

### J. K. White Cement Works

(Unit of JK Cement Ltd.)



CIN: L17229UP1994PLC017199

ISO 9001, ISO 14001, ISO 50001, OHSAS 18001 & SA 8000 Certified

P.O. GOTAN - 342 902 District - Nagaur (Rajasthan) INDIA Phone: (01591) 230201-03 (PBX), 230976 (D), Fax: 230206

Regd. A/D

Date: 11.05.2020

GTN/WH/MINES/RO-MOEF/COMP./125

To,

The Director

Ministry of Environment & Forests, Govt. Of India, Regional office (Central Region) Kendriya Bhawan, 5<sup>th</sup> Floor, Sector-H, Aliganj, LUCKNOW – 226024 (UP)

EC Letter No.: J-11015/03/2009-IA-II (M) dated 30.08.2010

Sub.: Six monthly Compliance Report from the period of Oct. 2019 to March 2020 in respect of Dhanappa limestone Mines, Tehsil Merta city, District Nagaur, Rajasthan Sir,

Please find enclosed herewith the six monthly compliance report from the period of Oct. 2019 to March 2020 of our Dhanappa Limestone mines near village Dhanappa, Tehsil Merta city, District Nagaur in Rajasthan admeasuring 400.00 ha. And M.L. 03/1993.

**Thanks** 

Yours Truly,

For JK White Cement Works

(Unit of JK Cement Ltd)

(Bairang Lal)

General Manager (Mines)

Enc.: - Monitoring Reports.

CC: The Additional Director (S),
Ministry of Environment & Forests,
Paryavaran Bhavan, CGO Complex,
Lodi Road. New Delhi -110003

Regd. A/D

Regd. A/D

CC: Member Secretary

Rajasthan State Pollution Control Board, 4<sup>th</sup> Institutional Area, Jhalana Doongari,

Jaipur - 302004

Regd. Office

J.K. Cement Ltd. Kamla Tower, KANPUR-208001 Ph.: 0512-2371478-83 Fax: 0512-2399854

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### **SIX MONTHLY COMPLIANCE REPORT**

Name of the Project: Dhanappa Limestone Mine (ML No. 03/93) Enc. Clearance Letter No.: J-11015/03/2009-IA-II(M) dated 30.08.2010

Period of Compliance Report: Oct. 2019 to March. 2020

S. No.	A. SPECIFIC CONDITIONS	COMPLIANCE STATUS		
(i)	The project proponent shall obtain Consent to Establish and Consent to Operate from the Rajasthan State Pollution Control Board and effectively implement all the conditions stipulated therein.	The Consent to Establish and Consent to Operate obtained from RSPCB vide letter no. F (Mines)/Nagaur (Merta) /43 (1)/2010 -2011/6693-6697 dated 25.01.2011 and F (Mines)/Nagaur (Merta) /2652(1)/2017 -2018/9170-9174 dated 31.01.2018 respectively.		
(ii)	Environmental Clearance is granted subject to final outcome of Hon'ble Supreme Court of India in Contempt Petition © No. 412/2004 in IA No. 833 in Writ Petition © No. 202 of 1995, as may be applicable to this project.			
(iii)	The environmental clearance is subject to approval of the State Land Use Department, Government of Rajasthan for diversion of agricultural land for non-agricultural use.	Agreed		
(iv)	Necessary prior permission from the Competent Authority as may be applicable for use of grazing land for mining purpose shall be obtained.	Mining lease renewal was granted for 20 years from 08/04/1994 to 07/04/2014 and extended up to 07.04.2034 as per the MMDR Amendment ACT 2015. The permission for mining was granted by State Department of Mines & Geology, Govt. of Rajasthan.		
(v)	The project proponent shall develop fodder plots in the non-mineralized area in lieu of use of grazing land.	The fodder plots in the non-mineralized area shall be developed in lieu of use of grazing land.		
(vi)	The mining operation shall be restricted to above ground water table and it should not intersect the groundwater table. In case of working below the ground water table, prior approval of the Ministry of Environment and Forest and the Central Ground Water	The avg. ultimate working depth of mine will be 25 m bgl whereas the ground water table in the area is more than 80 m bgl in the area during post-monsoon so no ground water intersection will be there due to mining operations.		

	Authority shall be obtained, for which a detailed hydro-geological study shall be carried out.	
(vii)	The project proponent shall ensure that no natural watercourse 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.	Shall be complied with.
(viii)	The top soil shall temporarily be stored at earmarked sit (s) only & it should not be kept unutilized for long. The top soil shall be used for land reclamation & plantation.	Topsoil availability is very poor. Topsoil available, if any is being utilized by means of spreading on reclaimed (backfilled) area for plantation purposes simultaneously with mining operations.
(ix)	The overburden (OB) generated during the mining operation shall be concurrently backfilled. The existing waste dump shall be liquidated by the end of the 7 <sup>th</sup> year and thereafter there shall be no external OB dump. The entire excavated area of 156.12 ha, shall be backfilled and reclaimed by plantation. 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 its Regional Office, Lucknow on six monthly basis.	Presently OB/waste is being backfilled in the worked out area for the reclamation & rehabilitation point of view.  The phased restoration, reclamation and rehabilitation are being carried out as per MCDR. A total of 44.13 ha area has been backfilled by the end of March. 2020 and is kept continue.
(x)	Catch drains and siltation ponds of the appropriate size shall be constructed for the working pit, temporary soil, OB and mineral dumps to arrest flow of silt and sediment directly into the agricultural fields, the Jojri Nadi and other water bodies. The water so collected should be utilized for watering the mine area, roads, green belt development etc. The drains should be regularly desilted particularly after the monsoon and maintained properly.  Garland drains, settling tanks and check dams of appropriate size, gradient and length shall be constructed both around the mine pit and the temporary over burden dumps to prevent runoff of water and flow of sediments directly into the agricultural fields, the Jojri Nadi and other water bodies and sump capacity should	Catch drains and siltation ponds of appropriate size have been constructed to arrest silt and sediment flows from mine pit and temporary over burden dump. The water collected in mine pit is being utilized for watering the mine area, roads, green belt development etc.

	be designed keeping 50% safety margin over and above peak sudden rainfall (based on 50 years data) and maximum discharge in the area adjoining the mine site. Sump capacity should also provide adequate retention period to allow proper settling of silt material. Sedimentation pits should be constructed at the corners of the garland drains and desilted at regular intervals.	
(xi)	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 rain fall data.	Retaining walls at the toe of the OB dumps has been constructed.
(xii)	Plantation shall be raised in an area of 172.2 ha including a 7.5m wide green belt in the safety zone around the mining lease, backfilled and reclaimed area, along the roads etc. by planting the native species in consultation with the local DFO/Agriculture Department. The density of the trees should be around 1000 plants per ha. Greenbelt shall be developed all along the mine lease area in a phased manner and shall be completed within first five years.	Presently 42.38 ha area is covered under greenbelt/plantation up to March. 2020. We have planted 3575 nos. of plant saplings covering 3.55 ha area in our ML area during the current financial year 2019-20. Plantation shall be raised in an area of 172.2 ha area during the mine life along periphery, along road and on backfilled and dump area.
(xiii)	Effective safeguard measures, such as 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 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.	Water spraying arrangement on haul roads, dump, and trucks (loading & unloading) has been provided to control the fugitive dust emission. Regular monitoring for ambient air quality has been carried out; results are well within the stipulated norms.
(xiv)	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.	We are maintaining Seven no. of rainwater harvesting stations and utilizing rain water collected in mining pits for plantation and spraying on haul roads.
(xv)	The project proponent shall undertake provision of artificial recharge to ground water through rainwater harvesting to the tune of 2.5 to 3.0 ML/year in the area in consultation with the Rajasthan State Ground Water Department.	The project of rainwater harvesting has been completed. We have constructed seven rainwater harvesting stations within lease area and maintaining them in good conditions for recharging the ground water.
(xvi)	Regular monitoring of ground water level and	We are doing regular monitoring of ground water level in the mines as per guideline.

	quality shall be carried out in and 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 in a year – pre-monsoon (April-May), monsoon (August), post monsoon (November) and winter (January); one in each season)] shall be carried out in consultation with the State Ground Water Board /Central Ground Water Authority and the data thus collected may be sent regularly to the Ministry of Environment and Forest and its Regional Office Lucknow, the Central Ground Water Authority and the 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.	Piezometers are installed and complete monitoring record is maintained.  Comply with conditions, ground water level monitoring details are being regularly submitted to the concerned office.	
(xvii)	Appropriate mitigative measures shall be taken to prevent pollution of the Jojri Nadi in consultation with the State Pollution Control Board.	The Nadi Jojri flows at about 1.25 km south of the lease area which is a seasona one. No impact is envisaged due to minir activities on this said Nadi.	
(xviii)	The project proponent shall obtain necessary prior permission of the component authorities for drawl of requisite quantity of water (surface water Ground water, if any) required for the project.	Not applicable. The water requirement fo the site is being met from the mine sump water and nearby area.	
(xix)	Suitable rainwater harvesting measures on long term basis shall be planned and implemented in consultation with the Regional Director, Central Ground Water Board.	We have planned and implemented seven nos.of rain water harvesting structures in the lease area.	
(xx)	The project proponent shall be ensure that the fluoride level in the water to be used for drinking purpose in this area are within prescribed limits by making provision of RO System.	The J.K. White Cement Works Management already has installed RO System in the factory colony for workers, staff. The management also installed RO System in village Gotan for nearby villagers to check fluoride level.	
(xxi)	Vehicular emissions shall be kept under control and regularly monitored. Measures shall be taken for maintenance 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.	All the vehicles used for mining operations are on hired basis and we supervise & force them for periodic maintenance & servicing. PUC certified vehicles are being used.	

(xxii)	The project proponent shall take specific safeguard measure to control RSPM levels in the area.	Safeguard measures area being taken to control RSPM levels in the area. The RSPM results area within the stipulated norms.		
(xxiii)	Blast vibration study shall be carried out. Based on the same, charge per delay should be so adjusted that there is no adverse impact in the surrounding area due to vibration.	Blast Vibration Study is being regularly carried out and no adverse impact of blasting in the surrounding area due to vibration.		
(xxiv)	Controlled blasting shall be practiced. The mitigative measures for control of ground vibrations and to arrest fly rocks and boulders should be implemented.	Blasting operation is being carried out during the daytime only.  Controlled blasting is being practiced by using most advance and safe technology i.e. Shock Tubes Blasting by competent persons and also as per recommendation made in Blast Vibration Studies Report.		
(xxv)	Drills shall either be operated with dust extractors or equipped with water injection system.	Wet drilling operation is being practiced.		
(xxvi)	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.	Not applicable as handling of mineral is being carried out by manual means only. No loading of limestone by mechanized means.		
(xxvii)	Sewage treatment plant shall be installed for the colony. ETP shall be provided for the workshop and wastewater generated during the mining operation.	Not applicable, as no effluents are envisaged from mine. The workers come from nearby villages.		
(xxviii)	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.	Pre-placement medical examination and periodical medical examination is being carried out and records are maintained.		
(xxix)	Digital processing of the entire lease area using remote sensing technique should be done regularly once in three years for monitoring land use pattern and report submitted to MOEF and its Regional Office located at Lucknow.	Digital Processing of the entire lease area was conducted by M/s Hydro-Geo Surve Consultants Pvt. Ltd., Jodhpur in the Yea 2011, 2014 & 17 and reports submitted to Moef and Regional Office, Lucknow.		

(xxx)	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, crèche etc. The housing may be in the form of temporary structure to be removed after the completion of the project.	Not applicable as it is mining project hence no construction activity is involved.		
(xxxi)	The critical parameters such as RSPM (Particulate matter with size less than 10 micron i.e. PM <sub>10</sub> ), 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 discharge 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 Forest, which is available on the website of the Ministry <a href="https://www.envfor.nic.in">www.envfor.nic.in</a> shall also be referred in this regard for its compliance.	Ambient Air Quality-monitoring stations have been set up in mines area. Periodical monitoring is being carried out by our environment Cell and third party monitoring is being also done.  All the parameters w. r. t. SPM, RSPM, NOx, SO <sub>2</sub> are well within the stipulated norms. Annexure-I.  The monitored data have been displayed on a display board at the Mine site.  No water is being discharged from the lease area.		
(xxxii)	A Final Mine Closure Plan along with details of Corpus Fund should be submitted to the Ministry of Environment & Forest 5 years in advance of final closure for approval.	A final mine closure plan along with details of Corpus Fund shall be submitted to the Ministry of Environment & Forest well before as directed.		
	B. General Conditions			
(i)	No change in mining technology and scope of working should be made without prior approval of the Ministry of Environment & Forest.	No change in mining technology and scope of working shall be made without prior approval of Ministry of Environment & Forests.		
(ii)	No change in the calendar plan including excavation, quantum of mineral limestone and waste should be made.	No change in the calendar plan including excavation, quantum of mineral limestone and waste is made.		
(iii)	Conservation measures for protection of flora and fauna in the core & buffer zone should be drawn up in consultation with the local forest and wildlife department and effectively	No endangered to endemic species of flor and fauna found in the study area. However 10 hectares land has been developed for conservation of flora and		

	implemented.	fauna in the area.
(iv)	Four ambient air quality-monitoring stations should be established in the core zone as well as in the buffer zone for RSPM (Particulate matter with size less than 10 micron i.e. PM <sub>10</sub> ), NOx monitoring. Location of the stations should be decided based on the meteorological, topographical features and environmentally and meteorological data, topographical features and environmentally and ecologically sensitive targets and frequency of monitoring should be undertaken in consultation with the State Pollution Control Board.	Ambient Air Quality-monitoring stations have been set up in Core and Buffer zone. Regular monitoring of AAQ is being carried out.
(v)	Data on ambient air quality RSPM (Particulate matter with size less than 10 micron i.e., PM <sub>10</sub> ), NOx should be regularly submitted to the Ministry of Environment and Forest including its Regional office located at Lucknow and the State Pollution Control Board / Central Pollution Control Board once in six month.	Data on ambient air quality RSPM (Particulate matter with size less than 10 micron i.e., PM <sub>10</sub> ), NOx is attached herewith. Annexure –I
(vi)	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.	Water spraying arrangement on haul roads, unloading of waste trucks has been provided to control the fugitive dust emission. Blasted/ fragmented limestone loading in trucks is by manual means so no dust generation is envisaged.
(vii)	Measures should be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in operations of HEMM, etc. should be provided with ear plugs / muffs.	All the equipment's are maintained properly & workers are provided with all necessary PPE. Noise monitoring is being done & results are well within the prescribed norms.
(viii)	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 19 <sup>th</sup> May, 1993 and 31 <sup>st</sup> December, 1993 or as amended from time to time. Oil and grease trap should be installed before discharge of workshop effluent.	Not applicable. There is no generation of industrial waste water from the Dhanappa Limestone Mines.
(ix)	Personnel working in dusty areas should wear protective respiratory devices and they should also be provided with adequate training and information on safety and health aspects.  Occupational health surveillance program of the workers should be undertaken periodically	PPE has been provided to person working in such area & time to time training about safety & awareness is given to all the workers. Occupational health surveillance program of the workers is being conducted periodically. There is no occupational

	to observe any contractions due to exposure to dust and take corrective measures, if needed.	disease observed so far.
(x)	A separate environmental management cell with suitable qualified personnel should be set-up under the control of a Senior Executive, who will report directly to the Head of the Organization.	A separate environmental management cell with suitable qualified personnel has been set-up.
(xi)	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 Lucknow.	The funds earmarked for environmental protection measures kept in a separate account and not diverted for other purpose. Expenditure incurred for the environmental protection measures during the compliance period is Rs. 12.14 lacs.
(xii)	The project authorities should inform to the Regional Office located at Lucknow regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.	The mining project in question is an operative mining unit since 1987.
(xiii)	The Regional Office of this Ministry located at Lucknow 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.	We are extending full cooperation to the officer (s) of the Regional Office by furnishing the requisite data/ information/ monitoring reports regularly.
(xiv)	The project proponent shall submit six monthly reports 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 Lucknow, the respective Zonal Office of Central Pollution Control Board the State Pollution Control Board. 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 and Forest, Lucknow, the respective Zonal Office of Central Pollution Control Board and the State Pollution Control Board.	The reports on the status of compliance of stipulated EC conditions including results of monitoring is being sent to concern offices within time frame (Both in hard copies as well as by e-mail) The status of compliance in hard copies is being done.
(xv)	A copy of the clearance letter shall be sent by the proponent to concerned Panchayat, Zila	Copy of clearance letter has sent to the concerned Panchayat / Local NGO.

	Parishad / Municipal Corporation, Urban Local Body and the Local NGO, If any, from whom suggestions / 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.	
(xvi)	The State Pollution Control Board should display a copy of the clearance letter at the Regional Office, District Industry Centre and the Collector's Office / Tehsildar's Office for 30 days.	Complied with.
(xvii)	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 the 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, Lucknow by e-mail.	The Environmental Statement for financial year April 2019 to 31st March 2020 in Form–V will be submitted by Sep. 2020.
(xviii)	The project authorities should advertise at least in two local newspapers widely circulated, one of which shall be in the vernacular language of the locality concerned, within 7 days of the issue of the clearance letter informing that the project has been accorded environmental clearance and a copy of clearance letter is available with the State Pollution Control Board and also at web site of the Ministry of Environment and Forest at <a href="http://envfor.nic.in">http://envfor.nic.in</a> and a copy of the same should be forwarded to the Regional Office of this Ministry located at Lucknow	Advertisement of Environmental Clearance published in Rajasthan Patrika & Dainik Bhaskar dated 10 Sept. 2010.
3	The Ministry of other competent authority may alter/ modify the above conditions or stipulate any further condition in the interest of environment protection.	Agreed
4	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	Agreed

	alter/ modify the above conditions or stipulate any further condition in the interest of environment protection.	
4	Failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of the Environment (Protection) Act, 1986.	Agreed
5	The above conditions will be enforced interalia, under the provisions of the water (Prevention & Control of Pollution) Act 1974, the Air (prevention & Control of Pollution) Act, 1981, the Environment (Protection) Act 1986 and the Public Liability Insurance Act, 1991 along with their amendments and rules made there under and also any other orders passed by the Hon'ble Supreme Court of India/High Court of Rajasthan and any other Court of Law relating to subject matter.	We are communicating our agreement to fulfill the other statutory requirements under any law/ rules/ notifications if any applicable.
6	Any appeal against this environmental clearance shall lie with the National Environment Appellate Authority, if preferred within a period of 30 days as prescribed under Section 11 of the National Environment Appellate Authority Act, 1997.	Agreed

Thanking you,

Yours faithfully

For J.K. White Cement Works

(Unit of J.K. Cement Ltd.)

(Bajrang Lal) General Manager-Mines





Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051

(NABL Accredited ISO 9001 | ISO 14001 | OHSAS 18001)

#### **Test Certificate**

Sample Number:

VEL/A/1910240009

Name & Address of the Party : M/s JK White Cement Works, Gotan

( Unit of JK Cement LTD.) Dhanappa Limestone Mines (ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur

Rajasthan

Report No.

: VEL/A/1910240009

Format No

. 7.8 F-01

Party Reference No

Reporting Date

: 02/11/2019

: 24/10/2019

Period of Analysis **Receipt Date** 

: 24/10/2019-02/11/2019

Sample Description

: AMBIENT AIR

General Information

Sampling Location Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Meteorological condition during monitoring

**Date of Monitoring** 

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

Dhanappa Lime Stone Mine

VARDAN ENVIROLAB TEAM

RDS, FPS

VEL/RDS/01 & FPS/01

Calibrated Clear Sky

22/10/2019 To 23/10/2019

6.00 to 6.00 Hrs.

Min. 19 Max 29

Human, Vehicular & Mining Activities

Regulatory Requirment

IS:5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P-23), Gravimetric Method, RA:2006	79.23	μg/m³	100
2	Particulate Matter (as PM - 2.5)	CPCB Guideline (Vol-I, May,2011)	40.21	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P-6), Jacob & Hochheiser, RA:2006	17.5	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P-2), Modified West and Gaeke, RA:2012	8.42	μg/m³	80
5	Carbon Monoxide (as CO)	IS:5182 (P-10) Gas Chromatography, RA:2003	0.47	mg/m³	4.0
6	Benzene (as C6H6)	IS:5182 (P-11) :2004	*BDL(**DL-1.0 μg/m3)	μg/m³	5.0
	Ammonia (as NH3)	SOP, SP-207, Issue No.01, Based on CPCB Guidelines:2018	*BDL(**DL-2.0 µg/m3)	μg/m³	400.0
8	Ozone (as O3)	IS:5182 (P-9), Colorimetric Method, RA:2003	10.56	μg/m³	180.0
9	Lead (as Pb)	IS:5182 (P-22),Air Acetylene Method, RA:2009	0.08	μg/m³	1.0
10	Arsenic (as As)	IS:5182 (P-22), :2004	*BDL(**DL-1.0 ng/m3)	ng/m³	6.0

Note: a) The results listed refer only to the tested samples & applicable parameters

b) Total liabilities of our lab will be restricted to the invoice amount only c) The Sample will be destroyed after retention time unless otherwise specified

d) This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law

Tel 0141 2983404 | E-mail: jaipur@vardanenvironet.com | www.vardan.co.in

No. 1/2





Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 (NABL Accredited ISO 9001 | ISO 14001 | OHSAS 18001)

### **Test Certificate**

Sample Number: VEL/A/1910240009

Report No.

· VEL/A/1910240000

		rieport No.	: VELIA/1910	240009
Parameters	Test Method	Results	Units	Limit as per CPCB
Nickel (as Ni)	IS:5182 (P-22),Air Acetylene Method, RA:2009	*BDL(**DL-5.0 ng/m3)	ng/m³	20.0
Benzo (alpha) Pyrine-Particulate Phase Only	IS:5182 (P-12):2004	*BDL(**DL-0.5 ng/m3)	ng/m³	1.0

elow Detection Limit, \*\*DL-Detection Limit

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



Page No. 2/2

b) Total liabilities of our lab will be restricted to the invoice amount only

c) The Sample will be destroyed after retention time unless otherwise specified

d) This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law





Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 (NABL Accredited ISO 9001 | ISO 14001 | OHSAS 18001)

#### **Test Certificate**

Sample Number :

VEL/A/1910240011

Name & Address of the Party : M/s JK White Cement Works, Gotan

( Unit of JK Cement LTD.) Dhanappa Limestone Mines (ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur

Rajasthan

Report No.

: VEL/A/1910240011

Format No.

: 7.8 F-01

Party Reference No

**Reporting Date** 

: 02/11/2019

Period of Analysis

: 24/10/2019-02/11/2019

age No. 1/2

**Receipt Date** 

: 24/10/2019

Sample Description

: AMBIENT AIR

**General Information** 

Sampling Location

Sample Collected by

Sampling Equipment used Instrument Code

Instrument Calibration Status

Meteorological condition during monitoring

**Date of Monitoring** 

Time of Monitoring

Ambient Temperature (°C)

**Surrounding Activity** Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration Parameter Required

Village Dhanappa

VARDAN ENVIROLAB TEAM

RDS.FPS

VEL/RDS/03 & FPS/03

Calibrated

Clear Sky

22/10/2019 To 23/10/2019

11.30 to 11.30 Hrs.

Min. 21 Max. 30

Human, Vehicular & Plant Activities

Regulatory Requirment

24 Hrs.

: As Per Work Order

S.No	. Parameters	Test Method	Results	Units	Limit as per
1	Particulate Matter (as PM -10)	IS:5182 (P-23), Gravimetric Method,	72.37	μg/m³	100
2	Particulate Matter (as PM - 2.5)	CPCB Guideline (Vol-I, May,2011)	30.47	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P-6), Jacob & Hochheiser, RA:2006	16.1	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P-2), Modified West and Gaeke, RA:2012	08.62	μg/m³	80
5	Carbon Monoxide (as CO)	IS:5182 (P-10) Gas Chromatography, RA:2003	0.47	mg/m³	4.0
6	Benzene (as C6H6)	IS:5182 (P-11) :2004	*BDL(**DL-1.0 µg/m3)	μg/m³	5.0
7	Ammonia (as NH3)	SOP, SP-207, Issue No.01, Based on CPCB Guidelines:2018	*BDL(**DL-2.0 µg/m3)	μg/m³	400.0
8	Ozone (as O3)	IS:5182 (P-9), Colorimetric Method, RA:2003	10.72	μg/m³	180.0
9	Lead (as Pb)	IS:5182 (P-22),Air Acetylene Method, RA:2009	0.07	μg/m³	1.0
10	Arsenic (as As)	IS:5182 (P-22), :2004	*BDL(**DL-1.0 ng/m3)	ng/m²	6.0

Note: a) The results listed refer only to the tested samples & applicable parameters b) Total liabilities of our lab will be restricted to the invoice amount only

c) The Sample will be destroyed after retention time unless otherwise specified

d) This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law

Tel 0141 2983404 | E-mail: jaipur@vardanenvironet.com | www.vardan.co.in





Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 (NABL Accredited ISO 9001 | ISO 14001 | OHSAS 18001)

### **Test Certificate**

Sample Number:

VEL/A/1910240011

Report No.

· VEL/A/1010240011

mateur			. VLL/A/1910240011		
neters	Test Method	Results	Units	Limit as per CPCB	
I (as Ni)	IS:5182 (P-22),Air Acetylene Method, RA:2009	*BDL(**DL-5.0	ng/m³	20.0	
o (alpha) Pyrine-Particulate e Only	IS:5182 (P-12):2004	*BDL(**DL-0.5	ng/m³	1.0	
	(alpha) Pyrine-Particulate	(as Ni)  IS:5182 (P-22),Air Acetylene Method, RA:2009  (alpha) Pyrine-Particulate  IS:5182 (P-12):2004	Test Method Results  (as Ni) IS:5182 (P-22),Air Acetylene Method, RA:2009 Rg/m3)  (alpha) Pyrine-Particulate IS:5182 (P-12):2004 **RDI (**DL 0.5)	(as Ni)	

low Detection Limit, \*\*DL-Detection Limit

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



Note: a) The results listed refer only to the tested samples & applicable parameters

b) Total liabilities of our lab will be restricted to the invoice amount only

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: VEL/N/1910240009

: 7.8 F-01

: 02/11/2019

: 24/10/2019

: Calibrated

: 24 Hrs.

Sample Collected by : VARDAN ENVIROLAB TEAM

: NII

Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 (NABL Accredited ISO 9001 | ISO 14001 | OHSAS 18001)

#### **Test Certificate**

Report No.

Reporting Date

Sampling Duration

Calibration Status

**Receipt Date** 

Instrument

**Format No** 

Sample Number :

VEL/N/1910240009

Name & Address of the Party : M/s JK White Cement Works, Gotan

( Unit of JK Cement LTD.) Dhanappa Limestone Mines Party Reference No (ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur

Rajasthan

Sample Description

Scope of Monitoring

Protocol Used Instrument Used : Ambient Noise : Regulatory Requirment

: IS 9989; IS 9876

: Sound Level Meter

**General Information** 

Instrument Code

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity Parameter Required

Sampling Location

Dhanappa Lime stone Mine

VEL/SLM/01

Clear Sky

22/10/2019 To 23/10/2019 6.00 to 6.00 Hrs.

Min. 21 Max 32

Human & Vehicular Activities

As Per Work Order

S.No. Test Parameters	Protocol	Test Res	sult dB (A)
		Day Time	Night Time
1 L max	IS: 9989-1981, IS 9876: 1981	71.2	62.4
2 L min	IS: 9989-1981, IS 9876: 1981	48.3	62.1 37.8
3 Leq	IS: 9989-1981, IS 9876: 1981	56.7	43.2

	Leq in dB(A)
Day	Night
75	70
65	55
55	45
50	40
	75 65 55

- 1. Day Time is from 6.00 AM to 10.00 PM.
- 2: Night Time is reckoned between 10.00 PM to 6.00 AM
- 3. SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, ludspeaker and bursting of crackers is banned in these zones.

Note: Mixed categories of areas be declared as one of the four above mentioned categories by the competent Authority and the corresponding standards shall apply

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

Page No. 1/1

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: VEL/N/1910240011

: 7.8 F-01

: 02/11/2019

: 24/10/2019

: 24 Hrs.

Sample Collected by : VARDAN ENVIROLAB TEAM

: Calibrated

Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 (NABL Accredited ISO 9001 | ISO 14001 | OHSAS 18001)

#### **Test Certificate**

Report No.

Format No

**Receipt Date** 

Instrument

Sampling Duration

**Calibration Status** 

Sample Number:

VEL/N/1910240011

Name & Address of the Party : M/s JK White Cement Works, Gotan

( Unit of JK Cement LTD.) Dhanappa Limestone Mines Party Reference No

(ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur Reporting Date

Rajasthan

Sample Description

Scope of Monitoring

**Protocol Used** 

Instrument Used

: Regulatory Requirment

: IS 9989; IS 9876

: Sound Level Meter

**General Information** 

Sampling Location

Instrument Code Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Parameter Required

: Ambient Noise

Village- Dhanappa

VEL/SLM/09

Clear Sky 22/10/2019 To 23/10/2019

6.00 to 6.00 Hrs. Min. 19 Max 32

Human & Vehicular Activities

As Per Work Order

S.No.	Test Parameters	Protocol		
			Day Time	Night Time
1	L max	IS: 9989-1981, IS 9876: 1981	68.2	56.3
2	L min	IS: 9989-1981, IS 9876: 1 <mark>981</mark>	44.7	37.2
3	Leq	IS: 9989-1981, IS 9876: 1981	50.2	43.1

Category of Zones	Leq	in dB(A)
	Day	Night
Industrial	75	70
Commercial	65	55
sidential	55	45
Silence Zone	50	40

- 1. Day Time is from 6.00 AM to 10.00 PM.
- 2: Night Time is reckoned between 10.00 PM to 6.00 AM
- 3. SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, ludspeaker and bursting of crackers is banned in these zones.

Note: Mixed categories of areas be declared as one of the four above mentioned categories by the competent Authority and the corresponding standards shall apply

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

Page No. 1/1

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Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051

(NABL Accredited ISO 9001 | ISO 14001 | OHSAS 18001)

#### **Test Certificate**

Sample Number :

VEL/W/1911060001

Report No.

: VEL/W/1911060001

Name & Address of the Party : M/s JK White Cement Works, Gotan

Format No

: 7.8 F-01

(Unit of JK Cement LTD.) Dhanappa Limestone Mines

Party Reference No

; NIL

(ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur Rajasthan

Reporting Date Period of Analysis

: 11/11/2019 : 06/11/2019-11/11/2019

**Receipt Date** 

: 06/11/2019

Location

: Water Sample

Sampling Date

: 04/11/2019

: Dhanappa Village Ground water sample

Sampling Quantity

: 2.0 Ltr.

Sample Collected by

Sample Description

: Vardan Envirolab Team

Sampling Type

: Grab

Preservation Sampling and Analysis

: 25 DEGREE : IS 10500 2012

Protocol

<b>70.</b>	Test Parameters	ters Test Method	Results	Units	Requirement as per	
0.					IS:10500-2012	
					Acceptable Limits	Permissible Limits
1	pH (at 25°C)	IS 3025(P-11): 1983 Reaff. 2017	7.28		6.5 to 8.5	No Relaxation
2	Turbidity	IS 3025 (Part 10): 1984, Reaff: 2017	*BDL(**DL 1NTU)	NTU	1	5
3	Total Hardness (as CaCO3)	IS: 3025 (Part 21): 2009, Reaff. 2019	764.0	mg/l	200	600
4	Calcium (as Ca)	IS: 3025 (Part 40): 1991 Reaff. 2019	173.15	mg/l	75	200
5	Alkalinity (as CaCO3)	IS: 3025 (Part 23): 1986, Reaff. 2019	294.80	mg/l	200	600
6	Chloride (as CI)	IS: 3025 (Part 32): 1988, Reaff. 2019	661.62	mg/l	250	1000
7	Magnesium (as Mg)	IS: 3025 (Part 46): 1994, Reaff. 2019	32.07	mg/l	30	100
8	Total Dissolved Solids	IS 3025 (P-16): 1984 Reaff. 2017	1597	mg/l	500	2000
9	Sulphate (as SO4)	IS: 3025 (Part 24): 1986, Reaff. 2019	177.14	mg/l	200	400
10	Fluoride (as F)	APHA 23rd Edition 2017, 4500FD	1.35	mg/l	1.0	1.5
11	Nitrate (as NO3)	IS: 3025 (Part 34): 1988, Reaff. 2019 (Chromotropic Method)	18.16	mg/l	45.0	No Relaxation
12	Zinc (as Zn)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.2)	mg/l	5.0	15.0
13	Copper (as Cu)	APHA 23rd Edition Year 2017 Method No. 3111B	*BDL(**DL-0.02)	mg/l	0.05	1.5
14	Cadmium (as Cd)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.002)	mg/l	0.003	No Relaxation
15	Lead (as Pb)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.005)	mg/l	0.01	No Relaxation
16	Total Coliform	IS 1622:2009	Absent	MPN/10 0 ml	Shall not be detectable in any 100 ml sample	
17	Temperature	IS -3025(Part -9):1984,Ref:2017	26.4	°c		Shall not exceed 5°c above the receiving water Temperature
18	Sodium as Na	APHA 3500 Na B	344.0	mg/l	ENE	A

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Rage No. 1/2





Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 (NABL Accredited ISO 9001 | ISO 14001 | OHSAS 18001)

### **Test Certificate**

Sample Number	:		VEL/W/1911060001	
---------------	---	--	------------------	--

Report No.

VFI /W/1911060001

			Keport No		. VEL/VV/191	1000001
S.No.	Test Parameters	nmeters Test Method		Units	Requirement as per IS:10500-2012	
					Acceptable Limits	Permissible Limits
19	Potassium as K	APHA 3500 K B	16.20	mg/l	-	-
20	Phosphate as PO4	APHA 4500 PD	0.26	mg/l		-
21	Ammonical nitrogen (as N-NH3)	IS 3025, P-34, 1988 (Ref. 2019)	*BDL(**DL-0.3 mg/L)	mg/l		-
22	BOD (3 Days at 27°)	IS 3025, P-44, (Ref.2019)	*BDL(**DL-2.0mg/L )	mg/l	-	-
23	Chemical Oxygen Demand (COD)	IS 3025, P-58 (Ref. 2017)	7.68	mg/l		
_4	Dissolved Oxygen (DO)	IS 3025, P-38,1989 (Ref.2019)	5.33	mg/l	-	-
25	Fecal Coliform	IS 1622,1981 (Ref.2003)	Absent	MPN/10	-	

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

ecked By)

Page No. 2/2

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Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 MoEF & CC Recognised |ISO 9001 | OHSAS 45001)

#### **Test Certificate**

Sample Number: VEL/A/2003050014

Name & Address of the Party : M/s JK White Cement Works, Gotan

( Unit of JK Cement LTD.) Dhanappa Limestone Mines (ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur

Rajasthan

Report No.

: VEL/N/2003050014

Format No

: 7.8 F-01

Party Reference No : NIL

Reporting Date

: 11/03/2020

Period of Analysis Receipt Date

: 06/03/2020-11/03/2020 . 05/03/2020

Sample Description

: AMBIENT AIR

General Information Sampling Location

Sample Collected by Sampling Equipment used

instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C)

**Burrounding Activity** 

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration Parameter Required

VARDAN ENVIRULAB I EAM

: RDS,FPS

VEL/RDS/05 & FPS/05

Calibrated

: Clear Sky

29/02/2020 To 01/03/2020

14:00 to 14:00 Hrs.

! Min. 17 Max 32

Human, Vehicular & Plant Activities

Regulatory Requirment

: IS:5182

: 24 Hrs.

: As Fei Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P-23), Gravimetric Method, RA:2006	76.60	μg/m³	100
?	Particulate Matter (no PM 2.5)	I5: 5182 (P-24), 2019	39.64	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P-6), Jacob & Hochheiser, RA:2006	18.40	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P-2), Modified West and Gaeke, RA:2012	9.17	μg/m³	80
5	#Carbon Monoxide (as CO)	IS:5182 (P-10) Gas Chromatography, RA:2003	0.44	mg/m³	4.0
6	Benzene (as C6H6)	IS:5182 (P-11) :2004	BDL (*DL1.0 µg/m³)	μg/m³	5.0
	Ammonia (as NH3)	Methods of air sampling and analysis,3rd ed.,1988, Method No. 401	BDL (*DL2.0 µg/m³)	μg/m³	400.0
8	Ozone (as O3)	IS:5182 (P-9), Colorimetric Method, RA:2003	10.03	μg/m³	180.0
9	Lead (as Pb)	IS:5182 (P-22),Air Acetylene Method, RA:2009	BDL (*DL1.0 µg/m³)	μg/m³	1.0
10	Arsenic (a. As)	Methods of air sampling and	BDL (*DL1.0	ng/m³	6.0

Note: a) The results listed refer only to the tested samples & applicable parameters

b) Total liabilities of our lab will be restricted to the invoice amount only c) The Sample will be destroyed after retention time unless otherwise specified





Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 MoEF & CC Recognised JISO 9001 | OHSAS 45001)

#### **Test Certificate**

y No	Parameters		Report No.	: VEL/A/2003	3050014
5.140.	Talameters	Test Method	Results	Units	Limit as per CPCB
10		analysis,3rd ed ,1988, Method No.302	ng/m²)		
11	Nickel (as Ni)	USEPA compendium IO-3.2,1999	BDL (*DL 5.0 ng/m³)	ng/m³	20.0
	Benzo (alpha) Pyrine-Particulate Phase Only	IS:5182 (P-12):2004	BDL (*DL 0.5	ng/m³	1.0







Page No. 2/2

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Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051

MoEF & CC Recognised |ISO 9001 | OHSAS 45001)

#### **Test Certificate**

Sample Number: VFI /A/2003050015

Name & Address of the Party

: M/s .IK White Cement Works, Gotan

( Unit of JK Cement LTD.) Dhanappa Limestone Mines Party Reference No : NIL (ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur

Kajasthan

Report No.

: VEL/A/2003050015

Format No

· 7.8 F-01

Reporting Date

: 11/03/2020

: 05/03/2020

Period of Analysis Receipt Date

: 06/03/2020-11/03/2020

Sample Description

· AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Village - Dhanappa

VARDAN ENVIROLAB TEAM RDS.FPS

VEL/RDS/02 & FPS/02

Calibrated

Clear 5ky

29/02/2020 To 01/03/2020

16:00 to 16:00 Hrs.

Min. 17 Max 32

Human. Vchicular & Plant Activities

Regulatory Requirment

IS:5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Unita	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P-23), Gravimetric Method, RA:2006	70.64	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS: 5182 (P-24), 2019	29.49	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P-6), Jacob & Hochheiser, RA:2006	15.49	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P-2), Modified West and Gaeke, RA:2012	8.83	μg/m³	80
5	#Carbon Monoxide (as CO)	IS:5182 (P-10) Gas Chromatography, RA:2003	0.42	mg/m³	4.0
6	Benzene (as C6H6)	IS:5182 (P-11) :2004	BDL (*DL1.0 µg/m³)	μg/m³	5.0
7	Ammonia (as NH3)	Methods of air sampling and analysis,3rd ed.,1988, Method No. 401	BDL (*DL2.0 µg/m³)	μg/m³	400.0
8	Ozone (as O3)	IS:5182 (P-9), Colorimetric Method, RA:2003	11.34	μg/m³	180.0
9	Lead (as Pb)	IS:5182 (P-22),Air Acetylene Method, RA:2009	BDL (*DL1.0 µg/m³)	μg/m³	1.0
10	Arsenic (as As)	Methods of air sampling and	BDL (*DL1.0	ng/m³	6.0

he results listed refer only to the tested samples & applicable parameters b) Total liabilities of our lab will be restricted to the invoice amount only

c) The Sample will be destroyed after retention time unless otherwise specified





Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 MoFF & CC Recognised [ISO 9001 | OHSAS 45001)

#### **Test Certificate**

Sample Number: VFI /A/2003050015

Report No.

: VEL/A/2003050015

				,	
S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
10		analysis,3rd ed.,1988, Method No.302	ng/m³)		
11	Nickel (as Ni)	IISEPA compendium IQ 2.2,1000	NDI (*DI 5.0 ng/m³)	ng/m²	20.0
	Benzo (alpha) Pyrine-Particulate Phase Only	IS:5182 (P-12):2004	BDL (*DL 0.5 ng/m³)	ng/m³	1.0

#Not covered in NABL Scope

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

Page No. 2/2

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Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051

MoEF & CC Recognised IISO 9001 | OHSAS 45001)

#### **Test Certificate**

Sample Number: VEL/N/2003050018

Report No.

: VEL/N/2003050018

Name & Address of the Party : M/s JK White Cement Works, Gotan

Format No

( Unit of JK Cement LTD ) Dhanappa Limestone Mines Party Reference No (ML No. 3/93), VIII- Dhanappa, Tehsil- Merta Nagaur

: NIL

Rajasthan

Reporting Date Receipt Date

: 12/03/2020

Sample Description

· Ambient Noise

Sumpling Duration

· 05/03/2020

Scope of Monitoring

: Regulatory Requirment

: 24 Hrs. Sample Collected by : VARDAN ENVIROLAB TEAM

Protocol Used

: IS 9989; IS 9876

Instrument Calibration Status

: Calibrated

Instrument Used : Sound Level Meter General Information

Sampling Location

Instrument Code

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring Ambient Temperature (°C) Surrounding Activity Parameter Regulred

Mine Site VEL/SLM/04 Clear Sky

28/02/2020 To 20/02/2020

6.00 to 6.00 Hrs. Min. 17° Max 32°

Human & Vehicular Activities As Per Work Order

S.No.	Test Parameters	Protocol	loct Heault dD (A)		
			Day Time	Night Time	
1	L max	IS: 9989-1981, IS 9876: 1981	72.5	24.5	
2	l min	IS: 9989-1981, IS 9876: 1981	19.8	61.5 39.1	
3	Leq	IS: 9989 1981, IS 9076; 1981	58.94	47.61	

Category of Zones	100	E. • S. Jie Ven J. A.
3-1, 01 20100		q in dB(A)
Industrial	Day	Night
Industrial	75	70
Commercial	65	
Residential		55
Silence Zone	55	45
4 D. T.	50	40

Day Time is from 6.00 AM to 10.00 PM.

2: Night Time is reckoned between 10.00 PM to 6.00 AM

3. SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, ludspeaker and bursting of crackers is banned in these zones. Note: Mixed categories of areas be declared as one of the four above mentioned categories by the competent Authority and the

corresponding standards shall apply

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

Page No. 1/1

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Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051

MoEF & CC Recognised [ISO 9001 | OHSAS 45001]

#### **Test Certificate**

Sample Number: VEL/N/2003050019

Report No.

: VEL/N/2003050019

Name & Address of the Party : M/s JK White Cement Works, Gotan

Format No

( Unit of JK Cement LTD.) Dhanappa Limestone Mines Party Reference No : NIL

: 7.8 F-01

(ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur

Reporting Date

: 12/03/2020

Rajasthan

Receipt Date

: 05/03/2020

Sample Description

: Ambient Noise

Sampling Duration

: 24 Hrs.

Scope of Monitoring

: Regulatory Requirment

Sample Collected by

: VARDAN ENVIROLAB TEAM

Frotocol Used Instrument Used

: IS 9989; IS 9876

Instrument **Calibration Status**  : Calibrated

: Sound Level Meter General Information

Sampling Location

Village - Dhanappa

Instrument Code

VEL/SLM/05

Meteorological condition during monitoring

Clear Sky

Liate of Monitoring

28/02/2020 Tu 29/02/2020

Time of Monitoring

6.00 to 6.00 Hrs.

Ambient Temperature (°C)

Min. 17° Max 32° Human & Vehicular Activities

**Burrounding Activity** Parameter Required

As Per Work Order

3.No,	Test Parameters	Protocol	Tool Result db (A)		
			Day Time	Night Time	
1	L max	IS: 9989-1981, IS 9876. 1981	69.3	57.5	
2	L min	IS: 9989-1981, IS 9876: 1981	45.0	38.6	
3	Leq	IS: 9989-1981, IS 9876: 1981	59.74	44.21	

Category of Zones	Lec	q in dB(A)
	Day	Night
Industrial	75	70
Commercial	65	55
Residential	55	45
Silence Zone	50	40

- 1. Day Time is from 6.00 AM to 10.00 PM.
- 2. Night Time is reckoned between 10.00 PM to 6.00 AM
- 3. SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, ludspeaker and bursting of crackers is banned in these zones.

Note: Mixed categories of areas be declared as one of the four above mentioned categories by the competent Authority and the corresponding standards shall apply

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

Page No. 1/1

Note: a) The results listed refer only to the tested samples & applicable parameters

- b) Total liabilities of our lab will be restricted to the invoice amount only
- c) The Sample will be destroyed after retention time unless otherwise specified
- d) This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law



Laboratory: Plot No. 24, 25, Narayan Vihar B Block, Jaipur (Raj.) 302035 Corp. Off.: Plot No. 82A, Sector- 5, IMT Manesar, Gurugram- 122051 MoEF & CC Recognised [ISO 9001 | OHSAS 45001]

#### **Test Certificate**

Sample Number:

Sample Description

Sample Collected by

VEL/W/2003050009

Name & Address of the Party : M/s JK White Cement Works, Gotan

( Unit of JK Cement LTD.) Dhanappa Limestone Mines

(ML No. 3/93), Vill- Dhanappa, Tehsil- Merta, Nagaur

Rajasthan

: Water Sample

: Village- Dhanappa

: Vorden Envirolab Tuum

Report No.

: VEL/W/2003050009

Format No

: 7.8 F-01

Party Reference No

: NIL

Reporting Date Period of Analysis

Sampling Quantity

: 11/03/2020

: 05/03/2020-11/03/2020

Receipt Date

. 05/03/2020

**Campling Date** 

: 03/03/2020

Sampling Type

: 2.0 Ltr : Grab

Preservation

: 25 DEGREE : IS 10500 2012

Sampling and Analysis Protocol

Lucation

10100	:01					
S.No.	Test Parameters	t Parameters Test Method		Units	IS:10500-2012	
					Acceptabl Limit	e Permissible Lim
1	pH (at 25°C)	IS 3025(P-11): 1983 Reaff. 2017	7.61		6.5 to 8.5	No Relaxation
2	Odour	IS 3025 (P-5) : 2018	Agreeable	-	Agreeable	
3	Total Hardness (as CaCO3)	IS: 3025 (Part 21): 2009, Reaff, 2019	430.08	mg/l	200	600
4	Calcium (as Ca)	IS: 3025 (Part 40): 1991 Reaff. 2019	69.25	mg/l	75	
5	Alkalinity (as CaCO3)	IS: 3025 (Part 23): 1986, Reaff. 2019	319.14	mg/l	200	200
6	Chloride (as CI)	IS: 3025 (Part 32): 1980, Reaff. 2019	A STATE OF THE PARTY OF THE PAR			600
7	Magneslum (as Mg)	IS: 3025 (Part 46): 1994, Reaff. 2019	62.52	mg/l	250	1000
8	Total Dissolved Solids	IO 3025 (P-16): 1984 Reatt. 2017	2081.30	mg/l	30	100
9	Sulphate (as SO4)	IS: 3025 (Part 24): 1986, Reaff. 2019	120000000000000000000000000000000000000	mg/l	500	2000
10	Fluoride (as F)	APHA 23rd Edition 2017, 4500FD	193.44	mg/l	200	400
11	Nitrate (as NO3)	IS: 3025 (Part 34): 1988, Reaff. 2019	1.38	mg/l	1.0	1.5
		(Chromotropic Method)	21.87	mg/l	45.0	No Relaxation
	Zinc (as Zn)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.2)	mg/l	5.0	15.0
	Copper (as Cu)	APHA 23rd Edition Year 2017 Method No. 3111B	*BDL(**DL-0.02)	mg/l	0.05	1.5
	Cadmium (as Cd)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.002)	mg/I	0.003	No Relaxation
	_ead (as Pb)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.005)	mg/l	0.01	No Relaxation
	otal Coliform	IS 1622:2009	Absent	MPN/10 0 ml	Shall not be detectable in any 100 ml	
	emperature	IS -3025(Part -9):1984,Ref:2017	26.0	°c	sample	Shall not exceed 5°c above the receiving water
3 5/0	odium as Ma	APHA 3500 Na B	556.00			Temperature
1	III		00.00	mg/l	-	W-EAL

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**Fecal Coliform** 

### Vardan Enviro ab

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#### **Test Certificate**

ampi	e Number: VEL/W/2003050009		Report No	).	: VEL/W/200	3050009
S.No.	Tost Parameters	Test Method	Results	Unita	IS:10500-2012	
					Acceptable Limit	Permissible Limit
19	Potassium as K	APHA 3500 K B	4.22	mg/l	-	-
20	Phosphate as PO4	APHA 4500 PD	0.36	mg/l	-	
21	Ammonical nitrogen (as N-NH3)	IS 3025, P-34, 1988 (Ref. 2019)	*BDL(**DL-0.3)	mg/l	-	-
22	BOD (3 Days at 27°)	IS 3025, P-44, (Ref.2019)	*BDL(**DL-2.0)	mg/l	1/2	
23	Chemical Oxygen Demand (COD)	IS 3025, P-58 (Ref. 2017)	7.92	mg/l		
24	Dissolved Oxygen (DO)	IS 3025, P-38,1989 (Ref.2019)	5.86	ma/l		

Opinion : The sample Complies with the standard laid down under FSSA rules & regulations 2011, in respect of the test performed.

IS 1622,1981 (Ref.2003)

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

MPN/10

Absent

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