100ml		APHA 9221 B Member filter technique		Not detected	Not Detectable	Not Detectable

Inference

The Above Tested Parameters Complies with the Standard Specified

  
Verified By

Ribeka ( Chemist)



Authorised Signatory  
Mrs. Radha M Bengeri

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## TEST REPORT

Report No. : SKAEW/W/2025/MAR/47	Date of Sampling	28.03.2025
Name of the Organisation :	Date of Analysis Started	28.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Completed	28.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Report	04.04.2025
Sample Particulars : Borewell's Depth (Piezometer)		

SI No	Locations Name	BoreWell's Depth in Mtr
1	Itagi Village	9.81
2	Mogla Village	10.16
3	Diggaon Village	14.53
4	Chittapur Town	11.56

  
Verified By

**Ribeka ( Chemist)**



**Authorised Signatory**  
**Mrs. Radha M Bengeri**



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### TEST REPORT

Report No. : SKAEWW/2025/MAR/01	Date of Sampling	28.03.2025
Name of the Organisation :	Date of Receipt	29.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	30.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	04.04.2025
Sample Particulars : Rain Water Harvesting - 1 (Inlet) Latitude - 17° 6'49.27"N Longitude - 77° 8'45.44"E	Date of Report	04.04.2025
Source of Collection : --	Condition of the Sample	Satisfactory
	Sampling Method : APHA 23 <sup>rd</sup> Edition -1060	

### RESULTS

SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+,B	7.28	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	---
3	Turbidity, NTU	APHA 23rd Edition 2130-B	Nil	---
4	Conductivity, $\mu$ S/cm	APHA 23rd Edition 5520-B	1110	2250 Max
5	Total Dissolved Solids, mg/L	APHA 23rd Edition 2540-C	611	2100 Max
6	Total Hardness as $\text{CaCO}_3$ , mg/L	APHA 23rd Edition 2340-C	305.25	---
7	Calcium as Ca, mg/L	APHA 23rd Edition 3500-Ca, B	61.05	---
8	Magnesium as Mg, mg/L	APHA 23rd Edition 3500-Mg, B	37.1	---
9	Alkalinity as $\text{CaCO}_3$ , mg/L	APHA 23rd Edition 2320-B	363	---
10	Chlorides as Cl, mg/L	APHA 23rd Edition 4500-Cl-B	107.23	600 Max
11	Sulphates as $\text{SO}_4$ , mg/L	APHA 23rd Edition 4500- $\text{SO}_4$ , E	88.62	1000 Max
12	Nitrates as $\text{NO}_3$ , mg/L	APHA 23rd Edition 4500- $\text{NO}_3$ , B	14.15	---
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017, 4500 F, D	1.54	---
14	Residual Free Chlorine, mg/L	APHA 23rd Edition 4500-Cl, B	Nil	---
15	Boron as B, mg/L	APHA 23rd Edition 4500-B, B	0.94	2 Max
16	Total Suspended Solids, mg/L	APHA 23rd Edition 2540-D	3.34	---
17	Total solids	APHA 23rd Edition 2540-D	2.61	---
18	Oil & Grease	APHA 23rd Edition 5520 B	7.63	---
19	Chemical Oxygen Demand	IS 3025 Part - 58	312	---
20	Biochemical Oxygen Demand 3 Days	IS 3025 Part - 44	78	---
21	Dissolved Oxygen	IS 3025 Part - 38	3.5	---
22	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	---
23	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	---
24	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	---
25	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	---
26	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	---
27	Lead as Pb mg/L	APHA 23rd Edition 3500 Cd	BDL	---
28	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	---

Verified By

Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri

# SHRI KRISHNA AQUA ENGINEERING WORKS

ISO 9001:2015, ISO 45001:2018

MoEFCC Recognized, NABL Accredited Laboratory.

## Environmental Lab, Pollution Control Consultants

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### TEST REPORT

Report No. : SKAEW/W/2025/MAR/02		Date of Sampling	28.03.2025	
Name of the Organisation :		Date of Receipt	29.03.2025	
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211		Date of Analysis Started	30.03.2025	
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur		Date of Analysis Completed	04.04.2025	
		Date of Report	04.04.2025	
Sample Particulars : Rain Water Harvesting - 1 (Outlet) Latitude - 17° 6'52.58"N Longitude - 77° 8'41 44"E		Condition of the Sample	Satisfactory	
Source of Collection : Near Nala		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+,B	7.81	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	---
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	---
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	750	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	413	2100 Max
6	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	206.25	---
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	41.25	---
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	25.1	---
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	228.8	---
10	Chlorides as Cl,mg/L	APHA 23rd Edition 4500-Cl-B	410.33	600 Max
11	Sulphates as So <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-So <sup>2-</sup> <sub>4</sub> ,E	40.05	1000 Max
12	Nitrates as NO <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> ,B	25.64	---
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION – 2017 ,4500 F,D	1.01	---
14	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	---
15	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.62	2 Max
16	Total Suspended Solids,mg/L	APHA 23rd Edition 2540-D	5.14	---
17	Total solids	APHA 23rd Edition 2540-D	2.61	---
18	Oil & Grease	APHA 23rd Edition 5520 B	9.64	---
19	Chemical Oxygen Demand	IS 3025 Part - 58	192	---
20	Biochemical Oxygen Demand 3 Days	IS 3025 Part - 44	48	---
21	Dissolved Oxygen	IS 3025 Part - 38	4	---
22	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	---
23	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	---
24	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	---
25	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	---
26	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	---
27	Lead as Ld mg/L	APHA 23rd Edition 3500 Cd	BDL	---
28	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	---

Verified By  
**Ribeka ( Chemist )**

Authorised Signatory  
**Mrs. Radha M Bengeri**

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E-mail - radhabengeri@gmail.com, krishnapandhari@gmail.com



### TEST REPORT

Report No. : SKAEW/W/2025/MAR/03		Date of Sampling	28.03.2025	
Name of the Organisation :		Date of Receipt	29.03.2025	
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211		Date of Analysis Started	30.03.2025	
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur		Date of Analysis Completed	04.04.2025	
Sample Particulars : Mines Pit		Date of Report	04.04.2025	
Latitude - 17° 7'8.91"N		Condition of the Sample	Satisfactory	
Longitude - 77° 8'53.65"E				
Source of Collection : --		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+,B	7.95	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	---
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	---
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	640	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	352	2100 Max
6	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	176	---
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	35.2	---
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	21.4	---
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	173.8	---
10	Chlorides as Cl,mg/L	APHA 23rd Edition 4500-Cl-B	85.08	600 Max
11	Sulphates as So <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-So <sub>4</sub> ,E	35.16	1000 Max
12	Nitrates as NO <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> ,B	20.15	---
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	0.46	---
14	Iron as Fe	IS 3025 Part - 53	0.59	---
15	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	---
16	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.41	2 Max
17	Total Suspended Soilds,mg/L	APHA 23rd Edition 2540-D	1.01	---
18	Total solids	APHA 23rd Edition 2540-D	0.72	---
19	Oil & Grease	APHA 23rd Edition 5520 B	3.64	---
20	Chemical Oxygen Demand	IS 3025 Part - 58	24	---
21	Biochemical Oxygen Demand	IS 3025 Part - 44	5	---
22	Dissolved Oxygen	IS 3025 Part - 38	4.5	---
23	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	---
24	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	---
25	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	---
26	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	---
27	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	---
28	Lead as Ld mg/L	APHA 23rd Edition 3500 Cd	BDL	---
29	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	---

Verified By

Ribeka ( Chemist)

Authorised Signatory  
Mrs. Radha M Bengeri



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### TEST REPORT

Report No. : SKAEW/W/2025/MAR/04		Date of Sampling		28.03.2025
Name of the Organisation :		Date of Receipt		29.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211		Date of Analysis Started		30.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur		Date of Analysis Completed		04.04.2025
Sample Particulars : River Downstream Latitude - 17° 9'52.93"N Longitude - 77° 5'2.34"E		Date of Report		04.04.2025
Source of Collection : Mudbol Village		Condition of the Sample		Satisfactory
		Sampling Method : APHA 23 <sup>rd</sup> Edition -1060		
RESULTS				
SL.NO	PARAMETERS	PROTOCOL	RESULTS	Standards as per IS 2296 Class - E Water for Irrigation, Industrial cooling and Controlled waste Disposal
1	pH Value	APHA 23rd Edition 4500-H+,B	8.37	8.5 Max
2	Odour	APHA 23rd Edition 2150-B	Agreeable	---
3	Turbidity,NTU	APHA 23rd Edition 2130-B	Nil	---
4	Conductivity,µS/cm	APHA 23rd Edition 5520-B	660	2250 Max
5	Total Dissolved Solids ,mg/L	APHA 23rd Edition 2540-C	330	2100 Max
6	Total Hardnes as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2340-C	164.65	---
7	Calcium as Ca,mg/L	APHA 23rd Edition 3500-Ca,B	32.93	---
8	Magnesium as Mg,mg/L	APHA 23rd Edition 3500-Mg,B	20.0	---
9	Alkalinity as CaCO <sub>3</sub> ,mg/L	APHA 23rd Edition 2320-B	226.6	---
10	Chlorides as Cl,mg/L	APHA 23rd Edition 4500-Cl-B	42.39	600 Max
11	Sulphates as So <sub>4</sub> ,mg/L	APHA 23rd Edition 4500-So <sup>2-</sup> <sub>4</sub> ,E	43.51	1000 Max
12	Nitrates as NO <sub>3</sub> ,mg/L	APHA 23rd Edition 4500-NO <sub>3</sub> ,B	22.16	---
13	Fluoride as F	APHA 23 <sup>rd</sup> EDITION - 2017 ,4500 F,D	0.78	---
14	Iron as Fe	IS 3025 Part - 53	0.46	---
15	Residual Free Chlorine,mg/L	APHA 23rd Edition 4500-Cl,B	Nil	---
16	Boron as B,mg/L	APHA 23rd Edition 4500-B,B	0.82	2 Max
17	Total Suspended Soilds,mg/L	APHA 23rd Edition 2540-D	1.05	---
18	Total solids	APHA 23rd Edition 2540-D	1.68	---
19	Oil & Grease	APHA 23rd Edition 5520 B	2.54	---
20	Chemical Oxygen Demand	IS 3025 Part - 58	24	---
21	Biochemical Oxygen Demand 3 Days @ 27°C	IS 3025 Part - 44	6	---
22	Dissolved Oxygen	IS 3025 Part - 38	3.4	---
23	Mercury as Hg mg/L	IS 3025 (Part 48) 1994 (RA1999)	BDL	---
24	Arsenic as As mg/L	IS 3025 (Part 37) 1988 (RA2003)	BDL	---
25	Cadmium as Cd mg/L	APHA 23rd Edition 3500 Cd	BDL	---
26	Zinc as Zn mg/L	APHA 23rd Edition 3500 Cr, B	BDL	---
27	Manganese as Mn mg/L	APHA 23rd Edition 3500 B	BDL	---
28	Lead as Ld mg/L	APHA 23rd Edition 3500 Cd	BDL	---
29	Mercury as Hg mg/L	APHA 23rd Edition 3500 Hg	BDL	---



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## TEST REPORT

Report No. : SKAEW/S/2025/MAR/06	Date of Monitoring	19.03.2025
Name of the Organisation :	Date of Receipt	20.03.2025
M/S. ORIENT CEMENT LIMITED., Malkhed Road Chittapur - 585211	Date of Analysis Started	21.03.2025
Name of the Project: M/s. Itagi Lime Stone Mine, Chittapur	Date of Analysis Completed	23.03.2025
	Date of Report	04.04.2025
Sample Description: Polyethylene Container	Sample Description	Stack Emission
Stack ID : Lime Stone Crusher	Sampling Method	IS-11255

## GENERAL DETAILS

Fuel Used	----
Temperature (°C)	51°C
Velocity (m/s)	15.82
Height (m)	---
Diameter (m)	1.5

## RESULTS

S.NO	PARAMETERS	PROTOCOL	UNITS	RESULTS	STANDARD
1	Particulate Matter	IS:1125(Part-1)	mg/Nm <sup>3</sup>	13.35	30 Max
2	Flow/Discharge rate	Calculation Method	Nm <sup>3</sup> /hr	49852.35	NS

INFERENCE	As Per KSPCB Standards,
	Report Status :- The above tested results are within the limits.

  
Verified By  
Ribeka ( Chemist)

  
Authorised Signatory  
Mrs. Radha M Bengeri