

JK Cement Works, Panna (Formerly known as Jaykaycem (Central) Ltd. now amalgamated) A Unit of JK Cement Ltd.

CIN: L17229UP1994PLC017199

- Village Harduwaken, Tehsil Amanganj District - Panna, State - Madhya Pradesh, India - 488 441
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- er www.jkcement.com

Ref.No.: JKCEMENT/ENV./EC/KAKRA/2024-25/03/16

Date: 21.11.2024

To,
Regional Office (WZ),
Kendriya Paryavaran Bhawan,
E-5, Arera Colony, Link Road-3, Ravi Shankar Nagar
BHOPAL – 462 016
E-Mail: rowz.bpl-mef@nic.in

Subject: Submission of Half yearly Environment Clearance Compliance Status Report for the period from April -2024 to September-2024 of Kakra Panna Limestone Mine of M/s J K Cement Ltd. Located at Villages Kakra, Kamtana, Saptai, Judi, Devri, Purohit, & Devra, Tehsil Amanganj, District Panna of State Madhya Pradesh.

- Ref.: 1- Environment Clearance vide no F. No. J-11015/190/2016-IA. II (M) dated 31.08.2020.
  - 2- Corrigendum in EC vide letter No. J-11015/190/2016-IA.II (M) dated 08.03.2021.
  - 3- Amendment EC letter no. J-11015/190/2016-IA. II (M) dated 18.10.2023

Dear Sir,

With reference to above stated Environment Clearance (EC) and MoEF & CC notification no. S.O.5845(E) 26.11.2018, we area submitting Half Yearly Environmental Clearance Compliance Status Report for the period from April 2024 to September-2024 of Kakra Panna Limestone Mine of M/s J K Cement Ltd, located at Villages Kakra, Kamtana, Saptai, Judi, Devri, Purohit, & Devra, Tehsil Amangani, District Panna, Madhya Pradesh through email, this is for your kind information and record please.

Thank you,

Yours Sincerely
For: Kakra-Panna Limestone Mine
(A Unit of M/s J K Cement Limited.)

KapiLAgrawat

(Unit Head)

Encl.: Copy of EC Compliance Status Report Soft copy sent by mail to:

- 1. Member Secretary, MP Pollution Control Board, Paryawaran Parisar, E-5, Arera Colony, Bhopal (MP).
- 2. Regional Officer, Regional Office, MP Pollution Control Board, Makronia, Sagar (MP)
- 3. Regional Director- CPCB, Paryawaran Parisar, E-5, Arera Colony, Bhopal (MP).
- 4. Deputy Director General of forest (C), MoEFCC, Integrated Regional Office, Bhopal-462016.
- 5. The Director, MoEFCC, Indira Paryavaran Bhavan, New Delhi-11003

#### Corporate Office

- Prism Tower, Ground Floor, Ninaniya Estate, Gwal Pahari, Gurugram, Haryana - 122102, India
- +0124-6919000
- admin.prismt@jkcement.com
- www.jkcement.com
   CIN: L17229UP1994PLC017199







Manufacturing Units at:
Nimbahera, Mangrol, Gotan (Rajasthan) | Muddapur (Karnataka)
Jharli (Haryana) | Katni, Paona, Ujjain (M.P.) { Prayagral, Allgerh,
Hamirpur (U.P.) | Balasinor (Gujarat) | Fujairah

Environmental Clearance to M/s J K Cement Limited issued for Kakra-Panna Limestone Mine for production of 4.08 MTPA Limestone, 1.51 MTPA inter-burden, 1.26 MTPA soil/Alluvium, 0.18 MTPA Mine waste and 0.58 MTPA sub-grade mineral [Total Excavation 7.61 MTPA] in the ML area 1594.35 Ha, at Villages Kakra, Kamtana, Saptai, Judi, Devri Purohit and Devra, Tehsil Amanganj, District Panna, Madhya Pradesh.

Environment Clearance vide no F. No. J-11015/190/2016-IA. II (M) dated 31<sup>st</sup> August 2020, Corrigendum in EC vide letter No. J-11015/190/2016-IA.II (M) dated 8<sup>th</sup> March, 2021 and Amendment in EC vide F. No. J-11015/190/2016-IA. II (M) dated 18<sup>th</sup> October 2023

Cnaa	Amendment in EC vide F. No. J-11015/190/2016-IA. II (M) dated 18" October 2023					
	ific Condition	Complied				
I.	Mining shall be restricted to the land already acquired near the Judi Village (about 235 ha). Meanwhile the PP may acquire the land, modify the mining sequence to avoid the void in west side of Dewra Village and approach the Ministry for revalidation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area.	Complied. This condition Amended EC dated 18 <sup>th</sup> Coin the entire plan. Amenda approval correspectively.	C no. <b>F. N</b> October 20 lease are ded EC o py are e	o. J-11015/ 023, to carry a as per th copy and re	190/2016 out mini e approv evised m	ng activity ed mining ining plan
II.	The safety barrier of 100 m against the village / Habitation; 45 m on either side of the Nallah; 50 m on either side of the village roads shall be left as non-mining zone and thick green belt shall be developed with native species before commencement of mining operations in the area.	Compliance The safety Habitation; 4 on either sid non-mining developed w	barrier of 45 m on e de of the v zone an	ither side o ither side o illage roads d thick gre	f the Nal s have be	lah; 50 m een left as
III.	No mining shall be carried up to 250 m distance from the bank of Ken River and an embankment of not less than 3 m height above the HFL shall be constructed and thick green belt shall be developed with native species before commencement of mining operations in the area.	Complied. No mining is the bank of being developed	the Ken	River and t	hick gre	
IV.	The PP shall adopt control basting with necessary permission from the Director General of Mines Safety within 300 m from the village / Habitation boundary and non-conventional mining with ripper dozer or other mechanical means by avoiding the blasting within 100 m from the village / Habitation boundary. Thick plantation with native and broad-leaved species shall be developed in the safety barrier left against the Habitations before commencement of mining operations in the area.	Pit details  Pit 1  Thick plant species is be DGMS perm	ssary pe Mines Safe age / Habit y from villa Distance fro Dewra Village 750 tation wite	rmission fety to do blacation bound age/ habitation bound age/ habitation m Mine Pit  Kakra  Village  1380  th native ageloped in the	rom the asting wit ary. Miniron bound (meter)  Judi Village  3000  and broke safety be	E Director hin 300 m ng is being ary.  Kamtana Village  3600  ad-leaved parrier.
		<b>3.</b>		F. J. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1. 1.		

V. The ground induced blasting vibrations shall be monitored regularly for every blast performed and the values of "Peak Particle Velocity" and "Air Over Pressure" shall be maintained below the permissible values prescribed by the DGMS, from time to time.

#### Complied.

The ground induced blasting vibrations is being monitored regularly for every blast performed and the values of "Peak Particle Velocity" and "Air Over Pressure" is well within the permissible values prescribed by the DGMS.

A blasting vibration report attached as Annexure-4.

VI. No external dumping of overburden and/or subgrade material shall be made outside the mining lease area.

#### Complied.

No external dumping of overburden and/or sub-grade material is being done outside the mining lease area.

VII. Site specific conservation plan for all the Schedule-I species reported in the study area shall be implemented in consultation with State Forest Department as per the recommendations of Chief Wildlife Warden.

#### Compliance in progress.

We have already deposited Rs. 289.90 Lakh via. E Cheque no. CTY3061751 dated 19.08.2023 as per fund allocated for implementation of approved Wild Life Conservation Plan (WLCP) approval Letter no. V.Pra/Ma.Chi./8847 dated 13.12.2019 for JK Cement Limited Integrated Cement Plant Project. Acknowledgement copy of amount deposition is given below:

However, we are following the State Forest Department regarding implementation of Wildlife conservation plan and letters have been submitted to the Wild Life Department on dated 06.03.2024 via letter no. JKCEMENT/PCP/EMD/2023-24/F 04/10, follow up letter on 18.04.2024 via letter no. JKCEMENT/PCP/EMD/2024-25/F 04/11. Copy is given below.





#### Acknowledgement copy of amount deposition in WLCP

VIII. Total Excavation shall not be exceeded to 7.61 which includes 4.08 MTPA Lime Stone, 0.58 MTPA sub-grade limestone, 1.51 MTPA Inter

#### Complied.

Our mine was commissioned on dated **30.01.2023** and production & dispatched of limestone started from the

burden, Soil/Alluvium 1.26 MTPA, Mine Waste 0.18 MTPA.

month April-2023. The total excavation in FY: 2023-24 is following:

Sr.	Production	Permission	FY:2023-24
No		(MTPA)	(MTPA)
1	Limestone	4.08	0.83
2	Sub-grade Limestone	0.58	0.00
3	Inter burden	1.51	0.00
4	Soil/ Alluvium	1.26	0.27
5	Mine waste	0.18	0.05

Further, the excavation for period from Apr-24 to Sep-24 is following:

Sr. No	Production	Permission (MTPA)	Apr-24 to Sep-24 (MTPA)
1	Limestone	4.08	0.59
2	Sub-grade Limestone	0.58	0.00
3	Inter burden	1.51	0.00
4	Soil/ Alluvium	1.26	0.18
5	Mine waste	0.18	0.00

IX. Plantation shall be carried out as per the mining plan both concurrent and closer phase reclamation, inter alia, including plantation all along the boundary of the mining lease shall be completed within 2 years of commencement of mining operations, with a sapling of native and broad-leaved species of not less than 12 feet and shall maintain the record of the same, gap plantation and grassing as per the directions of the Hon'ble Supreme Court

#### Compliance in progress.

Plantation is being done as per the EC conditions and the approved mining plan.

A total of 31334 nos of sapling of native and broadleaved species have been planted in 12.54 Ha of area up to Sep-2024. Pictures are given below. A proper record of plantation is being maintained.







#### **Plantation photo**

X. The project proponent shall implement the commitments made on the issues raised in PH and activities proposed under CER, in a period of three years and record for the same shall be maintained and audited and reported to the Regional Office of the Ministry along with the compliance reports

#### Complied.

The commitments made on the issues raised in PH and activities proposed under CER is being executed. Present status is given below.

#### Corporate Environment Responsibility (CER) Expenditure Report of Kakra-Panna Limestone Mine:

S.No.	Activities	Expenditure till Oct2023 (in Lakhs)	Expenditure from November 23 to September-24 (in Lakhs)	Total Expenditure ( <b>(in Lakhs)</b>
1	Health (Health, Check-up, Camp, Sports etc.)	211.73	56.93	268.66
2	Education (Books, Bags, Stationary etc.)	54.80	262.93	317.73
3	Sanitation (Domestic water, Toilets etc.)	40.99	7.09	48.08
4	Skill Development (Training centre etc.)	8.21	6.35	14.56
5	Infrastructure (Road, Community Centers, etc.)	132.0	395.43	527.43
6	Other Local Social Need	45.32	36.51	81.83
7	Greenery Development Nearby Area	251.66	145.35	397.01
	Total	744.71	910.59	1655.30



Bridge constructed at Kakra village



**Construction of ITI collage at Plant premises** 



Livestock drinking water arrangements of Puraina village



Water plant installed at Devra Village



Financial assistance provided to MP Tiger Foundation Society



Support 25 orphaned children with financial help

XI.	All	the	mitig	ation	measures	committe	ed /
					EIA/EMP		
	sub	seque	nt sub	missic	on shall be ir	nplemente	ed.

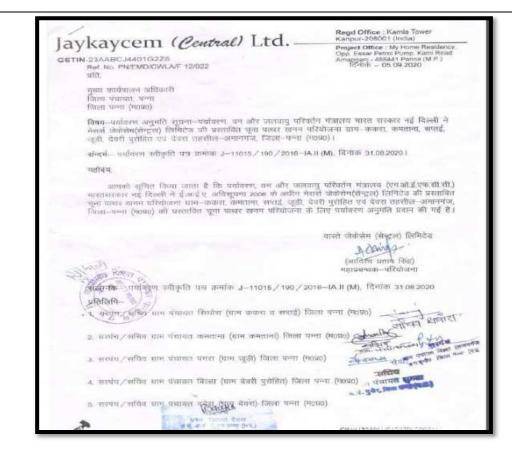
XII. In pursuant to Ministry's 0.M No 22-34/2018-IA.III dated 16.01.2020to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining

#### Complied.

#### Complied.

The mining lease after ceasing mining operations will be re-grassed and any other area which may have been disturbed due to other mining activities and will be restore the land to a condition which is fit for growth of fodder, flora, fauna etc.

B. Si	operations, undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.	
I. Sta	atutory compliance	
1)	The EC granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. It does not tantamount/ construe to approvals/ consent/ permissions etc. required to be obtained or standards / conditions to be followed under any other Acts/ Rules/ Subordinate legislations, etc., as may be applicable to the project.	Complied. EC amendments are obtained under the provisions of the EIA Notification, 2006 and its amendments issued from time to time. EC condition was amended via EC vide F. No. J-11015/190/2016-IA. II (M) dated 18 <sup>th</sup> October 2023.
2)	The Project proponent complies with all the statutory requirements and judgment of Hon'ble Supreme Court dated 2nd August,2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors before commencing the mining operations.	Complied. The content of the judgement is being complied.
3)	The State Government concerned shall ensure that mining operation shall not be commenced till the entire compensation levied, if any, for illegal mining paid by the Project Proponent through their respective Department of Mining & Geology in strict compliance of Judgment of Hon'ble Supreme Court dated 2nd August, 2017 in Writ Petition (Civil) No. 114 of 2014 in matter of Common Cause versus Union of India & Ors.	Compliance not applicable.  The subject proposal is green field project and the case of illegal mining does not occur. The mining activity is being done in the land which is already purchased and registered in the name of company.
4)	The Project Proponent shall follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29th October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".	Complied.  We have been granted mining lease area after leaving of habitation and villages part. However we are compline. assure that we will follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29 <sup>th</sup> October, 2014, titled "Impact of mining activities on Habitations-Issues related to the mining Projects wherein Habitations and villages are the part of mine lease areas or Habitations and villages are surrounded by the mine lease area".
5)	A copy of EC letter will be marked to concerned Panchayat / local NGO etc. if any, from whom suggestion / representation has been received while processing the proposal.	Complied. The copy of EC letter has been provided to the concerned Panchayat vide letter No. PN/EMD/CWLA/F 12/012, dated 05.09.2020 and copy of the same already send to all concerns on 07.09.2020. copy is enclosed in given below.



#### Copy of acknowledgement of gram panchayat during received EC copy.

6)	State Pollution Control Board/Committee shall be
	responsible for display of this EC letter at its
	Regional office, District Industries Centre and
	Collector's office/ Tehsildar's Office for 30 days.

Not Applicable.

7) The Project Authorities should widely advertise about the grant of this EC letter by printing the same in at least two local newspapers, one of which shall be in vernacular language of the concerned area. The advertisement shall be done within 7 days of the issue of the clearance letter mentioning that the instant project has been accorded EC and copy of the EC letter is available with the State Pollution Control Board/Committee and web site of the Ministry of Environment, Forest and Climate Change (www.parivesh.nic.in). A copy of the advertisement may be forwarded to the concerned MoEFCC Regional Office for compliance and record.

#### Complied.

The advertisement about the grant of EC letter for the project has been published in two local newspapers namely Dainik Jagran and Raj Express dated 04.09.2020 and copy of the same already send to all concerns on 07.09.2020. Copy is attached below





#### **Advertisement in News paper**

8) The Project Proponent shall inform the MoEF&CC for any change in ownership of the mining lease. In case there is any change in ownership or mining lease is transferred than mining operation shall only be carried out after transfer of EC as per provisions of the para 11 of EIA Notification, 2006 as amended from time to time.

#### Complied.

Change in ownership of the mining lease name changes in EC. Copy enclosed in given below.



Name changes in EC copy

#### II. Air quality monitoring and preservation

9) The Project Proponent shall install a minimum of 3 (three) online Ambient Air Quality Monitoring Stations with 1 (one) in upwind and 2 (two) in downwind direction based on long term climatological data about wind direction such that

#### Complied.

We have installed 03 Nos. Continuous Ambient Air Quality Monitoring Station (CAAQMS) close to boundary of the mine lease.

an angle of 120° is made between the monitoring locations to monitor critical parameters, relevant for mining operations, of air pollution viz. PM10, PM2.5, NO2, CO and SO2 etc. as per the methodology mentioned in NAAQS Notification No. B-29016/20/90/PCI/I dated18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone.

The ambient air quality shall also be monitored at prominent places like office building, canteen etc. as per the site condition to ascertain the exposure characteristics at specific places. The above data shall be digitally displayed within 03 months in front of the main Gate of the mine site.

The ambient air quality in core zone and buffer zone are also being monitored by NABL approved lab. Monitoring reports are attached as **Annexure 5**.

#### 1-CAAQMs behind Store



#### 2-CAAQMs near Reservoir



3- CAAQMS near Kamtana Village





Data display in main Gate of the Kakra mine site

10) Effective safeguard measures for prevention dust generation and subsequent suppression (like regular water sprinkling, metaled road construction etc.) shall be carried out in areas prone to air pollution wherein high levels of PM10 and PM2.5 are evident such as haul road, loading and unloading point and transfer points. The Fugitive dust emissions from all sources shall be regularly controlled by installation of required equipments/ machineries and preventive maintenance. Use of suitable water-soluble chemical dust suppressing agents may be explored for better effectiveness of dust control system. It shall be ensured that air pollution level conform to the standards prescribed by the MoEFCC/ Central Pollution Control Board

#### Complied.

Water sprinkling is being carried out for controlling the fugitive dust emission (Photo given below) and bag filter has been installed at material transfer point in crusher. Fugitive Emission reports are attached as **Annexure-6.** 



Water sprinkling photo

#### III. Water quality monitoring and preservation

In case, immediate mining scheme envisages intersection of ground water table. then Environmental Clearance shall become operational only after receiving formal clearance from CGWA. In case, mining operation involves intersection of ground water table at a later stage, then PP shall ensure that prior approval from CGWA and MoEFCC is in place before such mining operations. The permission for intersection of ground water table shall essentially be based on detailed hydro-geological study of the area

#### Complied.

The NOC form CGWA had already been obtained vide no. CGWA/NOC/ MIN/ORIG/2020/7359 dated 05.02.2020, valid up to 02.02.2024 for use of ground water as well as for intersection of water table during the course of mining operation. Further we have applied for its renewal via application no. 21-4/864/MP/MIN/2019 dated 24.01.2024 application copy is enclosed as given below.

Government of India Ministry of Jal B heatt urbnent of Water Resources. Their Development and Genga Rejuve Central Ground Water Authority (GCWA) Application for Issue of NOC to Abstract Ground Water (MCCAP) Application for Renewal of NOC to Dewater Ground Water for Mining Industry (Application for Renewal of NOC) Applied For Renewal: 1st General Information Purpose of Renewal Application **Existing Ground Water** Application Type Category/ Type of Application KARRA PANNA LIMESTONE MINE Location Details of the Mining Unit- (Attach Site, Approved Mining Plan, Toposketch of Surrounding 10km Radius Oxidides (\$):
 Address Line 1:
 JECGMENT LIMITED. VELACE KARRA, KANTANA, SAPTAL JUDI, DEVRIPERCHIT, DEVRIP. Address Line 2: Address Line 3 : PANINA Sub-District QUNQUE Village/Fown: Latitude: Kakra 24.353000 Area Type Category Whether industry is MSME. No JAYKAYCEM (CENTRAL) LIMITED Address Line 1: MY HOME RESIDENCY OPPOSITE ESSAR PETROL PUMP, KATNI POAD, AMANGANJ State MADHYA PRADESH PANNA 455441 Phone Number with Arm Code: 5. Dealfor of estated by CGWA (enclose copy) Clate of Issuance: 24/05/2024

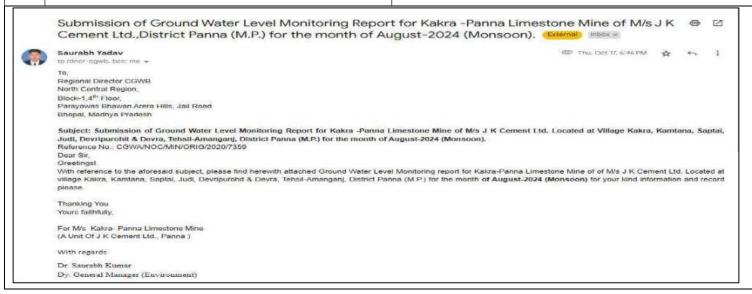
Project Proponent shall regularly monitor and maintain records w.r.t. ground water level and quality in and around the mine lease by establishing a network of existing wells as well as new piezo-meter installations during the mining operation in consultation with Central Ground Water Authority/ State Ground Water Department. The Report on changes in Ground water level and quality shall be submitted on six-monthly basis to the Regional Office of the Ministry, CGWA and State Groundwater Department / State Pollution Control Board.

#### Complied.

We are monitoring and maintaining records w.r.t. ground water level and quality in and around the mine. Ground water level & Quality test report have been submitted in, CGWA and State Groundwater Department / State Pollution Control Board by e-mail dated 17.10.2024 (Ground water level) & (Surface water & quality test report).

**Renewal NOC Application copy** 

However, Ground water level and Quality reports are enclosed as **Annexure-7** and **Annexure 7A**.





#### Water Level & water Quality test report submission by Email.

The Project Proponent shall undertake regular monitoring of natural water course/ water resources/ springs and perennial nallahs existing/ flowing in and around the mine lease including upstream and downstream. Sufficient number of gullies shall be provided at appropriate places within the lease for management of water. The parameters to be monitored shall include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. It shall be ensured that no obstruction and/ or alteration be made to water bodies during mining operations without justification and prior approval of MoEFCC. The monitoring of water courses/ bodies existing in lease area shall be carried out four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data may be sent regularly to Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board. Clearly showing the trend analysis on sixmonthly basis.

13)

#### Complied.

Regular water quality is being monitored four times in a year viz. pre- monsoon (April-May), monsoon (August), post-monsoon (November) and winter (January) and the record of monitored data is been sent regularly to the Ministry of Environment, Forest and Climate Change and its Regional Office, Central Ground Water Authority and the Regional Director, Central Ground Water Board, State Pollution Control Board and Central Pollution Control Board.

Surface water quality reports are enclosed as **Annexure-8**.

Quality of polluted water generated from mining operations which include Chemical Oxygen Demand (COD) in mines run-off; acid mine drainage and metal contamination in runoff shall be monitored along with Total Suspended Solids (TDS), Dissolved Oxygen (DO), pH and Total Suspended Solids (TSS).

#### Complied.

Monitoring of mines run-off is being carried out on regular basis. Report is enclosed as **Annexure-9**.

The monitored data has been uploaded on the website of the company under six monthly EC compliance report as well as displayed at main gate in public domain. The circular No. "J-20012/1/2006-IA.II(M)

The monitored data shall be uploaded on the website of the company as well as displayed at the project site in public domain, on a display board, at a suitable location near the main gate of the Company. The circular No. "J-20012/1/2006-IA.II(M) dated 27.05.2009 issued by Ministry of Environment, Forest and Climate Change may also be referred in this regard.

dated 27.05.2009 issued by the Ministry of Environment, Forest and Climate Change will be referred in this regard after commencement of mining operations.



#### Compliance report & Monitored data uploaded in Company website

15) Project Proponent shall plan, develop and implement rainwater harvesting measures on long term basis to augment ground water resources in the area in consultation with Central Ground Water Board/ State Groundwater Department. A report on amount of water recharged needs to be submitted to Regional Office MoEFCC annually.

16)

#### Complied.

The rainwater harvesting structure will be developed as per the approved hydrogeological study report and consultation with Central Ground Water Board.

Industrial waste water (workshop and waste water from the mine) should be properly collected and treated so as to conform to the notified standards prescribed from time to time. The standards shall be prescribed through Consent to Operate (CTO) issued by the concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.

#### Agreed.

Construction of workshop and Oil and grease trapping system are under progress. We assure that we will maintain the standards as prescribed in Consent to Operate (CTO) issued by the concerned State Pollution Control Board (SPCB). Valid CTO copy is enclosed below.



#### Valid CTO Copy

17) The water balance/water auditing shall be carried out and measure for reducing the consumption of water shall be taken up and reported to the Regional Office of the MoEF&CC and State Pollution Control Board / Committee.

#### Complied.

Water balance for period from Apr-2024 to September-2024 is given below.

		Permission of		During April-2024 to September-2024			
Sr.No	Water Code	Water Consumption (KL/Day)	of Waste water generation (KL/Day)	Water Consumption (KL/Day)	Waste water generation (KL/Day	Reuse/recycle	
1	Domestic water	20	9.0	3.8	0.0	Nil	
2	Dust Suppression	70	0.0	14.5	N/A	N	
3	Manufacturing Process	100	0.0	11.4	N/A	N/A	
4	Plantation/ Horticulture	40	0.0	3.4	N/A	N/A	

#### IV. Noise and vibration monitoring and prevention

The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines

#### Complied

Peak Particle velocity is being monitored as per the DGMS guidelines. Report is enclosed as **Annexure-4**.

Distance from Mine Pit (meter)					
Pit details	Dewra Village	Kakra Village	Judi Village	Kamtana Village	
Pit 1	750	1380	3000	3600	

The illumination and sound at night at project sites disturb the villages in respect of both human and animal population. Consequent sleeping disorders and stress may affect the health in the villages located close to mining operations. Habitations have a right for darkness and minimal noise levels at night. PPs must ensure that the biological clock of the villages is not disturbed; by orienting the floodlights/ masks away from the villagers and keeping the noise levels well within the prescribed limits for day /night hours

#### Complied.

As the mine is running only in two shifts hence the question of sound and illumination at night to disturb the sleeping is not arisen. The illumination and Noise levels are being monitored and maintained within the prescribed limits. Noise monitoring Reports is enclosed as **Annexure-10**.

S.No	monunatio	A Survey at Mine Standard	is Area of Differe	nt Locations Date	12.64.2034
-	Place	Storetord Storeinstion(in Lux)	Location	Actual Illumination (in Lant)	Remarks
1	Work Place of heavy machinery	154.297	ARIE	56427V	
2	Work Place of Feavy machinery	154.25V	8814	174,260	
,	Haut Roads for Tracks	1014	Transfer Points	1314	
4	Haud Mosess for Trucks	100	Near to Oslaher Area	1300	
5	Places where seriosiding.	INLIN	Chalter Hopper	1791.19V	
*	General working area	1014	Near to Cruster	32H	
	angenul &	72			Melin Manager Sarjay Ontvech
(	Elubiul.	Symon)		*	Moses Manager des flama Lovestione 1

in.	Pm 19	maked Barrier	es Area of Different	Actual Statement In	Security
	No. of Concession, Name of Street, or other Designation, Name of Street, or other Designation, Name of Street,	- lest	Septime .	hell	-
1	Work Place of heavy machinery	35 H,25 V	8916	15 H26 V	
2	Work Place of heavy machinery	15 H25 V	10015	17 H.26 V	
3	Hauf Roads for Trucks	30 H	Transfer Paints	33.14	
4	Haus Roads for Trucks	10 H	Near to Crusher Area	12 H	
5	Places where unloading	15 H,15 V	Crusher Hopper	16 H.18 V	
6	General working area	30 H	Near to Crusher	11.11	
3	proposal B. Balada Po	ale .			Mires Manager Sanjay Delivedi
9	Attubial 3	myaran)		- 10	Mines Manager ira itunia Universiana Mine

illumination survey at near mines Area.

20) The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged operations of HEMM, etc. should be provided with ear plugs /muffs. All personnel including laborers working in dusty areas shall be provided with protective respiratory devices along with adequate training, awareness and information on safety and health aspects. The PP shall be held responsible in case it has been found that workers/ personals/ laborers are working without personal protective equipment.

#### Complied.

Regular maintenance of HEMM is being carried out. PPEs like earplugs/muffs etc. has been provided to the workers working near high noise area. Training and awareness programs on health and safety aspects are being organized regularly. Photograph as enclosed in given below. Work Zone Noise Monitoring Reports is enclosed as **Annexure-11**.

#### V) Mining Plan

21) The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, interburden and top soil etc.); mining technology; lease area; scope of working ( method of mining, overburden & dump management, O.B. & dump transportation minina. mineral mode. ultimate depth of mining, concurrent reclamation and reclamation at mine closure; landuse of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).

#### Complied.

Mining activities are being carried out as per the approved mining plan. Approved mining plan copy is enclosed above.

The mining shall be governed as per the approved Mining Plan. The excavation vis-a-vis backfilling in the mine lease area and corresponding afforestation to be raised in the reclaimed area shall be governed as per approved mining plan. PP shall ensure the monitoring and management of rehabilitated areas until the vegetation becomes self-sustaining. The compliance status shall be submitted half-yearly to the MoEFCC and its concerned Regional Office.

#### Complied.

Mining activities and land use planning being done as per the approved mining plan.

Backfilling has not started yet as the area is not matured and the afforestation will be done on reclaimed area as per the approved mining plan.

#### VI. Land reclamation

23) The Overburden (O.B.), waste and topsoil generated during the mining operations shall be stacked at earmarked OB dump site(s) only and it should not be kept active for a long period of time. The physical parameters of the OB / waste dumps / topsoil dump like height, width and angle of slope shall be governed as per the approved Mining Plan and the guidelines/circulars issued by D.G.M.S. The topsoil shall be used for land reclamation and plantation.

#### Complied.

OB and topsoil generated during the mining operations is being stacked at earmarked OB dump site only. Physical parameters of the OB/waste dumps /topsoil dump height, width and angle of the slope is being maintained as per the approved mining plan and also as per the guidelines/circulars issues by the DGMS. The top soil is being used for plantation and stored in the designated areas.





Top Soil

OB dump Complied.

The slope of dumps shall be vegetated in scientific manner with suitable native species to maintain the slope stability, prevent erosion and surface run off. The selection of local species regulates local climatic parameters and help in adaptation of plant species to the microclimate. The gullies formed on slopes should be adequately taken care of as it impacts the overall stability of dumps. The dump mass should be consolidated with the help of dozer/ compactors thereby ensuring proper filling/ leveling of dump mass. In critical areas, use of geo textiles/ geo-membranes / clay liners / Bentonite etc. shall be undertaken for stabilization of the dump.

As per approved mining plan. Approved mining copy enclosed as above.

Catch drains, settling tanks and siltation ponds of 25) appropriate size shall be constructed around the mine working, mineral yards and qoT Soil/OB/Waste dumps to prevent run off of water and flow of sediments directly into the water bodies (Nallah/ River/ Pond etc.). The collected water should be utilized for watering the mine area. roads. green belt development. plantation etc. The drains/ sedimentation sumps etc. shall be de-silted regularly, particularly after monsoon season. and maintained properly

Complied.

We have just started the mining activity in the lease area. Bunds has been created around the mine working

Catch drains, settling tanks and siltation ponds are being created around the mine working, mineral yards and Top Soil/OB/Waste dumps to prevent surface run off. Collected Mine water will be utilized for watering the mine area, roads, green belt development, plantation etc.

Drains/ sedimentation sumps etc. will be de-silted regularly, particularly after monsoon season, and maintained properly. Garland drain & sedimentation pit photo enclosed as below.



#### Garland drains



Siltation pond photo

Check dams of appropriate size, gradient and length shall be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% shall be kept for designing of sump structures over and above peak rainfall (based on 50 years data) and maximum discharge in the mine and its adjoining area which shall also help in providing adequate retention time period thereby allowing proper settling of sediments/ silt material. The sedimentation pits/ sumps shall be constructed at the corners of the garland drains.

#### Complied.

Check dams of appropriate size, gradient and length will be constructed around mine pit and OB dumps to prevent storm run-off and sediment flow into adjoining water bodies. A safety margin of 50% will be kept properly.

Sedimentation pits are constructed at the corners of the garland drain. Garland drain & sedimentation pit photo as enclosed on above.

#### VII. Transportation

27) No Transportation of the minerals shall be allowed in case of roads passing through villages/ habitations. In such cases, PP shall construct a 'bypass' road for the purpose of transportation of the minerals leaving an adequate gap (say at least 200 meters) so that the adverse impact of sound and dust along with chances of accidents could be mitigated. All costs resulting from widening and strengthening of existing public road network shall be borne by the PP in consultation with nodal State Govt. Department. Transportation of minerals through road movement in case of existing village/ rural roads shall be allowed in consultation with nodal State Govt. Department only after required strengthening such that the carrying capacity of roads is increased to handle traffic load. The pollution transportation load on the environment will be effectively controlled and water sprinkling will also be done regularly. Vehicular emissions shall be kept under control and regularly monitored. Project should obtain Pollution Under Control (PUC) certificate for all the vehicles from authorized pollution testina centers. applicable in case of road transport]

#### Complied.

No Transportation of the minerals is being passed through villages/ habitations.

2 nos. Water tankers has been deployed for sprinkling over haul road.

Vehicular emissions are kept under control and regularly being monitored. PUC of all vehicles are done periodically. A PUC sample copy as enclosed in given below.



#### Valid vehicle PUC Certificate copy





Water sprinkling in Mines haulage road

28) The Main haulage road within the mine lease should be provided with a permanent water sprinkling arrangement for dust suppression. Other roads within the mine lease should be wetted regularly with tanker-mounted water sprinkling system. The other areas of dust generation like crushing zone, material transfer points, material yards etc. should invariably be provided with suppression arrangements. pollution control equipment's like bag filters, vacuum suction hoods, dry fogging system etc. shall be installed at Crushers, belt-conveyors and other areas prone to air pollution. The belt conveyor should be fully covered to avoid generation of dust while transportation. PP shall take necessary measures to avoid generation of fugitive dust emission.

#### Complied.

On the main haulage road the dust suppression is being done through two water tankers. Water sprinkling photo as enclosed above).

Dust suppression within mining lease roads are being done regularly with water tankers.

Water sprinkler and fogging system has been provided at other areas of dust generation like crushing zone, material transfer points, material yards etc. The crusher has been provided with air pollution control equipment like bag filters, vacuum suction hoods, dry fogging system and covered belt-conveyors.



Water Sprinkling photo



**Bag Filter photo** 



covered belt-conveyors



#### VIII. Green Belt

The Project Proponent shall develop greenbelt in 7.5m wide safety zone all along the mine lease boundary as per the guidelines of CPCB in order to arrest pollution emanating from mining operations within the lease. The whole Green belt shall be developed within first 5 years starting from windward side of the active mining area. The development of greenbelt shall be governed as per the EC granted by the Ministry irrespective of the stipulation made in approved mine plan.

#### Compliance in progress.

Plantation is being done as per the EC condition and approved mining plan. We have started plantation all along the boundary of mining lease area.

Plantation is being carried out in 7.5 m ML boundary and nearby Crusher area. A total of 31334 no. of sapling have been planted in 12.54 Ha of area up to September-2024.





#### Plantation at Kakra mines area.

The Project Proponent shall carryout plantation/ afforestation in backfilled and reclaimed area of mining lease, around water body, along the roadsides, in community areas etc. by planting the native species in consultation with the State Forest Department/ Agriculture Department/ Rural development department/ Tribal Welfare Department/ Gram Panchayat such that only those species be selected which are of use to the local people. The CPCB guidelines in this respect shall also be adhered. The density of the trees should be around 2500 saplings per Hectare. Adequate budgetary provision shall be made for protection and care of trees

31

**Agreed & will be complied** when the backfilled area is available.

The Project Proponent shall make necessary alternative arrangements for livestock feed by developing grazing land with a view to compensate those areas which are coming within the mine lease. The development of such grazing land shall be done in consultation with the State Government. In this regard, Project Proponent should essentially implement the directions of the Hon'ble Supreme Court with regard to acquisition of grazing land. The sparse trees on such grazing ground, which provide

#### Agreed & Noted.

There is no grazing land in the mine lease area.

mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted.

#### IX. Public hearing and human health issues

Project Proponent shall make provision for the housing for workers/labors or shall construct labor camps within/outside (company owned land) with necessary basic infrastructure/ facilities like fuel for cooking, mobile toilets, mobile STP, safe drinking water, medical health care, crèche for kids etc. The housing may be provided in the form of temporary structures which can be removed after the completion of the project related infrastructure. The domestic waste water should be treated with STP in order to avoid contamination of underground water.

#### Complied.

Mine is adjacent to the cement plant and Laboure camps has been provided with all amenities within the cement plant premises. STP has been installed for treatment of Sewage water.



STP With Capacity 300KLD

#### X. Corporate Environment Responsibility (CER)

The activities and budget earmarked for Corporate Environmental Responsibility (CER) as per Ministry's O.M No 22-65/2017-IA. II (M) dated 01.05.2018 or as proposed by EAC should be kept in a separate bank account. The activities proposed for CER shall be implemented in a time bound manner and annual report of implementation of the along with documentary proof viz. same photographs, purchase documents, latitude & longitude of infrastructure developed & road constructed needs to be submitted to Regional Office MoEF&CC annually along with audited statement.

#### Complied.

CER/CSR including activities raised during public hearing three years time-bound action plan has been submitted to the concerned RO of the Ministry.

#### XI. Miscellaneous

- The Project Proponent shall prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring land use pattern and submit a report to concerned Regional Office of the MoEF&CC.
- The Project Authorities should inform to the Regional Office regarding date of financial closures and final approval of the project by the concerned authorities and the date of start of land development work.

#### Agreed & noted for compliance.

We assure that we will prepare digital map (land use & land cover) of the entire lease area once in five years purpose of monitoring of land use pattern and report will be submitted to concerned Regional Office of the MoEF&CC.

#### Complied.

We have submitted of financial closures and final approval of the project details via letter no. Jaykaycem/Env./Corres./2023-24/07/02 dated 19.07.2023 and sent by email on dated 20.07.2023.Letter & email copy enclosed as below.







**Letter & Email copy** 

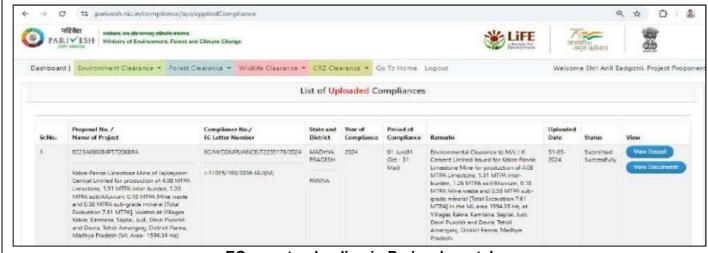
The Project Proponent shall submit six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC &its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board.

#### Complied.

Six monthly compliance reports on the status of the implementation of the stipulated environmental safeguards to the MOEFCC & its concerned Regional Office, Central Pollution Control Board and State Pollution Control Board is being submitted regularly. Last EC compliance report submission during Oct-2023 to Mar-2024, Letter no-JKCEMENT/ENV/EC/KAKRA/2024-25/03/15 dated 27.05.2024 copy as enclosed in given below.



#### Submission of half yearly EC compliance report copy



EC report uploading in Parivesh portal

37	A separate 'Environmental Management Cell' with suitable qualified manpower should be set-up under the control of a Senior Executive. The Senior Executive shall directly report to Head of the Organization. Adequate number of qualified Environmental Scientists and Mining Engineers shall be appointed and submit a report to RO, MoEFCC.	Complied.  A separate 'Environmental Management Cell' has been established under the Senior Executive who directly report to Head of the organization.  The separate 'Capter Colores' Free Park (Capter Colores) F
38	The concerned Regional Office of the MoEFCC	Head of the Organization Agreed and noted.
30	shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.	Agreed and noted.
39	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020to comply with the direction made by Hon'ble Supreme Court on 8.01.2020 in W.P. (Civil) No 114/2014 in the matter Common Cause vs Union of India, the mining lease holder shall after ceasing mining operations, undertake re-grassing the mining area and any other area which may have been disturbed due to other mining activities and restore the land to a condition which is fit for growth of fodder, flora, fauna etc.	Agreed and Noted.
25.	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection.	Agreed and Noted.
26.	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	Agreed and Noted.

	action under the provisions of Environment	
	(Protection) Act, 1986.	
27.	The above conditions will be enforced inter-alia,	Agreed and Noted.
	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 and any	
	other Court of Law relating to the subject matter.	
28.	Any appeal against this environmental clearance	Agreed and Noted.
	shall 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.	
	ndment in EC vide F. No. J-11015/190/2016-IA. II (	M) dated 18 <sup>th</sup> October 2023
1	DUST SUPPRESSION	
1.1	Project Proponent needs to make provision for	Complied.
	permanent water sprinklers so as to reduce the	Permanent water sprinklers will be provided on the
	water consumption. Further, 10 nos. of fog	Mine Haulage road after construction.
	canon/mist sprayer of at least 40 m throw shall be	Fogging systems are installed at unloading point.
	installed at various locations in the mine area.	Regular water sprinkling has been carried out on mine
	Effective dust suppression system shall also be	haulage road to control the fugitive dust emission. Bag
	adopted at other parts of the mining lease to arrest	filter has been installed and belt conveyors with
	the fugitive dust emission. Online air monitoring	covered corrugated sheets are installed to control the
	system should be installed near crusher and haul	fugitive dust emission.
	roads to control dust generation during mining.	3 nos. of Online air monitoring system (CAAQMS) have
		been installed at boundary of the ML.
2	SINGLE USE PLASTIC	
2.1	The Project Proponent shall create awareness	Complied.
	among the local people working within the project	Awareness program among the near schools the ban
	area as well as its surrounding area on the ban of	of Single Use Plastic (SUP) has been carried out and
	Single Use Plastic (SUP) in order to ensure the	report with photographs are attached as <b>Annexure -12</b> .
	compliance of Notification published by MoEF&CC	report man priotographic and attached act tamestare
	on 12/08/2021. A report, along with photographs, on	
	the measures taken shall also be included in the six	
	monthly compliance report.	
3	CLEAN ENERGY	ı
3.1	The Project Proponent shall explore the possibility	Noted and Will be complied.
	of using at least 20% of electric vehicles/CNG/Solar	
	instead of diesel operation within three years.	
4	GREATER PANNA LANDSCAPE	1
4.1	The Project Proponent shall not transport the	Complied.
	mineral though tiger dispersal route and it should be	As the mining lease area is not falling under tiger
	routed through other side without causing traffic,	dispersal route hence causing traffic, pollution and road
	pollution and roadkill in the tiger reserve area.	kill in tiger reserve area is not anticipated.
	1	

4.2 Although the site is not located in any classified corridor, tigers move in the landscape randomly through the agriculture and open areas. Therefore, the Project Proponent should have site-specific assessment of tiger movement and shall ensure that there is no disturbance on the western area towards Ken River. Further, based on site assessment, local level mitigation plan shall be in place.

#### Agreed and will be complied.

We have submitted request letter to District Forest South, Panna for guidance regarding compliance of this condition via letter no. JKCEMENT/PCP/EMD/2024-25/F04/14 dated 16.08.2024. Acknowledgment copy is given below.



4.3 The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of Tigers in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be

#### Agreed and will be complied.

We have submitted request letter to District Forest South, Panna for guidance regarding compliance of this condition via letter no. JKCEMENT/PCP/EMD/2024-25/F04/14 dated 16.08.2024. Acknowledgment copy is given above.

	taken to minimize stress conditions for Tigers and to avoid Man-Animal conflict.	
4.4	Biodiversity management plan, including restoration and carbon offset scheme shall be included in the mine plan and operation.	Agreed and will be complied.  Will be complied during preparation and approval of Mining plan and in mining operation.
4.5	The project proponent needs to submit the quarterly compliance report to the State Forest Department/NTCA/RO w.r.t monitoring of the movement of tiger in the study area and their effectiveness of implementation of mitigation plan.	
5	SKILL DEVELOPMENT	
5.1	The Project Proponent needs to provide the apprenticeship to the local people. The data and the outcome should be maintained for the same imparted to the local people.	Complied. Employment based apprenticeship / internship training program through ITI has been provided to 27 Nos. local residents. During FY:2023-24. ITI College has been established and administrative set-up is being done. Educational session will be started from FY: 2025-26.



#### (M/s JK Cement Institute of Technology ITI)

	6	MISCELLANEOUS	
ſ	6.1	All other terms and conditions mentioned in the EC	Noted and Agreed
		letter dated 31.08.2020 shall remain unchanged.	

**Yours Sincerely** 

For JK Cement Limited, Panna

(Kapil Agrawal)

For: M/s Kakra Panna Limestone Mine (A Unit of J K Cement Limited, Panna)

By e-mail

# GOVERNMENT OF INDIA MINISTRY OF MINES INDIAN BUREAU OF MINES OFFICE OF THE REGIONAL CONTROLLER OF MINES, JABALPUR

No. E 6699 MCDR-MPC0LST/15/2023-JBP-IBM\_RO\_JBP

Shri/M/s. JAYKAYCEM (Central) LIMITED, Kamla Tower Kanpur U.P. 0 Kanpur

KAKRA PANNA Limestone mine (45908601)

Dt: 19/06/2023

Sub Approval of Modification in Approved Mining Plan in respect of Kakra Panna Limestone Mine over an area of 1594.34 Hect; situated in Kakra Village, Amanganj Taluka, Panna District of Madhya Pradesh State.

References: 1) Draft Modofication of Mining plan received on MPAS, dated – 25/04/2023

- 2) This office scrutiny comments dated 24/05/2023 & 14/06/2023
- 3) final copy of Modofication of Mining Plan received on MPAS, dated 17/06/2023

Dear Sir.

In exercise of the powers conferred under Clause (b) of Sub-section (2) of Section 5 of Mines and Minerals (Development and Regulation) Act, 1957 and clause (3) of Rule 17 of the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 read with Government of India Order No.S.O.445(E) dated 28.04.1987 and S.O. 1857(E) dated 18th May, 2016;, I hereby **Approve** the above said Modification in Approved Mining Plan submitted under Rule 17(3) of Minerals (Other than Atomic and Hydrocarbons Energy Minerals) Concession Rules, 2016. This approval is subject to the following conditions: -

- 1. The Modification in Approved Mining Plan is approved without prejudice to any other law applicable to the mine area from time to time whether made by the Central Government, State Government or any other authority and without prejudice to any order or direction from any court of competent jurisdiction.
- 2. The proposals shown on the plates and /or given in the document is based on the lease map /sketch submitted by the lessee and is applicable from the date of approval.
- 3. It is clarified that the approval of aforesaid Modification in Approved Mining Plan does not in any way imply the approval of the Government in terms of any other provision of Mines & Minerals (Development & Regulation) Act, 1957, or the Minerals (Other than Atomic and Hydro Carbons Energy Minerals) Concession Rules, 2016 and any other laws including Forest (Conservation) Act, 1980, Environment (Protection) Act, 1986 or the rules made there under, Mines Act, 1952 and Rule & Regulations made there under.
- 4. Indian Bureau of mines has not undertaken verification of the mining lease boundary on the ground and does not undertake any responsibility regarding correctness of the boundaries of the leasehold shown on the ground with reference to lease map & other plans furnished by the lessee.
- 5. At any stage, if it is observed that the information furnished, data incorporated in the document are incorrect or misrepresent facts, the approval of the document shall be revoked with immediate effect.
- 6. If the approval conflicts with any other law or court order/direction under any statute, it shall be revoked immediately.
- 7. You have signed Mine Development & Production Agreement (MDPA) with State Government paying performance security of 53,26,86,050/- (Rupees Fifty Three Crore Twenty Six Lakh Eighty Six Thousand Fifty only) to The Governor of Madhya Pradesh, Department of Mines & Geology, Bhopal having validity up to 31/08/2025.
- 8. This approval is restricted in respect of proposals given in the document for the period 2023-24 (from the date of approval) to 2024-25 with validity up to 31/03/2025, subject to all other statutory clearances.
- 9. It shall be mandatory to project proponent, abstracting ground water to obtain **No objection certificate** form Central Ground Water Authority or the M.P. State Ground Water Authority.
- 10. As per Madhya Pradesh State Government's order dated 10/08/2011 if there is enhancement of production proposed from that in the approved scheme of mining under such circumstances additional stamp duty has to be paid by the lessee for the enhances quantum of production and also a supplementary agreement has to be made by the lessee.

( Pukhraj Nenival)

#### **Regional Controller of Mines**

**Indian Bureau of Mines, Jabalpur** 

#### Copy for information to-

- 1. The Director of Geology and Mining, Govt. of Madhya Pradesh, Khaniz Bhawan, 29A Arera Hills, Jail Road, Bhopal (MP).
- 2. The Controller of Mines (CZ), Indian Bureau of Mines, Nagpur.
- 3. The District Collector, Panna (M.P.)
- 4. Shri Indraneel Dawande, 1338, Vijay Nagar, Jabalpur E mail: engeotech@rediffmail.com

(Pukhraj Nenival)

KAKRA PANNA COMESTIGE of Me (45908601)

**Indian Bureau of Mines, Jabalpur** 

# **Chapter 1 : General Information**

### 1.1 : Lease Details

IBM Registration Number :	IBM/16851/2013
Lease Code:	45908601
Mine Code :	38MPR420002
Name of Lessee :	JAYKAYCEM (Central) LIMITED
Address of Lessee :	Kamla Tower Kanpur U.P. 0 Kanpur
Type of Lessee:	Private
Name of Mining Lease :	KAKRA PANNA Limestone Mine
State:	MADHYA PRADESH
District:	PANNA
Tehsil/ Taluk/ Mandal :	Amanganj
Village:	Kakra
Lease Area (Ha):	1594.34
Forest Area (Ha):	0.0000
Name of Minerals:	LIMESTONE
Name of associated minerals :	

Type:	Existing Lease
Period of the proposal (FY) from:	2023 - 24
Period of the proposal (FY) to:	2024 - 25
Type of working:	Opencast
Nature of Use:	Captive
Category of Mine :	Category A

### 1.1.1 : Initial/subsequent Lease grant details

Grant	From	То	Lease deed execution date	Lease registration date
Initial Grant	23/09/2020	22/09/2070	09/09/2020	23/09/2020

## 1.1.2 : Mining Plan Submission Criteria Details

Type of Document:	Modification Of Mining Plan Under Rule 17(3) Of MCR, 2016
Reason/s For Modification :	Modification Is Being Opted To Propose More Working Pits Considering Availability Of Acquired Land, Quantity And Quality Of Limestone To Fulfill The Requirement Of Our Cement Plant. In Previous Approved Mining Plan There Is Only One Working Pit.
Period for which modification is proposed :	2023-2024 to 2024-2025

### 1.2 : Land Ownership Details

View Land Ownership Details Excel	Land Ownership Details.xlsx
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### 1.3 : Existing Lease

Date of Ex	09	9/09/2020



# File No.: J-11015/190/2016-IA.II(M) Government of India Ministry of Environment, Forest and Climate Change IA Division



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Dated 18/10/2023



To,

Shri Anil Badgotri

JAYKAYCEM CENTRAL LIMITED

Kamla Tower, Kanpur, UP, Kanpur, KANPUR NAGAR, UTTAR PRADESH, Kamla Tower, 208001

aditya.singh@jkcement.com

**Subject:** 

Amendment in Environmental Clearance (EC) 01/07/2023 granted to the project under the provision of the EIA Notification 2006 -regarding.

Sir/Madam,

This is in reference to your application submitted to MoEF&CC vide proposal number EC23A0000MP5720689A dated 30/06/2023 for grant of an amendment in prior Environmental Clearance (EC) to the project under the provision of the EIA Notification 2006-and as amended thereof.

2. The particulars of the proposal are as below:

(i) EC Identification No. EC23A0000MP5720689A (ii) File No. J-11015/190/2016-IA.II(M)

(iii) Clearance Type Amendment in EC

(iv) Category A

(v) Schedule No./ Project Activity 1(a) Mining of minerals

(vi) Sector Non-Coal Mining

Amendment /Revalidation of EC w.r.t specific condition No (I) of EC dated 31.08.2020 in Kakra-Panna Limestone Mine (ML Area 1594.34 ha),

(vii) Name of Project located at Villages Kakra, Kamtana, Judi, Devra,
Devri Purohit and Saptai, in Amanganj Tehsil,

District Panna, Madhya Pradesh proposed by M/s

Jaykaycem Central Limited.

(viii) Location of Project (District, State) PANNA, MADHYA PRADESH

(ix) Issuing Authority MoEF&CC

(x) EC Date

(xii) Applicability of General Conditions NO

(xiii) Status of implementation of the project

- 1. In view of the particulars given in the Para 1 above, the project proposal interalia including Form-1(Part A, B and C)/ EIA & EMP Reports were submitted to the MoEF&CC for an appraisal by the EAC under the provision of EIA notification 2006 and its subsequent amendments.
- 2. The above-mentioned proposal has been considered by EAC in the meeting held on 21/09/2023. The minutes of the meeting and all the project documents are available on PARIVESH portal which can be accessed from the PARIVESH portal by scanning the QR Code above or through the following web link click here.
- 3. The brief about the reasons for an amendment requested along with comparison table illustrating the details of amendments are annexed to this letter as Annexure (1).
- 4. The brief about the reasons for an amendment requested along with comparison table illustrating the details of amendments are annexed to this letter as Annexure (1)The EAC/SEAC, in its meeting held on 21/09/2023, based on information & clarifications provided by the project proponent and after detailed deliberations recommended the proposal for grant of amendment in Environment Clearance under the provision of EIA Notification, 2006 and as amended thereof.
- 5. The EAC has examined the proposal in accordance with the extant provisions of the Environment Impact Assessment (EIA) Notification, 2006 & further amendments thereto and accepted the recommendations and hereby accords the amendment in EC dated 31.08.2020 to w.r.t waive off the specific condition no: (i) of M/s Jaykaycem Central Limited in Kakra- Panna Limestone Mine for production capacity of 4.08 MTPA of Limestone in the mine lease area of 1594.34 ha, located at Villages Kakra, Kamtana, Judi, Devra, DevriPurohit and Saptai, in Amanganj Tehsil, District Panna, Madhya Pradesh subject to compliance of certain additional specific condition.
- 6. This issues with the approval of the Competent Authority.

#### Copy To

- 1. The Secretary, Ministry of Mines, Government of India Shastri Bhawan, New Delhi.
- 2. **The Secretary,** Department of Mines and Geology, Government of Madhya Pradesh, Secretariat, Bhopal.
- 3. **The Secretary, Department of Environment, Government of Madhya Pradesh, Secretariat, Bhopal.**
- 4. The Secretary, Department of Forests, Government of Madhya Pradesh, Secretariat, Bhopal.
- 5. **The Chief Wildlife Warden,** Government of Madhya Pradesh, Van Bhavan, 1st Floor, Tulsi Nagar, Bhopal 462 003.
- 6. **The Deputy Director General of Forests (C)**, Ministry of Env., Forest and Climate Change, Regional Office (WZ), E-5, Kendriya Paryavaran Bhawan, E-5 Arera Colony, Link Road No.3, Ravishankar Nagar, Bhopal 462 016.
- 7. **The Member Secretary,** Central Pollution Control Board, Parivesh Bhawan, CBD-Cum-Office Complex, East Arjun Nagar, New Delhi-110 032.
- 8. **The Member Secretary,** Central Ground Water Authority, 18/11, Jam Nagar House, Man Singh Road, New Delhi-110011.
- 9. **The Member Secretary,** Madhya Pradesh State Pollution Control Board, Paryavaran Parisar, E-5, Arera Colony, Bhopal 462016.

- 10. **The Controller General,** Indian Bureau of Mines, Indira Bhavan, Civil Lines, Nagpur- 440 001.
- 11. **The District Collector,** Panna District, Government of Madhya Pradesh.
- 12. Guard File.
- 13. PARIVESH Portal.

Annexure 1

Specific EC Conditions for (Mining of minerals)

#### 1. Dust Suppression

S. No	EC Conditions
1.1	The Project Proponent needs to make provision for permanent water sprinklers so as to reduce the water consumption. Further, 10 nos. of fog canon/mist sprayer of atleast 40 m throw shall be installed at various locations in the mine area. Effective dust suppression system shall also be adopted at other parts of the mining lease to arrest the fugitive dust emission. Online air monitoring system should be installed near crusher and haul roads to control dust generation during mining.

#### 2. Single Use Plastic

S. No	EC Conditions
2.1	The Project Proponent shall create awareness among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) in order to ensure the compliance of Notification published by MoEF&CC on 12/08/2021. A report, along with photographs, on the measures taken shall also be included in the six monthly compliance report.

#### 3. Clean Energy

S. No	EC Conditions		
3.1	The Project Proponent shall explore the possibility of using atleast 20% of Electric vehicles/CNG/Solar instead of diesel operation within three years.		

#### 4. Greater Panna Landscape

S. No	EC Conditions
4.1	The Project Proponent shall not transport the mineral though tiger dispersal route and it should be routed through other side without causing traffic, pollution and road kill in the tiger reserve area.
4.2	Although the site is not located in any classified corridor, tigers move in the landscape randomly through the agriculture and open areas. Therefore, the Project Proponent should have site-specific assessment of tiger movement and shall ensure that there is no disturbance on the western area towards Ken River. Further, based on site assessment, local level mitigation plan shall be in place.

S. No	EC Conditions
4.3	The Project Proponent needs to use modern equipment's such as Camera Traps for ensuring presence and movement of Tigers in the study area in consultation with Wildlife Wing of Forest Department. Appropriate interventions shall be taken to minimize stress conditions for Tigers and to avoid Man-Animal conflict.
4.4	Biodiversity management plan, including restoration and carbon offset scheme shall be included in the mine plan and operation.
4.5	The project proponent needs to submit the quarterly compliance report to the State Forest Department/NTCA/RO w.r.t monitoring of the movement of tiger in the study area and their effectiveness of implementation of mitigation plan.

# 5. Skill Development

S. No	EC Conditions
5.1	The Project Proponent needs to provide the apprenticeship to the local people. The data and the outcome should be maintained for the same imparted to the local people.

### 6. Miscellaneous

S. No	EC Conditions
6.1	All other terms and conditions mentioned in the EC letter dated 31.08.2020 shall remain unchanged.

Annexure 2

# **Amendment Logs**

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

Signed by Pankaj Verma

Date: 18-10-2023 09:20:06 Reason: Verified and

signed

12/27/23, 10:40 AM Email Annexure-3



भारत सरकार Govt. of India श्रम एवं रोजगार मंत्रालय Ministry of Labour & Employment स्याज सुरक्षा महाजिदेशालय Directorate-General of Mines Safety



Date: 08/05/2023

NO: 36249961|WZ|Jabalpur Region|Perm|2023|255843

From

Director of Mines Safety, JABALPUR REGION Region, WESTERN ZONE NAGPUR MAHARASHTRA

To

The Agent, Kakra Panna Limestone Mine, M/s Jaykaycem(Central) Ltd Village-Harduwaken, Tehsil-Amanganj, Dist- Panna (M.P) 488441.

Subject:Relaxation under Provisions of Regulation 106(2)(b) of the Metalliferous Mines Regulations,1961 to use Heavy Earth Moving Machineries (HEMMs) in conjunction with a system of deep hole blasting at Kakra Panna Limestone Mine of M/s Jaykaycem(Central) Limited located at village-Devra, Tehsil-Amanganj, Dist-Panna (M.P)

Sir

Please refer to your online application submitted vide ID: 255843, dated 21.04.2023, offline letter no.JKKCL/MINES/KPLM/DGMS/106(2)(b)/78 dated 18.04.2023; letter no. JKKCL/MINES/KPLM/DGMS/106(2)(b)/79 dated 21.04.2023; enclosing therewith Surface Plan No. JKC/MINES/KPLM/SURFACE PLAN/01 dated 23.03.2023 of the mine in offline mode on the above subject.

The matter has been considered in the light of information furnished by you in your application and accompanying plans/sections and other enclosures.

In exercise of the powers conferred on the Chief Inspector of Mines (also designated as Director-General of Mines Safety) under Regulation 106(2)(b) of the Metalliferous Mines Regulations, 1961, and by virtue of the authorization granted to me by the Chief Inspector of Mines (also designated as Director-General of Mines Safety) under Section 6(1) of Mines Act, 1952, I, hereby grant you relaxations from the Provisions of Regulation 106(2)(b) of the Metalliferous Mines Regulations,1961 to use Heavy Earth Moving Machineries (HEMMs) in conjunction with a system of deep hole blasting at Kakra Panna Limestone Mine of M/s Jaykaycem(Central) Limited located at village-Devra, Tehsil-Amanganj, Dist.- Panna (M.P) in the area bounded and marked by points WB-1,WB-2,....,WB-22 & WB-1 as shown on surface plan NO. JKC/MINES/KPLM/SURFACE PLAN/01 dated 23.03.2023 subject to the following conditions being strictly complied with.

### 1.0 GENERAL:

- 1.1 The conditions as mentioned in the Annexure 'A' of this permission letter shall be strictly complied with.
- 1.2 Except where otherwise provided for in this permission, all provisions of the Metalliferous Regulations, 1961 relating to opencast workings, use of explosives and use of machinery etc. shall be strictly complied with.
- 1.3 The opencast workings shall not be extended in areas within the lease unless the land has been acquired by the mine owner and is under the owner's physical possession.

12/27/23, 10:40 AM Email

1.4 No working shall be made or extended within 45 m of any building/structure/railway of permanent nature, not belonging to owner of the mine without permission in writing from this Directorate under Regulation 109 of the Metalliferous Mines Regulations, 1961.

- 1.5 No working shall be made in any spot lying within horizontal distance of 15 m from either bank of the Canal or any stream, Nallah, etc. without obtaining permission in writing from this Directorate under Regulation 127 of the Metalliferous Mines Regulations, 1961. Adequate protection against inrush of Nallah water in the mine shall be provided and maintained.
- 1.6 During heavy rain, the Manager or senior most mine official present in the mine, shall go round the surface area of the mine to check vulnerable points and effectiveness of the safety measures. Standing orders for withdrawal of persons from the mine in case of apprehended danger should be framed and enforced.
- 1.7 (a) No Deep hole blasting shall be carried out within 300m of any structure not belonging to the owner unless permitted by this Directorate in writing under Regulation 164 (1-B) of the Metalliferous Mines Regulations
- (b) No blasting shall be conducted using SME/SMS/ANFO explosive without having valid permission obtained under Regulation 155(1) & 162(5) of Metalliferous Mines Regulations, 1961
- (c) Regular deep hole blasting shall be carried out using Shock tube/Non-electric initiation system.
- (d) The working faces in the mine shall be so oriented that the free face for blasting is away from the adjoining mine/Crusher/school/temple etc. if any.
- 1.8 No blasting in the mine shall be carried out within 300m of public roads till such time the blasting in charge has ensured that no persons/vehicles pass on such roads during the time of blasting. For the purpose, drop bar barrier shall be provided on both side of such road at a distance of 300m from the place of firing of shots in the proposed limit of quarry and during blasting, guard shall be posted on the barrier and persons/vehicles shall not be allowed to pass on the said road during blasting and till the time all clear signal after blasting is obtained.
- 1.9 Blasting shall be conducted only after ensuring that persons including blaster within 500 m radial distance from place of firing of shot holes have taken proper shelter. The persons/employees of the adjoining mine nearby and within 500m radial distance shall also be informed and ensured that they have taken proper shelter.
- 1.10 An embankment of at least 3m higher than the HFL on eastern side to prevent inrush of water from nallah, designed and constructed on sound civil engineering principles to serve as dam shall be provided and maintained to prevent inrush of water in the mine.
- 1.11 Special care shall be taken when any slip or other planes of weakness or other geological disturbances exist, so as to prevent danger to the work-persons.
- 1.12 The owner shall indemnify occupants/owners of the houses/ dwellings/ buildings or other structures of public authority concerned, if any, against the dangers to those properties or injury to them or other persons arising out of operations conducted under this permission.
- 1.13 No blasting shall be conducted within 100m of any dwellings, roads, railways and other important structures not belonging to the owner of the mine. The blasting in the mine shall be carried out strictly as per the stipulations laid down in Regulation 164 of the MMR, 1961.
- 1.14 No blasting for any purpose shall be done within 300m from the boundary of sub-station or from the electric supply lines of voltage exceeding 650V or tower structure thereof without the written permission of the owner of such sub-station or electric supply lines or tower structures and in case of mining lease hold area, without the written permission of the Inspector of Mines under CEAR-2010.
- 2.0 Supervision:

12/27/23, 10:40 AM Email

2.1 A person possessing First Class Mine Manager's Certificate of competency under Regulation MMR, 1961 shall be appointed as the manager of the mine. This permission shall stand revoked as soon as the qualified manager ceases to work at the mine. Use of HEMM shall be suspended in the absence of manager with aforesaid qualification.

- 2.2 Adequate number of supervisors including duly qualified Assistant Managers, Foremen and Mining Mates shall be appointed in each working shifts to assist the Manager. The Manager, Assistant Manager, Foreman and Mate shall be responsible to ensure compliance of stipulations of conditions governing grant of this permission and other provisions of the Regulations, Rules, bye-laws, orders, and circulars issued from time to time, as may be applicable. They shall also supervise transport and loading operations being done by contractor(s), if any
- 2.3 A duly qualified engineer shall be appointed to hold charge of all machinery at the mine and shall be responsible for the proper installation, maintenance and safe working of such machinery.
- 2.4 During production shift the opencast workings shall be place under the charge of an Assistant Manager, holding at least Manager's Certificate who shall be responsible to see that all the regulations and the orders made there under are strictly complied with.
- 2.5 A code specifying duties and responsibilities of all mine-officials, i.e. Engineer, Supervisors, Technicians, Mechanics, Fitters, Machine Operators, helpers, loading supervisors etc. shall be drawn up by the Manager and distributed to all concerned.
- 2.6 The Manager shall issue to every Driver/Operator, Supervisor and Mine Official connected with the use of Heavy Earth Moving Machinery, a copy of rules/regulations/SOP, orders made there-under and guidelines listed in this permission governing his duties, in a language understood by the person concerned. The Manager and the Engineer shall be responsible to ensure that all the precautions and guidelines listed in this permission are strictly followed by all concerned.
- 2.7 It shall be the responsibility of the Manager, Engineer and other supervisors to ensure that all persons working in the mine, and those working on machines/equipment etc. work as per the code and all machines and equipment etc. are installed, operated and maintained in safe working conditions.
- 2.8 Operations connected with Drilling, Charging, Stemming and Blasting of deep holes shall be placed under overall charge of a person holding at least Manager's Certificate of Competency granted under Metalliferous Mines Regulations, 1961, who shall supervise the said operations in accordance with the guidelines and directives issued by the Manager.
- 2.9 Blasting parameters of each blast with a sketch showing the drilling pattern and the holes charged shall be maintained in register kept for the purpose for each blast.
- 2.10 Manager shall frame code of practices for each operation and copy of it shall be handed over to all concerned. It shall be the duty of all statutory persons to enforce the code of practices so framed.
- 2.11 Manager shall in particular:- Prepare "Safety Management plan" as per guidelines of DGMS Circular No. DGMS (Tech) (S&T) Circular No: 13 of 2002, DGMS (Tech) (S&T) Circular No: 02 of 2011 & DGMS (Tech) (S&T) Circular No. 05 of 2016.
- 3.0 Please note that, this permission is subject to the following additional conditions.
- 3.1 In the event of any change in the circumstances connected with this permission which is likely to endanger the life of workmen employed in the mining operation for which this permission has been granted shall be stopped forthwith and intimation thereof sent to this Directorate. The said mining operation shall not be resumed without an express and fresh permission in writing.

### Ground Vibration Report of Kakra-Panna Limestone Mine

# **Instantel**

### **Event Report**

 Date/Time
 Tran at 14:10:50 April 3, 2024

 Trigger Source
 Geo: 0.300 mm/s, Mic: 100:00 dB(L)

Range Geo: 254.0 mm/s
Record Time 3.0 sec at 2048 sps
Operator/Setup: Operator/MINES.MMB

Serial Number UM20052 V 10-90FB Micromate ISEE Battery Level 3.8 Volts

Unit Calibration February 19, 2024 by UES New Delhi
File Name \_\_TEMP.EVT

Notes Location: Client:

User Name: KAKRA PANNA LIMESTONE MINES

General:

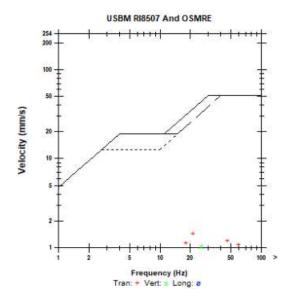
Microphone Linear Weighting PSPL 106.4 dB(L) at 1.895 sec

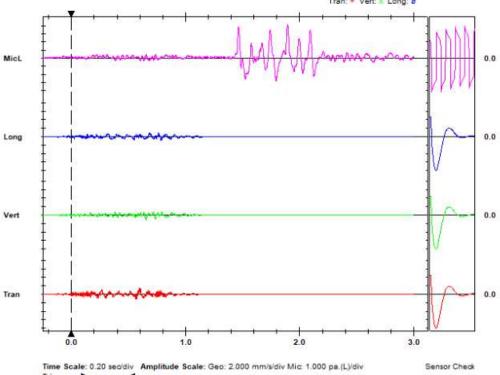
ZC Freq 6.0 Hz

Channel Test Passed (Freq = 19.7 Hz Amp = 1105 mv )

	Tran	Vert	Long	
PPV	1.450	1.040	0.969	mm/s
ZC Freq	21	26	24	Hz
Time (Rel. to Trig)	0.594	0.654	0.782	sec
Peak Acceleration	0.043	0.028	0.033	g
Peak Displacement	0.009	0.007	0.009	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	4.4	4.3	4.2	

Peak Vector Sum 1.551 mm/s at 0.594 sec





Printed: June 5, 2024 (V 10.72 - 10.72.1)

Format @ 1995-2015 Xmark Corporation



MicL at 14:18:31 April 4, 2024 Geo: 0.300 mm/s, Mic: 100.00 dB(L) Geo: 254.0 mm/s Trigger Source

Range Record Time 3.0 sec at 2048 sps Operator/Setup: Operator/MINES.MMB

Battery Level 3.8 Volts
Unit Calibration February 19, 2024 by UES New Delhi
File Name \_\_TEMP.EVT

Notes Client:

User Name: KAKRA PANNA LIMESTONE MINES

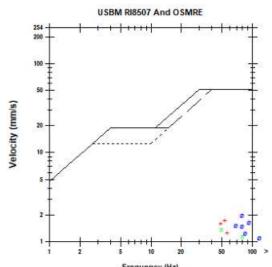
Linear Weighting 105.2 dB(L) at 0.106 sec Microphone PSPL

ZC Freq 5.9 Hz

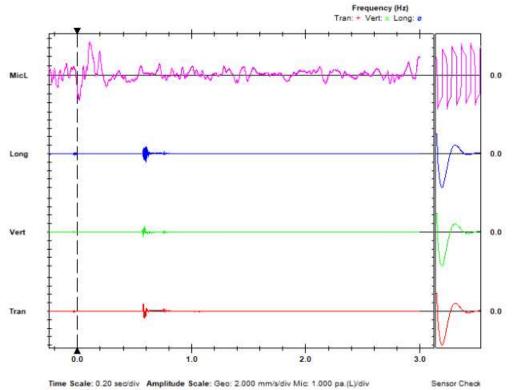
Channel Test Passed (Freq = 19.7 Hz Amp = 1088 mv)

	Tran	Vert	Long	
PPV	1.734	1.371	1.978	mm/s
ZC Freq	54	49	79	Hz
Time (Rel. to Trig)	0.578	0.586	0.599	sec
Peak Acceleration	0.086	0.076	0.100	g
Peak Displacement	0.011	0.003	0.004	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.5	7.5	Hz
Overswing Ratio	4.5	4.3	4.1	

Peak Vector Sum 2.586 mm/s at 0.586 sec



UM20052 V 10-90FB Micromate ISEE



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div

Printed: June 5, 2024 (V 10.72 - 10.72.1)

Format @ 1995-2015 Xmark Corporation



 Date/Time
 Long at 14:12:28 April 30, 2024

 Trigger Source
 Geo: 0.300 mm/s, Mic: 100.00 dB(L)

 Range
 Geo: 254.0 mm/s

 Range
 Geo: 254.0 mm/s

 Record Time
 3.0 sec at 2048 sps

 Operator/Setup:
 Operator/MINES.MMB

Serial Number UM20052 V 10-90FB Micromate ISEE
Battery Level 3.6 Volts
Unit Calibration February 19, 2024 by UES New Delhi
File Name \_\_TEMP.EVT

Notes Location: Client:

User Name: KAKRA PANNA LIMESTONE MINES

General:

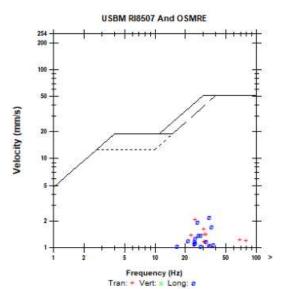
Microphone Linear Weighting
PSPL 105.2 dB(L) at 1.754 sec

ZC Freq 10.9 Hz

Channel Test Passed (Freq = 19.7 Hz Amp = 1090 mv)

	Tran	Vert	Long	
PPV	2.081	0.882	2.207	mm/s
ZC Freq	25	43	34	Hz
Time (Rel. to Trig)	0.314	0.416	0.238	sec
Peak Acceleration	0.066	0.028	0.066	g
Peak Displacement	0.011	0.003	0.010	mm
Sensor Check	Passed	Passed	Passed	
Frequency	7.3	7.3	7.7	Hz
Overswing Ratio	4.4	4.4	4.0	

Peak Vector Sum 2.583 mm/s at 0.313 sec



MicL 0.0

Long 0.0

Vert 0.0

Tran 0.0

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 ps.(L)/div

Sensor Check

Printed: June 5, 2024 (V 10.72 - 10.72.1)

Format ⊚ 1995-2015 Xmark Corporation



 Date/Time
 Tran at 13:32:51 May 22, 2024

 Trigger Source
 Geo: 0.300 mm/s, Mic: 100:00 dB(L)

 Range
 Geo: 254.0 mm/s

Range Geo: 254.0 mm/s
Record Time 3.0 sec at 2048 sps
Operator/Setup: Operator/MINES.MMB

Serial Number
Battery Level
Unit Calibration
File Name
UM20052 V 10-90FB Micromate ISEE
3.5 Volts
February 19, 2024 by UES New Delhi
\_\_TEMP.EVT

Notes Location: Client:

User Name: KAKRA PANNA LIMESTONE MINES

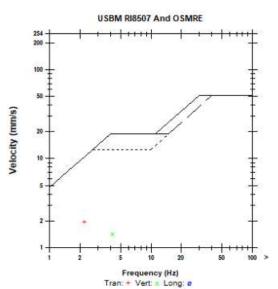
General:

Microphone Linear Weighting PSPL <88 dB(L) ZC Freq 4.0 Hz

Channel Test Passed (Freq = 19.7 Hz Amp = 1095 mv )

	Tran	Vert	Long	
PPV	2.475	1,434	0.063	mm/s
ZC Freq	N/A	4.2	73	Hz
Time (Rel. to Trig)	0.035	0.063	2.323	sec
Peak Acceleration	0.031	0.020	0.012	g
Peak Displacement	0.101	0.033	0.000	mm
Sensor Check	Passed	Passed	Check	
Frequency	7.3	7.5	1024.0	Hz
Overswing Ratio	4.4	4.4	0.0	

Peak Vector Sum 2.560 mm/s at 0.035 sec N/A: Not Applicable



Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 1.000 pa.(L)/div

Sensor Check

Printed: June 5, 2024 (V 10.72 - 10.72.1)

Format @ 1995-2015 Xmark Corporation



Tran at 14:03:50 June 7, 2024 Geo: 0.300 mm/s, Mio: 100.00 dB(L) Geo: 254.0 mm/s Trigger Source

Range Record Time 3.0 sec at 2048 sps Operator/Setup: Operator/MINES.MMB

UM20052 V 10-90FB Micromate ISEE Battery Level 3.4 Volts
Unit Calibration February 19, 2024 by UES New Delhi
File Name \_\_TEMP.EVT

Notes Client:

User Name: KAKRA PANNA LIMESTONE MINES

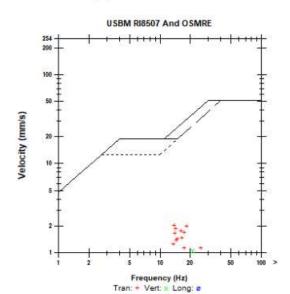
Linear Weighting 115.4 dB(L) at 1.481 sec 13.7 Hz Microphone PSPL

ZC Freq

Channel Test Passed (Freq = 19.7 Hz Amp = 1131 mv)

	Tran	Vert	Long	
PPV	2.018	1.084	0.047	mm/
ZC Freq	13.8	21	>200	Hz
Time (Rel. to Trig)	0.460	0.283	2.322	sec
Peak Acceleration	0.059	0.025	0.010	g
Peak Displacement	0.018	0.006	0.000	mm
Sensor Check	Passed	Passed	Check	
Frequency	7.3	7.5	1024.0	Hz
Overswing Ratio	4.6	4.4	0.0	

Peak Vector Sum 2.093 mm/s at 0.459 sec



Sensor Check

0.0 MicL Long 0.0 Vert 0.0 0.0 Tran 2.0 1.0 3.0

Printed: July 15, 2024 (V 10.72 - 10.72.1)

Format @ 1995-2015 Xmark Corporation

Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div



Tran at 13:40:27 July 2, 2024 Geo: 0.300 mm/s, Mio: 100.00 dB(L) Geo: 254.0 mm/s Trigger Source

Range Record Time 3.0 sec at 2048 sps Operator/Setup: Operator/MINES.MMB

Notes

Client: User Name: KAKRA PANNA LIMESTONE MINES

Microphone Linear Weighting PSPL 115.0 dB(L) at 1.282 sec

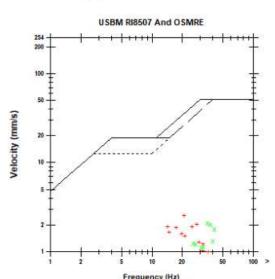
ZC Freq 6.1 Hz

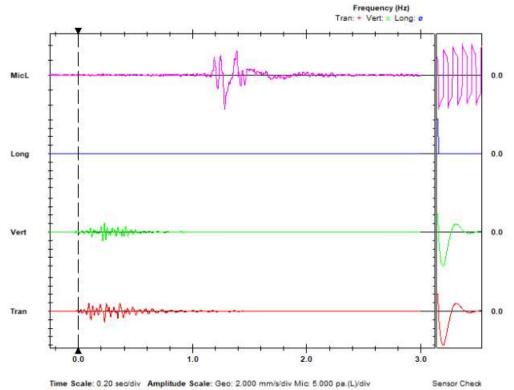
Channel Test Passed (Freq = 19.7 Hz Amp = 1191 mv)

mm/s
4z
ec
1
mm
4z

Peak Vector Sum 3,208 mm/s at 0,229 sec

UM20052 V 10-90FB Micromate ISEE Battery Level 3.6 Volts
Unit Calibration February 19, 2024 by UES New Delhi
File Name \_\_TEMP.EVT





Time Scale: 0.20 sec/div Amplitude Scale: Geo: 2.000 mm/s/div Mic: 5.000 pa.(L)/div

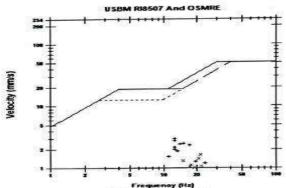
Printed: July 15, 2024 (V 10.72 - 10.72.1)

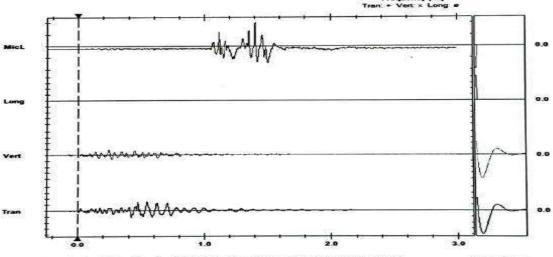
Format @ 1995-2015 Xmark Corporation



Tran et 13.35.31 August 1, 2024 Geo: 0 300 mm/s, Mic: 100.00 dB(L) Geo: 254.0 mm/s 3.0 sec at 2048 sps Operator/MINES, MMB

Long 0.047 171 1.520 0.010 0.000 Check 1024 0 Tran Vert
3.019 1.671
12.0 21
0.542 0.242
0.054 0.031
0.028 0.011
Passed 7.3 7.3
4.6 4.5 PPV
ZC Freq
Time (Rel. to Trig)
Peak Acceleration
Peak Displacemer
Sensor Check
Frequency
Overswing Ratio



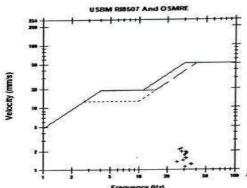


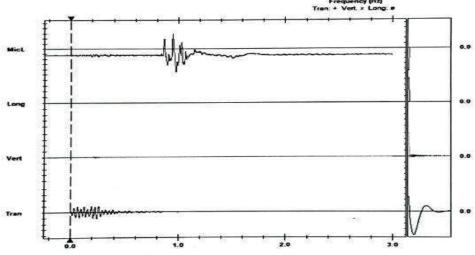
ale: Geo 2 000 mm/s/div Mic. 5 000 pa (L)/div Time Scale: 0 20 sec/div Am

s: October 8, 2024 (V 10.72 - 10.72.1)



PPV	2.191	0 126	0.047	mm/s
ZC Freq	28	171	>200	Hz
Time (Rel. to Trig)	0.241	0.224	0.186	sec
Peak Acceleration	0.059	0.016	0.008	
<b>Peak Displacement</b>	0 013	0.000	0.000	mm
Sensor Check	Passed	Check	Check	
Frequency	7.5	1024 0	1024 0	Hz
Overswing Ratio	44	0.0	0.0	





Sensor Check



Annexure-5

An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/A/24/05/17/N-007

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

KAKRA MINE (NEAR MINE OFFICE)

**Duration of Sampling** Time of Sampling

14.05.2024 TO 15.05.2024 11:30 AM

Sampling Done by

11:30 AM TO

VGL STAFF

**Packing Condition** Sample Id No.

SEALED 007

Environmental Condition Temp.(°C) & RH (%)

25.5 & 68.0

Method of Sampling Sample Receiving Date IS:5182

17.05.2024

Sample Processing Date

18.05.2024 TO 24.05.2024

Equipment Used

RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	33.8	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	76.1	μg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	15.4	μg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	25.8	μg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.72	mg/m <sup>3</sup>	4.0

Page 1 of 1

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- The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

3. Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only.

Review By

Technical Manager

Visition Selection ab

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical Laboratory

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TEST REPORT CODE: VGL/A/24/05/17/N-008

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ.

DISTT. - PANNA, 488441 (M.P)

Sampling Location

: KAKRA MINE (SECURITY OFFICE)

Duration of Sampling Time of Sampling 15.05.2024 TO 16.05.2024

Time of Sampling Sampling Done by 11:00 AM TO

VGL STAFF

11:00 AM

Packing Condition Sample Id No.

SEALED 008

Environmental Condition Temp.(°C) & RH (%)

25.0 & 56.0

Method of Sampling

IS:5182

Sample Receiving Date

: 17.05.2024

Sample Processing Date

18.05.2024 TO 24.05.2024

Equipment Used

RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	35.1	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	68.4	μg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	13.5	μg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	26.4	μg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.59	mg/m <sup>3</sup>	4.0

Page 1 of 1

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Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only.

irat Global Lab

Authorised Signatory

D. K. Yadav Lab In-charge

Dr. Alack Kumar Technical Manager

Review By:



An Analytical faboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/A/24/05/17/N-015

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ.

DISTT. - PANNA, 488441 (M.P)

Sampling Location

PURAINA VILLAGE

**Duration of Sampling** Time of Sampling

12.05.2024 TO 13.05.2024 10:00 AM 09:55 AM TO

Sampling Done by

VGL STAFF

**Packing Condition** 

SEALED

Sample Id No.

015

Environmental Condition Temp.(°C) & RH (%)

25.3 & 58.0

Method of Sampling

IS:5182

Sample Receiving Date

17.05.2024

Sample Processing Date

18.05.2024 TO 24.05.2024

**Equipment Used** 

RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	32.4	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	70.4	μg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	12.8	μg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	26.4	µg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.59	mg/m <sup>3</sup>	4.0

Page 1 of 1

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Any discrepancy in test result should be reported within 15Days.

The above results are related to the tested sample only.

Virat Global Lab **Authorized Signatory** 

Authorised Signatory

D. K. Yadav Lab In-charge

Review By Ashok Technical-Manager



An Analytical faboratory

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TEST REPORT CODE: VGL/A/24/05/17/N-016

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P) : PAGRA VILLAGE

Sampling Location

TAGRA VILLAGE

Duration of Sampling Time of Sampling : 12.05.2024 TO 13.05.2024 : 10:25 AM TO 10:00 AM

Sampling Done by

VGL STAFF

Packing Condition

SEALED

Sample Id No.

016

Environmental Condition Temp.(°Q & RH (%)

25.3 & 58.0 IS:5182

Method of Sampling Sample Receiving Date

1.5.5102

Sample Processing Date

: 17.05.2024 : 18.05.2024 TO 24.05.2024

Equipment Used

: RESPIRABLE DUST SAMPLER (PM 10)

FINE PARTICULATE SAMPLER (PM 2.5)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	31.4	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	68.2	μg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	11.1	μg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	20.4	μg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.62	mg/m³	4.0

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- Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only.

Virat Global Lab

Authorised Signatory

D. K. Yadav Lab In-charge

Dr. Affok Komay Technical Manager

Review Br



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TEST REPORT CODE: VGL/A/24/05/17/N-017

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

AMANGANJ VILLAGE

11.05.2024 TO

12.05.2024

Duration of Sampling Time of Sampling

12:30 PM TO

12:35 PM

Sampling Done by

VGL STAFF

Packing Condition

SEALED

Sample Id No.

017

Environmental Condition Temp.(°C) & RH (%)

: 25.3 & 58.0

Method of Sampling

: IS:5182

Sample Receiving Date

: 17.05.2024

Sample Processing Date

18.05.2024 TO 24.05.2024 RESPIRABLE DUST SAMPLER (PM 10)

Equipment Used

FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	33.1	µg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	70.1	µg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	12.9	μg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	22.8	µg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.51	mg/m <sup>3</sup>	4.0

Page 1 of 1

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Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only

Virat Global Lab

Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge

Review By:
Lucy ow Dr. Asherk Rumar
Technical Manager



An Analytical Laboratory

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TEST REPORT CODE: VGL/A/24/05/17/N-018

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

SAPTAI VILLAGE

**Duration of Sampling** Time of Sampling

13.05.2024 TO 14.05.2024 08:50 AM TO 08:50 AM

Sampling Done by

VGL STAFF

**Packing Condition** Sample Id No.

SEALED 018

Environmental Condition Temp.(°C) & RH (%)

25.3 & 58.0

Method of Sampling

IS:5182

Sample Receiving Date

17.05.2024

Sample Processing Date

18.05.2024 TO 24.05.2024

Equipment Used

RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

#### TEST RESULTS

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Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)			
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	36.1	μg/m3	60.0			
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	60.7	μg/m3	100.0			
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	13.2	μg/m3	80.0			
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	24.1	µg/m3	80.0			
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.68	mg/m³	4.0			

### Page 1 of 1

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Any discrepancy in test result should be reported within 15Days.

4 The above results are related to the tested sample only.

Virat Global Lab Authorized Signatory

700000 Authorised Signatory

> D. K. Yadav Lab In-charge

Review By: Ashok Kumar Technical Manager



An Analytical faboratory

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TEST REPORT CODE: VGL/A/24/05/17/N-019

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

: KAMTANA VILLAGE

Duration of Sampling
Time of Sampling

13.05.2024 TO 14.05.2024 08:20 AM TO 08:20 AM

Sampling Done by

VGL STAFF

Packing Condition Sample Id No. SEALED 019

Environmental Condition Temp.(°C) & RH (%)

: 25.3 & 58.0

Method of Sampling

: IS:5182

Sample Receiving Date

: 17.05.2024

Sample Processing Date

18.05.2024 TO 24.05.2024

Equipment Used

RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	36.9	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	69.1	µg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	14.7	μg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	26.2	μg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.65	mg/m <sup>3</sup>	4.0

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4. The above results are related to the tested sample only

Dr Astlok Kumar Technical Manager Virat Global Lab

Authorised Signatory

D. K. Yadav Lab In-charge



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TEST REPORT CODE: VGL/A/24/05/17/N-020

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

UDLA VILLAGE

Duration of Sampling Time of Sampling 11.05.2024 TO 12.05.2024 01:00 PM TO 01:00 AM

Sampling Done by

VGL STAFF

**Packing Condition** 

SEALED

Sample Id No.

020

Environmental Condition Temp.(°C) & RH (%)

25.3 & 58.0

Method of Sampling

: IS:5182

Sample Receiving Date

17.05.2024

Sample Processing Date

: 18.05.2024 TO 24.05.2024

Equipment Used

RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	33.1	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	67.2	μg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	16.1	μg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	24.8	μg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.60	mg/m³	4.0

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4. The above results are related to the tested sample only

Dr. Ashok Kumar Technical Manager Virat Global Lab

Authorised Signatory

D. K. Yadav Lab In-charge



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TEST REPORT CODE: VGL/A/24/05/17/N-021

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

SOTIPURA VILLAGE

13.05.2024 TO 14.05.2024 09:10 AM

**Duration of Sampling** Time of Sampling

09:10 AM TO

VGL STAFF Sampling Done by

**Packing Condition** 

SEALED

Sample Id No.

021 25.3 & 58.0

Environmental Condition Temp.(°C) & RH (%) Method of Sampling

IS:5182

Sample Receiving Date

17.05.2024

Sample Processing Date

18.05.2024 TO 24.05.2024

Equipment Used

RESPIRABLE DUST SAMPLER (PM 10)

FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	34.8	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	63.9	μg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	15.1	μg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	25.4	μg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.58	mg/m <sup>3</sup>	4.0

### Page I of I

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- Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only

Technical Manager

Virat Global Lab **Authorized Signatory** 

Authorised Signatory

D. K. Yadav Lab In-charge



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TEST REPORT CODE: VGL/A/24/05/17/N-022

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ.

DISTT. - PANNA, 488441 (M.P)

Sampling Location

HINAUTA VILLAGE

Duration of Sampling Time of Sampling 14.05.2024 TO 15.05.2024 09:30 AM TO 09:30 AM

Sampling Done by Packing Condition VGL STAFF

Sample Id No.

SEALED 022

Environmental Condition Temp.(°C) & RH (%)

25.3 & 58.0

Method of Sampling Sample Receiving Date : IS:5182

Sample Receiving Date

: 17.05.2024

Sample Processing Date

: 18.05.2024 TO 24.05.2024 : RESPIRABLE DUST SAMPLER (PM 10)

Equipment Used

FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	32.4	µg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	65.1	μg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	15.2	µg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	24.7	µg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.58	mg/m <sup>3</sup>	4.0

Page 1 of 1

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- Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only

Review By:

Technical Manager

Virat Global Lab
Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical faboratory

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TEST REPORT CODE: VGL/A/24/05/17/N-023

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ.

DISTT. - PANNA, 488441 (M.P)

Sampling Location

PURWA VILLAGE

14.05.2024 TO

15.05.2024

**Duration of Sampling** Time of Sampling

10:30 AM TO

10:30 AM

Sampling Done by

VGL STAFF

**Packing Condition** Sample Id No.

SEALED 023

Environmental Condition Temp.(°C) & RH (%)

25.3 & 58.0

Method of Sampling

IS:5182

Sample Receiving Date

17.05.2024

Sample Processing Date

18.05.2024 TO 24.05.2024

**Equipment Used** 

RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	32.8	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	61.4	µg/m3	100.0
4 3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	12.2	µg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	19.9	µg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.49	mg/m³	4.0

Page 1 of 1

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- The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified

3. Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only

Review By:

Dr. Ashiek Kumar **Vechnical Manager**  Virat Global Lab

ed Signatory

D. K. Yadav Lab In-charge



An Analytical faboratory

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TEST REPORT CODE: VGL/A/24/05/17/N-024

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

BHUPATPURA VILLAGE

**Duration of Sampling** 

14.05.2024 TO

15.05.2024

Time of Sampling

11:00 AM TO

11:00 AM

Sampling Done by

VGL STAFF SEALED

**Packing Condition** 

Sample Id No.

024

Environmental Condition Temp.(°C) & RH (%)

25.3 & 58.0

Method of Sampling

IS:5182

Sample Receiving Date

17.05.2024

Sample Processing Date **Equipment Used** 

18.05.2024 TO 24.05.2024 RESPIRABLE DUST SAMPLER (PM 10)

FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	39.1	µg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	66.8	μg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	10.1	µg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	19.2	μg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.53	mg/m <sup>3</sup>	4.0

### Note:

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- 2 The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

3. Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only.

Virat Global Lab Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge

Technical Manager

Review By:



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL)
(An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/A/24/05/17/N-025

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

MOHADKH VILLAGE

Duration of Sampling Time of Sampling 14.05.2024 TO 15.05.2024 11:20 AM TO 11:20 AM

Sampling Done by

VGL STAFF

**Packing Condition** 

SEALED

Sample Id No.

025

Environmental Condition Temp.(°C) & RH (%)

25.3 & 58.0

Method of Sampling

IS:5182

Sample Receiving Date

17.05.2024

Sample Processing Date

: 18.05.2024 TO 24.05.2024

Equipment Used

RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	33.7	μg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	61.5	µg/m3	100.0
3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	12.4	µg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	23.4	μg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.58	mg/m <sup>3</sup>	4.0

Page 1 of 1

### Note

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- 2. The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

3. Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only

Review By:

Dr. Ashik Kumar Technical Manager Virat Global Lab

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/A/24/05/17/N-026

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (AMBIENT AIR)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ.

DISTT. - PANNA, 488441 (M.P)

Sampling Location

UMERI VILLAGE

**Duration of Sampling** Time of Sampling

14.05.2024 TO 15.05.2024 11:50 AM TO 11:50 AM

Sampling Done by

VGL STAFF

**Packing Condition** 

SEALED

Sample Id No.

026

Environmental Condition Temp.(°C) & RH (%)

Method of Sampling Sample Receiving Date IS:5182

17.05.2024

25.3 & 58.0

Sample Processing Date

18.05.2024 TO 24.05.2024

Equipment Used RESPIRABLE DUST SAMPLER (PM 10) FINE PARTICULATE SAMPLER (PM 2.5)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification / Limits (As per CPCB)
1.	Particulate Matter (PM2.5)	IS 5182 (Part-24)	33.4	µg/m3	60.0
2.	Particulate Matter (PM10)	IS 5182 (Part-23)	65.2	μg/m3	100.0
- 3.	Sulphur Dioxide (SO2)	IS 5182 (Part-2)	12.8	µg/m3	80.0
4.	Nitrogen Dioxides (NO2)	IS 5182 (Part-6)	23.4	µg/m3	80.0
5.	Corban Monoxide (CO)	IS 5182 (Part-10)	0.59	mg/m³	4.0

- 1. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.
- 2. The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified

Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only

Villati Global Lab

Authorised Signatory

D. K. Yadav Lab In-charge

shok Kumar Technical Manager

Review By



Name & Address of the Party

Sample Description:

VTL/AA/01-03

M/s JK Cement Works, Panna

Ambient Air Quality Monitoring

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken

Tehsil-Amanganj PIN-488441 Dist-Panna

Report Date:

25/09/2024

7.8 F 02

NIL

Period of Analysis:

Party Reference No.:

16-25/09/2024

VTL/A/2409160005-07

Receipt Date

Report No.:

Format No.:

16/09/2024

General Information:-

**Date of Sampling** 

Sample collected by

Instrument Calibration Status

Meteorological condition during monitoring

**Surrounding Activity** 

Scope of Monitoring

Sampling & Analysis Protocol

**Sampling Duration** 

Parameter Required

: 03-04/09/2024

: VTL Team

: Calibrated

: Clear sky

: Human, Vehicular & Other Activities

: Regulatory Requirement

: IS-5182 & CPCB Guidelines

: 24 hrs.

: As Per Work Order

Sr.	Sampling Location	PM 10 (μg/m3)	PM 2.5 (μg/m3)	NO2 (μg/m3)	SO2 (μg/m3)	CO (mg/m3)
1.	Kakra Mines (Near Mines Office)	48.62	26.84	14.62	8.35	0.68
2.	Kakra Mines Boundary (Near CAAQMS)	45.34	23.11	12.41	6.29	0.52
3.	Kakra Mine (Security Office)	40.89	21.61	15.20	7.85	0.48
	Limit	100	60	80	80	4
Protocol		IS:5182 (P- 23)2006, RA 2017	IS:5182 (P- 24)2019	IS:5182 (P-6)2006	IS:5182 (P- 2)2001	IS:5182 (P- 10)NDIR

-----End of the Report-----

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**RK Yadav** Lab Incharge

Authorized Signatory

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

9 SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd⊚vibranttechnolab.com



Name & Address of the Party

Sample Description:

VTL/AA/19-21

M/s JK Cement Works, Panna

Ambient Air Quality Monitoring

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken

Tehsil-Amanganj PIN-488441 Dist-Panna

Report No.:

VTL/A/2409160017-28

Format No.:

7.8 F 02

Party Reference No.:

NIL

Report Date:

25/09/2024

Period of Analysis:

16-25/09/2024

Receipt Date

16/09/2024

General Information:-

**Date of Sampling** 

Sample collected by

Instrument Calibration Status

Meteorological condition during monitoring

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration Parameter Required : 08-09/09/2024

: VTL Team

: Calibrated

: Clear sky

: Human, Vehicular & Other Activities

: Regulatory Requirement

: IS-5182 & CPCB Guidelines

: 24 hrs.

: As Per Work Order

Sr.	Sampling Location	PM 10 (μg/m3)	PM 2.5 (μg/m3)	NO2 (μg/m3)	SO2 (μg/m3)	CO (mg/m3)
1.	Saptai Village	46.98	23.52	13.21	6.78	0.48
2.	Kamtana Village	42.85	21.64	15.10	7.43	0.41
3.	Puraina Village	45.67	23.41	17.58	9.16	0.59
4.	Pagra Village	47.95	25.39	19.37	10.21	0.67
5.	Udla Village	41.59	20.35	11.65	6.23	0.52
6.	Sotipura Village	38.76	21.89	10.75	5.89	0.46
7.	Hinauta Village	48.21	24.63	13.21	7.60	0.50
8.	Purwa Village	45.52	22.33	11.48	6.53	0.52
9.	Amanganj Village	43.61 XDE	20.78	9.50	5.35	0.44
10.	Bhupatpura Village	38.12	19.24	8.67	7.31	0.39
11.	Mahadkh Village	41.98	22.65	12.10	7.28	0.43
12.	Umeri Village	39.86	18.57	10.61	6.35	0.38
	Limit	100	60	80	80	4
Protocol		IS:5182 (P- 23)2006, RA 2017	IS:5182 (P- 24)2019	IS:5182 (P-6)2006	IS:5182 (P- 2)2001	IS:5182 (P- 10)NDIR

End of the Report-----





**RK Yadav** Lab Incharge Authorized Signatory

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

# Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**3** 0141-2954638

bd@vibranttechnolab.com



Annexure-6

An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL)
(An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/FE/24/05/17/N-013

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer :

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT, - PANNA, (M.P)

Sampling Location

NEAR KAKRA CRUSHER (TRANSFER POINT)

Duration of Sampling

12.05.2024 TO

12.05.2024

Time of Sampling

11:00 AM TO

07:00 PM

Sample Done By : Packing Condition : ASHISH KUMAR & RAHUL

Environmental Condition

TEMP.(°C)- 25.8 & RH (%)- 58.0

TO

Method of Sampling :

IS:5182

SEALED

Sample Receiving Date Sample Processing Date 17.05.2024

18.05,2024

24.05.2024

Equipment Used

HIGH VALUME SAMPLER

### TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	247.8	μg/m3	600

Page 1 of 1

### Note:

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Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/FE/24/05/17/N-012

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Sampling Location

NEAR KAKRA MINE BACK SIDE TO

12.05.2024

Duration of Sampling Time of Sampling

12.05.2024

6:30 PM

Sample Done By

10:30 AM TO ASHISH KUMAR & RAHUL

Packing Condition

SEALED

Environmental Condition

TEMP.(°C)- 25.8 & RH (%)- 58.0

Method of Sampling Sample Receiving Date IS:5182 17.05.2024

Sample Processing Date

18.05.2024

TO 24.05.2024

Equipment Used

HIGH VALUME SAMPLER

### TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	279.5	μg/m3	600

Page 1 of 1

### Note:

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Any discrepancy in test result should be reported within 15Days.

The above results are related to the tested sample only.

D. K. Yadav Lab In-charge

Technical Manager

Review By



An Analytical Laboratory

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TEST REPORT CODE: VGL/FE/24/05/17/N-011

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Sampling Location :

NEAR KAKRA HAULAGE ROAD

12.05.2024

TO 12.05.2024

Duration of Sampling : Time of Sampling :

10:10 AM TO

6:10 PM

Sample Done By :

ASHISH KUMAR & RAHUL

Packing Condition

SEALED

Environmental Condition

TEMP.(°C)- 25.8 & RH (%)- 58.0

Method of Sampling Sample Receiving Date IS:5182

Sample Processing Date

17.05.2024 18.05.2024

TO 24.05.2024

Equipment Used

HIGH VALUME SAMPLER

### TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	264.8	μg/m3	600

Page 1 of 1

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3. Any discrepancy in test result should be reported within 15Days.

4. The above results are related to the tested sample only.

- Luc Voy

Review By

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/FE/24/05/17/N-010

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Sampling Location

NEAR KAKRA MINE CRUSHER (UNLOADING POINT) TO

**Duration of Sampling** 

12.05.2024

12.05.2024

Time of Sampling

09:30 AM TO 5:30 PM

Sample Done By

ASHISH KUMAR & RAHUL

**Packing Condition** 

SEALED

**Environmental Condition** 

TEMP.(°C)- 25.8 & RH (%)- 58.0

Method of Sampling Sample Receiving Date IS:5182

Sample Processing Date

17.05.2024

18.05.2024

TO

24.05.2024

Equipment Used

HIGH VALUME SAMPLER

### TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	260.7	μg/m3	600

Page 1 of 1

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Any discrepancy in test result should be reported within 15Days.

The above results are related to the tested sample only.

Virat Global Lab Authorized Signatory

> tod moore Authorised Signatory

D. K. Yadav Lab In-charge

Ashok Kumar Technical Manager

Review By:



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/FE/24/05/17/N-009

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Sampling Location

NEAR PIT KAKRA MINE (LOADING POINT)

Duration of Sampling

TO

TO

TO

12.05.2024 5:00 PM

Time of Sampling Sample Done By

09:00 AM ASHISH KUMAR & RAHUL

Packing Condition

SEALED

**Environmental Condition** 

TEMP.(°C)- 25.8 & RH (%)- 58.0

Method of Sampling Sample Receiving Date IS:5182

Sample Processing Date

17.05.2024 18.05.2024

12.05.2024

24.05.2024

Equipment Used

HIGH VALUME SAMPLER

### TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	224.8	μg/m3	600

Page 1 of 1

### Note:

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Any discrepancy in test result should be reported within 15Days.

The above results are related to the tested sample only.

Ashok Kumar Technical Manager

Review By:

Virat Global Lab Authorized Signatory

D. K. Yadav Lab In-charge



Sample Number: Name & Address of

Sample Description:

VTL/FD/01

M/s JK Cement Works, Panna

the Party

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken

Tehsil-Amanganj PIN-488441 Dist-Panna

Report Date:

Report No .:

Format No.:

25/09/2024

7.8 F 02

NIL

Period of Analysis:

Party Reference No.:

16-25/09/2024

VTL/FD/2409160009

Receipt Date

16/09/2024

**Fugitive Emission Monitoring** 

General Information:-

**Sampling Location** 

Sample collected by

Sampling Equipment used **Instrument Code** 

Latitude

Longitude

Meteorological condition during monitoring

Date of Sampling

Time of Sampling

Ambient Temperature (°C)

Surrounding Activity

Method of Sampling

Sampling Duration

Parameter Required

: Near Kakra Crusher (Transfer Point)

: VTL Team

: HVS

: VTL/HVS/02

: Clear sky

: 02/09/2024

: 07:30 to 15:30 Hrs.

: Min. 28°C, Max. 32°C

: Human, Vehicular& Plant Activities

: IS-5182 & CPCB Guidelines

: 8 hrs.

: As Per Work Order

## Results

		Nesures			
S. No.	Parameter	Protocol	Result	Unit	Limit
1.	Suspended Particulate Matter (SPM)	VTL/STP/02/STP/01	311.0	μg/m3	600
	T	End of the Report-			

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RK Yadav Lab Incharge

Authorized Signatory

Pages 1 of 1

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

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9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

M bd@vibranttechnolab.com



Sample Number:

Name & Address of

the Party

VTL/FD/02

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken

Tehsil-Amanganj PIN-488441 Dist-Panna

Sample Description:

**Fugitive Emission Monitoring** 

Report No.:

VTL/FD/2409160010

Format No.:

7.8 F 02

Party Reference No.:

NIL

Report Date:

25/09/2024

Period of Analysis:

16-25/09/2024

Receipt Date

16/09/2024

General Information:-

Sampling Location

Sample collected by

Sampling Equipment used

**Instrument Code** 

Latitude

Longitude

Meteorological condition during monitoring

Date of Sampling

Time of Sampling

Ambient Temperature (°C)

Surrounding Activity

Method of Sampling

Sampling Duration

Parameter Required

: Near Kakra Mine Back Side

: VTL Team

: HVS

: VTL/HVS/03

: Clear sky

: 02/09/2024

: 07:30 to 15:30 Hrs.

: Min. 28°C, Max. 32°C

: Human, Vehicular& Plant Activities

: IS-5182 & CPCB Guidelines

: 8 hrs.

: As Per Work Order

### Results

S. No.	Parameter	Protocol	Result	Unit	Limit
1.	Suspended Particulate Matter (SPM)	VTL/STP/02/STP/01	289.0	μg/m3	600
		End of the Report			





RK Yadav Lab Incharge

Authorized Signatory

Pages 1 of 1

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Vibrant Techno Lab Pvt. Ltd.

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9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com



Sample Number:

Sample Description:

Name & Address of

the Party

VTL/FD/03

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken

Tehsil-Amanganj PIN-488441 Dist-Panna

Report Date:

**Fugitive Emission Monitoring** 

Period of Analysis:

Receipt Date

Report No.:

Format No.:

Party Reference No.:

25/09/2024 16-25/09/2024

7.8 F 02

NIL

16/09/2024

VTL/FD/2409160011

General Information:-

Sampling Location

Sample collected by

Sampling Equipment used

Instrument Code

Latitude

Longitude

Meteorological condition during monitoring

Date of Sampling

Time of Sampling

Ambient Temperature (°C)

**Surrounding Activity** 

Method of Sampling

**Sampling Duration** 

Parameter Required

: Near Kakra Haulage Road

: VTL Team

: HVS

: VTL/HVS/04

: Clear sky

: 02/09/2024

: 07:30 to 15:30 Hrs.

: Min. 28°C, Max. 32°C

: Human, Vehicular& Plant Activities

: IS-5182 & CPCB Guidelines

: 8 hrs.

: As Per Work Order

### Results

S. No.	Parameter	Protocol	Result	Unit	Limit			
1,	Suspended Particulate Matter (SPM)	VTL/STP/02/STP/01	356.0	μg/m3	600			

-End of the Report-





RK Yadav Lab Incharge Authorized Signatory

Pages 1 of 1

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

# Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com



Sample Number:

Name & Address of

Sample Description:

the Party

VTL/FD/04

M/s JK Cement Works, Panna

**Fugitive Emission Monitoring** 

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken

Tehsil-Amanganj PIN-488441 Dist-Panna

Report No.: Format No.: VTL/FD/2409160012

7.8 F 02

Party Reference No.:

NIL

Report Date:

25/09/2024

Period of Analysis:

16-25/09/2024

Receipt Date

16/09/2024

General Information:-

Sampling Location

Sample collected by

Sampling Equipment used

Instrument Code

Latitude

Longitude

Meteorological condition during monitoring

Date of Sampling

Time of Sampling

Ambient Temperature (°C)

**Surrounding Activity** 

Method of Sampling

**Sampling Duration** 

Parameter Required

: Near Kakra Mine Crusher (Unloading Point)

: VTL Team

: HVS

: VTL/HVS/05

: Clear sky

: 02/09/2024

: 07:30 to 15:30 Hrs.

: Min. 28°C, Max. 32°C

: Human, Vehicular& Plant Activities

: IS-5182 & CPCB Guidelines

: 8 hrs.

: As Per Work Order

#### Results

S. No.	Parameter	Protocol	Result	Unit	Limit
1.	Suspended Particulate Matter (SPM)	VTL/STP/02/STP/01	367.0	µg/m3	600

-End of the Report-----





RK Yadav Lab Incharge B Authorized Signatory

Pages 1 of 1

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Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2 0141-2954638** 

bd@vibranttechnolab.com



Sample Number:

Name & Address of the Party

Sample Description:

VTL/FD/04

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken

Tehsil-Amanganj PIN-488441 Dist-Panna

Report No.:

VTL/FD/2409160013

Format No.:

7.8 F 02

Party Reference No.:

NIL

Report Date:

25/09/2024

Period of Analysis:

16-25/09/2024

Receipt Date

16/09/2024

**Fugitive Emission Monitoring** 

General Information:-

Sampling Location

Sample collected by

Sampling Equipment used **Instrument Code** 

Latitude

Longitude

Meteorological condition during monitoring

Date of Sampling

Time of Sampling

Ambient Temperature (°C)

Surrounding Activity

Method of Sampling

**Sampling Duration** 

Parameter Required

: Near Kakra Mine (Loading Point)

: VTL Team

: HVS

: VTL/HVS/06

: Clear sky

: 02/09/2024

: 07:30 to 15:30 Hrs.

: Min. 28°C, Max. 32°C

: Human, Vehicular& Plant Activities

: IS-5182 & CPCB Guidelines

: 8 hrs.

: As Per Work Order

### Results

S. No.	Parameter	Protocol	Result	Unit	Limit
1	Suspended Particulate Matter (SPM)				Limit
1.	Suspended Particulate Matter (SPM)	VTL/STP/02/STP/01	238.0	μg/m3	600

-- End of the Report-----





RK Yadav Lab Incharge Authorized Signatory

Pages 1 of 1

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### Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com





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Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/WL/24/05/17/N-01-36

TEST REPORT ISSUE DATE: 24.05.2024

#### WATER LEVEL MONITORING REPORT

Name And Address of Customer : M/s, J K CEMENT WORKS, PANNA, (A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Date of Monitoring

: 12.05.2024 TO 14.05.2024

Monitoring Done By

: VGL STAFF

### RESULT

SI.N	Toronton.	Person Name	Location(	idºmm'ss")	Water Level	
	Location		Latitude (N)	Longitude (E)	(Below Ground Level)- Meter	
1	1 Puraina Village Borewell Vishwa Nath Sahu		24.314232	79.975905	15.80	
2	Tighara Village Borewell	Brij Mohan Singh	24.294028	79.963214	14.56	
3	Tighara Village Borewell	Sandeep	24.294027	79.963213	14.80	
4	Sanaura Village Dugwell	Siyaram Patel	24.418861	79.97881	25.15	
5	Kamtana Village Dugwell	Govt.	24.384879	79.958523	22.40	
6	Kamtana Village Dugwell	Govt.	24.383922	79.958833	22.30	
7	Kamtana Village Dugwell	Govt.	24.386512	79.958723	19.10	
8	Kamtana Village Borewell	Rajrendra Singh	24.383429	79.959408	15.10	
9	Kamtana Village Borewell	Pawan Kumar Khare	24.383367	79.959541	22.20	
10	Kamtana Village Borewell	Monoj Khampariya	24.383362	79.958243	25.80	
11	Kamtana Village Borewell	Ramfal Dubey	24.383732	79.958729	27.40	
12	Kamtana Village Borewell	ChandraBhansen	24.384587	79.958502	26.30	
13	Singhaura Village Borewell	Govt. School	24.404519	79.935819	51.40	
14	Sirshi patna Village Borewell	Govt.	24.388487	79.906193	28.60	
15	Sirshi patna Village Dugwell	Govt.	24.387825	79.906517	11.65	
16	Sunwani Kalan Borewell	Kanchhedi Lal Pathak	24.358643	79.888548	25.56	
17	Sunwani Khurd Borewell	Govt.	24.361943	79.920049	27.54	
18	Simra Khurd Borewell	Dhani Ram Dhai	24.351478	79.912537	38.10	
19	Banbhai Borewell	Arvind	24.329875	79.899603	16.70	
20	Maharajganj Borewell	Govt.	24.305336	79.894123	17.30	
21	Karia Borewell	Govt.	24.263893	79.981769	24.80	
22	Karia Dugwell	Ramchandra Tiwari	24.3636552	79.982056	11.90	
23	Umri Village Borewell	Bijju Chaoudhari	24.26652	79.936928	12.30	
24	Umri Village Dugwell	Govt.	24.266701	79.936928	7.80	
25	Palohi village Borewell	Govt. School	24.265933	79.960298	15.10	
26	Palohi village Dugwell	Darbari Rajak	24.265717	79.96011	16.20	



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27	Mahod Kalan Village Dugwell	Govt.	24.279306	80.017584	11.60
28	Mahod Kalan Village Borewell	Jitentra Singh	24.279386	80.017659	25.80
29	Bhupat Pura Borewell	Near Main Road	24.42591346	80.01900857	22.50
30	Simariya Village Borewell	Dangal Prasad Balmiki	24.28162146	79.89725613	9.42
31	Boda Village Dugwell	Govt. Near Temple	24.1741964	79.572004	4.80
32	Guda Village Borewell	Govt.	24.30541246	79.89403365	27.70
33	Guda Village Borewell	Charan Das Ray	24.32400349	79.88198007	25.80
34	Koni Village Borewell	Kallu Bhai	24.33056234	79.90068975	15.35
35	Koni village Borewell	Naresh patel	24.33057235	79.90068783	16.85
36	, Maharajganj Borewell	Govt.	24.305336	79.894123	19.02

Page 1 of 2

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- The above results are related to the tested sample only.

Global Lab **Authorized Signatory** 

Signatory

D. K. Yadav Lab In-charge

Dr. Ashok Kumar Technical Manager



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TEST REPORT CODE: VGL/WL/24/05/17/N-37-86

TEST REPORT ISSUE DATE: 24.05.2024

#### WATER LEVEL MONITORING REPORT

Name And Address of Customer : M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.) VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Date of Monitoring

: 13.05.2024 TO 15.05.2024

Monitoring Done By

: VGL STAFF

#### RESULT

SI.N	Location	Person Name	Location(	ddºmm'ss")	Water Level (Below	
200003.		Person Name	Latitude (N)	Longitude (E)	Ground Level)- Mete	
37 1	Bamhori Village Borewell	Ram Saran	24.33664463	80.0380059	30.90	
38	Bamhori Village Dugwell	Govt.	24.31678	80.104644	9.20	
39	Bamhori Village Borewell	Pyare Lal Vish karma	24.33536802	80.03276469	28,30	
40	Bamhori Village borewell	Raj Kumar	24.33725971	80.03266198	25.70	
41	Bamhori Village dugewell	Raj Kumar	24.33684576	80.03796254	6.70	
42	Jharkuwa Village Dugwell	Govt.	24.35447818	80.04507126	18.10	
43	Jharkuwa Village Borewell	Durjna Prasad	24.35393729	80.04480821	23.80	
44	Itauri Village Borewell	Ramshay	24.36419376	80.04177377	23.90	
45	Itauri Village Borewell	Daj Narayan	24.36641386	80.04199907	22.20	
46	Itauri Village Borewell	Govt.	24.39039877	80.03923784	20.70	
47	Itauri Village Dug well	Ghanshyam Pandey	24.39055834	80.04011205	10.90	
48	Amanganj Borewell	Kalpna Palace	24.4241417	80.0342961	20.40	
49	Amanganj Borewell	Govt. Near Tigadda	24.41839209	80.0331857	23.10	
50	Amanganj Borewell	Saduwa Chaoudhari	24.42437250	80.0332154	24.20	
51	Hinauta Borewell	Govt. School	24.388563	80.01382649	22.30	
52	Hinauta Dugwell	Govt.	24.38684007	80.01410258	10.05	
53	Hinauta Dugwell	Brij Lal Kushwaha	24.3869625	80.01445089	8.30	
54	Madaiyan Borewell	Amit Goswami	24.3870598	80.01344178	22,35	
55	Madaiyan Dugwell	Govt.	24.37842479	80.01052868	8.56	
56	Deora Village Dugwell	Govt.	24.33662268	79.96825672	4.70	
57	Deora Village Dugwell	Govt.	24.33851758	79.97188548	4.85	
58	Deora Village Dugwell	Govt.	24.34473355	79.97200211	6.20	
59	Deora Village Dugwell	Govt.	24.3466679	79.9949703	8.30	
60	Deora Village Dugwell	Govt.	24.34655777	79.97239277	9.10	
61	Deora Village Borewell	Near Road	24.33232328	79.98093834	12.50	
62	Deora Village Borewell	Govt. Near Panchayat	24.33838338	79.97177768	13.20	



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63	Deora Village Borewell	Brindavan Tiwari	24.33876411	79.97214955	13.90
64	Deora Village Borewell	Salikram Tiwari	24.34175291	79.97189798	14.60
65	Deora Village Borewell	Govt. Near Tample	24.34152108	79.97203621	15.20
66	Deora Village Borewell	Kishun Dash	24.34478814	79.97198335	14.50
67	Deora Village Borewell	Ramcharan pyashi	24.34486148	79.97133575	17.05
68	Deora Village Borewell	Balram singh	24.34566888	79.97181327	18.10
69	Deora Village Borewell	Harnam singh	24.3322903	98.124707	12.20
70	Deora Village Borewell	Govt. Near Hanuman Tample	24.34567758	79.97174564	11.53
71	Deora Village Borewell	Ashish Pathak	24.3403033	79.9876304	17.58
72	Purwa Village Borewell	Khet	24.33599338	79.9635235	25.30
73	Purwa Village Borewell	Khet	24.33780336	79.95513308	24.68
74	Purwa Village Borewell	Shiv Kumar	24.3469887	79.9610619	23.85
75	Kakra Village Borewell	Govt.	24.35772144	79.94992569	15.10
76	Kakra Village Borewell	Vijay Lodhi	24.35553216	79.95064759	16.20
77	Kakra Village Borewell	Kali Charan Sen	24.35570297	79.94977787	13.00
78	Kakra Village Borewell	Ganga Ram	24.3821511	79.9099998	18.50
79	Kakra Village Borewell	Shiv Kishor Tiwari	24.35030255	79.95552624	15.40
80	Kakra Village Dugwell	Ashok Kumar Tiwari	24.33904669	79.97119546	8.70
81	Kakra Village Borewell	Neeraj Lodhî	24.352488	79.950509	13.80
82	Kakra Village Borewell	Rajendra Tiwari	24.355165	79.950488	12.10
83	Kakra Village Borewell	Vishnu Kant Sen	24.356175	79.951568	18.30
84	Kakra Village Borewell	Prem Das Kushwaha	24.355189	79.951453	15.45
85	Kakra Village Borewell	Battu lal	24.3524422	79.9095892	20.40
86	Kakra Village Dugwll	Govt.	24.356529	79.952143	11.20

Page 1 of 2

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Review By: Dr. Ashok Kuma Technical Manager Virat G

D. K. Yadav Lab In-charge



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TEST REPORT CODE: VGL/WL/24/05/17/N-87-103

TEST REPORT ISSUE DATE: 24.05.2024

#### WATER LEVEL MONITORING REPORT

Name And Address of Customer : M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Date of Monitoring

: 14.05.2024 TO 15.05.2024

Monitoring Done By

: VGL STAFF

#### RESULT

SI.N	Location	Person Name	Location(	dd <sup>0</sup> mm'ss")	Water Level (Below	
			Latitude (N)	Longitude (E)	Ground Level)- Meter	
87	,Bilha Village borewell	Rohit Tiwari	24.383448	79.999435	13.65	
88	Jhagra Village Borewell	Dwarika Patel	24.39795765	79.98435206	16.10	
89	Dharampura Village Dug well	Govt.	24.39406932	79.98249481	11.15	
90	Ramanpura Village Borewell	Cheta Chaoudhari	24.37941909	7998398717	16.10	
91	Saptaiya Village Borewell	Govt.	24.35658	80.053129	22.25	
92	Saptaiya Village Borewell	Tunra Prasad Harwar	24.35787906	80.0650542	23.05	
93	Judi Village Borewell	Bajrang Dairy	24.35797237	79.98952222	12.20	
94	Judi Village Dug well	Keshav Pratap Singh	24.35762556	79.9909353	11.40	
95	Judi Village Borewell	Prem Narayan Singh Tomer	24.35843427	79.99083729	16.30	
96	Judi Village Borewell	Kripal Singh Chandel	24.35882056	79.99086533	14.45	
97	Judi Village Borewell	Sahab Singh Chandel	24.35866387	79.99125347	13.80	
98	Judi Village Borewell	Hiralal Kushwaha	24.3582755	79.99140577	19.30	
99	Judi Village Borewell	Ram Dayal Kushwaha	24.35854074	79.99219464	11.80	
100	Pgara village Borewell	Govt. Near School	24.35196983	79.99827417	21.10	
101	Pgara village Dugwell	Govt.	24.35235402	79.99988624	4.40	
102	Pgara village Dugwell	Sukhdev Dubey	24.35248791	80.00010214	19.35	
103	Pgara village Borewell	Mohammad Khan	24.35103883	80.00003505	20.35	

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Review By: Ashok Kumar

Technical Manager

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9628147141, 9415135012



VTL/WL/01-108

M/s JK Cement Works, Panna (A Unit Of JK Cement.Ltd.)

Village-Harduwaken Tehsil-Amanganj PIN-

488441 Dist-Panna **Ground Water Level**  Report No.: Format No.: VTL/W/2408300001-108

7.8 F-01 Party Reference No.:

NIL

Report Date:

12/09/2024

Period of Analysis:

30/08/2024 to 12/09/2024

Receipt Date: Sampling Date: 30/08/2024

20-25/08/2024

Sample Collected by:

Sample Description:

Vibrant Techno Lab Representative

C1 11	Location	Person Name	Location(c	dd0mm'ss")	Water Level (Below Ground	
SI.N			Latitude (N)	Longitude (E)	Level)- Meter	
1	Puraina Village Borewell	Vishwa Nath Sahu	24° 18′ 51″	79° 58' 33''	2.91	
2	Tighara Village Borewell	Swami Prasad tripathi	24°17′31"	79°57'41"	1.56	
3	Tighara Village Borewell	Govt.	24°17'38"	79°57'41"	6.89	
4	Sanaura Village Dugwell	Siaram Patel	24° 25' 7"	79° 58' 43"	5.09	
5	Kamtana Village Dugwell	Govt.	24°22'60"	79°57'17"	4.0	
6	Kamtana Village Dugwell	Govt.	24° 23′ 2″	79° 57' 31"	2.30	
7	Kamtana Village Dugwell	Govt.	24°22′55″	79°57′21″	1.1	
8	Kamtana Village Borewell	Govt. Near Road	24°23'16"	79°57'26"	3.40	
9	Kamtana Village Borewell	Govt. Near Road	24°22′55″	79°57'21"	3.76	
10	Kamtana Village Borewell	Govt. Near Road	24°23'18"	79°57′27	1.6	
11	Kamtana Village Borewell	Ramfal Dube	24° 23′ 1″	79° 57' 31"	2.21	
12	Kamtana Village Borewell	ChandraBhansen	24° 23′ 4″	79° 57' 30"	1.15	
13	Singhaura Village Borewell	Govt. School	24° 24' 19"	79° 54′ 38″	1.25	
14	Sirshi patna Village Borewell	Govt.	24° 22' 48"	79° 54' 8"	1.9	
15	Sirshi patna Village Dugwell	Govt.	24° 23' 7''	79° 54' 18"	2.35	
16	Sunwani Kalan Borewell	Kanchhedi Lal Pathak	24°21'31"	79°53'19	5.42	
17	Sunwani Khurd Borewell	Near Temple	24°21'43"	79°55′12"	11.95	
18	Simra Khurd Borewell	Vinod	24°20'4"	79°54′20″	.80	
19	Banbhai Borewell	Rambaksh Patel	24°18'44"	79°54'1"	2.3	
20	Maharajganj Borewell	Govt.	24°18′17"	79°56'46"	1.0	
21	Karia Borewell	Govt.	24° 15′ 50''	79° 58′ 54″	1.98	
22	Karia Dugwell	Ramchandra Tiwari	24° 21' 49"	79° 58' 55"	3.45	



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### Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

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23	Umri Village Borewell	Bf •u Chaoudhari	24°15'60"	79°15′5"	1.3
24	Umri Village Dugwell	Govt.	24°15'59"	79°55'48"	1.7
27	Mahod Kalan Village Dugwell	Govt.	24° 18' 11''	80° 2' 43"	2.55
28	Mahod Kalan Village Borewell	Suresh Sain	24°18′11″	80°2'45"	1.2
29	Bhupat Pura Borewell	Near Main Road	24° 25′ 33″	80° 1' 8"	1.79
30	Simariya Village Borewell	Dangal Prasad Balmiki	24°16′54"	79°53′50″	3.98
31	Boda Village Dugwell	Govt. Road	24°18'40"	79°56'46"	.76
32	Guda Village Borewell	Govt.	24° 18' 19"	79° 53' 38"	5.5
33	Guda Village Borewell	Charan Das Ray	24° 19' 26"	79° 52' 55"	5.4
34	Koni Village Borewell	Govt.	24°19'45"	79°54'1"	4.2
35	Koni village Borewell	\Govt. School	24° 19' 50''	79° 54' 2"	4.35
36	Maharajganj Borewell	Govt.	24° 19' 20"	79° 52' 47"	3.4
37	Bamhori Village Borewell	Mahen Singh	24°20'14"	80°1′58″	2.0
38	Bamhori Village Dugwell	Govt. School	24°20'10"	80°2′6″	1.45
39	Bamhori Village Borewell	Govt. School	24°20'10"	80°2'7"	1.98
40	Bamhori Village borewell	Ra• Kumar	24° 20' 12"	80° 2' 17''	0.70
41	Bamhori Village dugewell	Ra• Kumar	24° 20' 12"	80° 2' 17''	0.50
42	Jharkuwa Village Dugwell	Govt.	24°21′10"	80°2′56″	1.45
43	Jharkuwa Village Borewell	Dur•na Prasad	24°21′10″	80°2'56"	1.0
44	Itauri Village Borewell	Thakur Das Pandey	24°22'41"	80.2'17"	2.5
45	Itauri Village Borewell	Salikram Pandey	24°22'32"	80°2'32"	1.4
46	Itauri Village Borewell	xperigort. ce the	24°22'53"	80°2'15"	3.24
47	Itauri Village Dug well	Habib Khan	24°22′21″	80°2'24"	0.98
48	Amanganj Borewell	Lakshmi Narayan Dubey	24°25′258″	80°2'7"	2.8
49	Amanganj Borewell	Hiran Singh	24°25'28"	80°2'7"	2.97
50	Amanganj Borewell	Kishor Singh	24°25′29"	80°2'6"	3.61
51	Hinauta Borewell	Govt. School	24°23'18"	80° 0' 49"	1.4
52	Hinauta Dugwell	Near Road	24°25′33″	80.1'8"	1.0
53	Hinauta Dugwell	Bri' Lal Kushwaha	24°23'13"	80°0'52"	1.5



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### Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

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54	Madaiyan Borewell	Saheb Singh	24°19'45"	79°59'24"	2.0
55	Madaiyan Dugwell	Govt	24°19'45"	79°59'24"	2.0
56	Deora Village Dugwell	Samudayik Bhawan	24°20′19"	79°58'19"	1.0
57	Deora Village Borewelll	Anganbadi Kendra	24°20'43"	79°58'11"	1.87
58	Deora Village Dugwell	Govt. Near Road	24°20'21"	79°58′16″	0.90
59	Deora Village Dugwell	Govt.	24° 20' 48"	79° 59' 41"	1.27
60	Deora Village Dugwell	Ram mandir	24°20'48"	79°58′21″	0.91
61	Deora Village Borewell	Near Road	24° 19' 56"	79° 58' 51"	2.54
62	Deora Village Borewell	Govt. Near Panchayat	24°20'48"	79°58′19"	0.98
63	Deora Village Borewell	Brindavan Tiwari	24°20'41"	79°58'19"	2.49
64	Deora Village Borewell	Salikram Tiwari	24° 20' 30"	79° 58' 18"	4.51
65	Deora Village Borewell	Govt. Near Tam le	24° 20' 29"	79° 58' 19''	3.10
66	Deora Village Borewell	Kishun Dash	24° 20' 41"	79° 58' 18''	4.21
67	Deora Village Borewell	Ramcharan ashi	24° 20' 41"	79° 58' 17"	3.05
68	Deora Village Borewell	Balram sin h	24° 20' 44"	79° 58' 18"	3.08
69	Deora Village Borewell	Harnam sin h	24° 19' 56"	98° 7' 29''	2.25
70	Deora Village Borewell	Govt.Near Hanuman Tample	24°20′18"	79°58′18″	1.0
71	Deora Village Borewell	Ashish Pathak	24° 20' 25"	79° 59' 15"	3.23
72	Purwa Village Borewell	Khet	24°20′13"	79°57'52"	3.91
73	Purwa Village Borewell	Khet	24°20′15"	79°57'25"	1.2
74	Purwa Village Borewell	Shiv Kumar	24° 20' 49"	79° 57' 39"	3.24
75	Kakra Village Borewell	Ruplal Mandir	24°21′24"	79° 57'1"	1.5
76	Kakra Village Borewell	Via Lodhi	24°21'24"	79° 57'2"	0.56
77	Kakra Village Borewell	Kali Charan Patel	24°21'4"	79°57'24"	2.35
78	Kakra Village Borewell	Near Road (Khet)	24°21′9″	79°57'28"	2.3
79	Kakra Village Borewell	Sharda ,	24°21′23″	79° 57'1"	1.5
80	Kakra Village Dugwell	Shiv Kishor Tiwari	24°21′22"	79° 57'1"	1.70
81	Kakra Village Borewell	Rajbhan Singh	24°21′5"	79°57'26"	5.6
82	Kakra Village Borewell	Saki Bai Patel	24°21'4'	79°57′25″	1.8



Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

JAIPUR

Vibrant Techno Lab Pvt. Ltd.

9 SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

M bd@vibranttechnolab.com





83	Kakra Village Borewell	Near Road(Khet)	24°21′2"	79°57'21"	1.7
84	Kakra Village Borewell	Umer Kumar	24°21′1″	79°57'20"	2.13
85	Kakra Village Borewell	Dev Prabhakar	24°21′21″	79° 56'59''	2.16
86	Kakra Village Dugwll	Govt.	24° 21' 23"	79° 57' 8"	2.14
87	Bilha Village borewell	Rohit Tiwari	24° 23' 0"	24° 23' 0"	2.01
88	Jhagra Village Borewell	Dwarika Patel	24° 23' 22''	79° 59' 55"	9.12
89	Dharampura Village Dug well	Govt.	24° 23′ 38″	79° 58' 56"	1.15
90	Ramanpura Village Borewell	Cheta Chaoudhari	24° 22' 45"	79° 59' 2"	3.10
91	Saptaiya Village Borewell	Govt.	24°21'27"	80°3′54"	1.1
92	Saptaiya Village Borewell	Tunra Prasad Harwar	24°21'25"	80°3′54″	2.05
93	Judi Village Borewell	RamKishor	24°21'8"	79°59′53″	0.85
94	Judi Village Dug well	RamKishor	24°21′8"	79°59′53″	1.2
95	Judi Village Borewell	Ravi Shankar	24°21′23"	79°59′42"	3.2
96	Judi Village Borewell	Near Road	24°21'30"	79°59'52"	0.10
97	Judi Village Borewell	Ramrup	24°21'28"	79°59'26"	0.86
98	Judi Village Borewell	Hiralal Kushwaha	24°21′27"	79°59'25"	0.25
99	Judi Village Borewell	Ram Da al Kushwaha	24° 21' 31"	79° 59' 31"	2.72
100	Pgara village Borewell	Govt. Near School	24° 21′ 7″	79° 59' 53"	2.10
101	Pgara village Dugwell	Govt.	24° 21' 11"	80° 0' 3"	3.32
102	Pgara village Dugwell	Sukhdev Dube	24° 21' 8"	80° 0' 0''	5.32
103	Pgara village Borewell	Mohammad Khan	24° 21' 3"	80° 0' 0"	3.78
104	Security Barrack	Cement Plant	24.3305780	79.9779140	4.19
105	Piezometer (Nr.Kakra crusher area.)	Kakra Mines	24.329840	79.9713760	3.22
106	Piezometer (Nr.Kakra Mine Pit.)	Kakra Mines	24.346323	79.959719	2.76
107	Piezometer Koni Mine-1	Koni Mines	24.313389	79.932291	3.12
108	Piezometer Koni Mine-2	Koni Mines	24.319217	79.924886	3.19





RK Yadav Lab Incharge Authorized Signaton

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

### Vibrant Techno Lab Pvt. Ltd.

- 9 SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601



Annexure-7A

An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/W/24/05/17/N-027

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample

KAKRA MINE (BOREWELL - 01)

Sample Description

GROUND WATER

Date & Time of Sampling

15.05.2024

08:00 AM

Sample Collected by

VGL TEAM

Environmental Condition (Temp. & RH) Sample Packing

: 25.8 °C & 55%

: SEALED

Sample Id No.

: 027

Laboratory Sample Receiving Date

: 17.05.2024

**Duration of Sample Analysis** 

: 17.05.2024 TO 24.05.2024

Method of Sampling

APHA 1060B & 9060A

#### TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:199 (Reaff:2012)	
No.		2004 F-2004 F-20	VI-12-12-12-12-12-1		Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.36	140	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.1	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	148.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	405.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	160.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	28.4	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	21.7	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	16.0	mg/L	2	F4.
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	
13.	Sulfate	APHA 4500-SO42- E	22.4	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	9.0	mg/L	-	

Page 1 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only Review By:

Dr. Ashok Kumar

Fechnical Manager

Virat Global Lab **Authorized Signatory** 

d Signatory

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-027

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART - A (CHEMICAL)

TEST RESULTS

27.	Electrical Conductivity	APHA 2510 B	623	gS/cm	No relaxation	No relaxation
26.	Hexavalent Chromium	APHA 3500 B	N D	mg/L	0.001	No relaxation
25.	Fluoride	АРНА 4500-С	0.41	mg/L	1.0	1.5
24.	Zinc	APHA 31 II A+B	BDL	mg/L	5	15
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
22.	lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
21.	Iron	АРНА 3500?е В	0.21	mg/L	0.3	No relaxation
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
18.	Bomn	APHA 4500 BA+C	DDL	mg/L	0.5	1.0
17.	Qi bride	APHA 4500 Cl A+B	38.0	mg/L	250	1000
16.	Free Residual Chlorine	APHA 4500C1 B	<0.2	mg/L	0.2	1.0
15.	Nitrate	APHA 4500-NO3- B	7.8	mg/L	45.0	

Page 2 of 3

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Dr. Ashok Kumar Technical Manager

Review By:

Virat Global Lab **Authorized Signatory** 

> - Jodennes Authrfmed Signatory

D. K. Yadav Lab In-charge



An Analytical Laboratory

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TEST REPORT CODE: VGL/W/24/05/17/N-027

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART - B (BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Tremport in the Property of the	er IS 10500:1991 eaff:2012)
					Desirable	Permissible
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detec sample	table in any 100 ml

Page 3 of 3

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The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

d Signatory

Sayeed Ahmad Quality Manager



An Analytical faboratory

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TEST REPORT CODE: VGL/W/24/05/17/N-028

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.) VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample

KAKRA VILLAGE (HAND PUMP - 01)

Sample Description Date & Time of Sampling

**GROUND WATER** 

08:30 AM

Sample Collected by

15.05.2024

Environmental Condition (Temp. & RH)

VGL TEAM 25.5 °C & 55%

Sample Packing Sample Id No.

SEALED 028

Laboratory Sample Receiving Date

17.05.2024

**Duration of Sample Analysis** 

17.05.2024 TO 24.05.2024

Method of Sampling

APHA 1060B & 9060A

#### TECT DECLII TO

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.					Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.45	-	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.9	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	188.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	470.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	196.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	40.5	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	23.1	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	25.0	mg/L	-	-
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	2
13.	Sulfate	APHA 4500-SO42- E	32.9	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	10.0	mg/L	_	

Page 1 of 3

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Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab **Authorized Signatory** 

Authorised Signatory

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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(An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/W/24/05/17/N-028

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

27.	Electrical Conductivity	APHA 2510 B	721	pS/cm	No relaxation	No relaxation
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/I.	0.001	No relaxation
25.	Fluoride	АРНА 4500-С	0.64	mg/L.	1.0	1.5
24.	Zinc	APHA 31 II A+B	BDL	mg/L	5	15
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
22,	lead	APHA 3III A+B	BDL.	mg/L.	0.01	No relaxation
21.	Iron	АРНА 3500?еВ	0.16	mg/L	0.3	No relaxation
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
18.	Boron	APHA 4500 BA+C	BDL	mg/L	0.5	1.0
17.	Chloride	APHA 4500 Cl A+B	48.0	mg/L	250	1000
16.	Free Residual Chlorine	APHA 450OCl B	<0.2	mg/L	0.2	1.0
15.	Nitrate	APHA 4500-NO3- B	10.4	mg/L	45.0	

Page 2 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified
 Any discrepancy in test result should be reported within 15Days.

4 The above Results are related to the tested sample only

Revie\*, By:

Or A NioLe Kumar Tee Jin icat Manager Virat Global Lab Authorized Signatory

Authgm4d Signatory

D. K. Yadav Lab In-charge



An Analytical faboratory

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TEST REPORT CODE: VGL/W/24/05/17/N-028

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART - B (BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit		er IS 10500:1991 eaff:2012)
20020				Desirable	Permissible	
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detected sample	table in any 100 ml

Page 3 of 3

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- The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days. The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

d Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-014

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description : SAPTAI VILLAGE : GROUND WATER

Date & Time of Sampling

13.05.2024

24 08:10 AM

Sample Collected by

VGL STAFF

Environmental Condition (Temp. & RH)

: 26.8 °C & 58%

Sample Packing Sample Id No. : SEALED : 014

Laboratory Sample Receiving Date

: 17.05.2024

Duration of Sample Analysis

18.05.2024 TO 24.05.2024

Method of Sampling

: APHA 1060B & 9060A

#### TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.				2000000	Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.28	(4)	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.1	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	158	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	450	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	180	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	35.4	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	22.3	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	20.0	mg/L	-	-
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	[#]
13.	Sulfate	APHA 4500-SO42- E	32.4	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	10.0	mg/L	-	-

Page 1 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

(c) Law decrepancy in test result should be reported within 15Days. The above Benults are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-014

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

		ILS	I KESULIS			
15.	Nitrate	APHA 4500-NO3-B	8.9	mg/L	45.0	2
16.	Free Residual Chlorine	APHA 4500-CI B	<0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 Cl A+B	38.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0,5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	Iron	APHA 3500 FeB	0.21	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zinc	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	0.58	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510B	690	μS/cm	No relaxation	No relaxation
	-		0 2 61		-	

Page 2 of 3

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 The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL)
(An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/W/24/05/17/N-014

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART – B (BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	The state of the s	er IS 10500:1991 aff:2012)
				Desirable	Permissible	
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detection sample	table in any 100 ml

Page 3 of 3

#### Note

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- The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

4. The above Results are related to the tested sample only

Review By:

Dr. Ashok Kumar

Technical Manager

Virat Global Lab Authorized Signatory

Aumorised Signatory

Sayeed Ahmad Quality Manager



An Analytical Laboratory

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TEST REPORT CODE: VGL/W/24/05/17/N-015

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.) VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

09:50 AM

DISTT. - PANNA, (M.P)

Location of Sample

DNY WELL KAMTANA VILLAGE

Sample Description

GROUND WATER

Date & Time of Sampling

12.05.2024

VGL STAFF

Sample Collected by

Environmental Condition (Temp. & RH) Sample Packing

: 26.8 °C & 58%

: SEALED

Sample Id No.

: 015

Laboratory Sample Receiving Date **Duration of Sample Analysis** 

: 17.05.2024

Method of Sampling

18.05.2024 TO 24.05.2024 APHA 1060B & 9060A

TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.	000000000000000000000000000000000000000		nananana.		Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.65	2	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.8	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	160.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	440.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	172.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	40.1	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	17.5	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	18.0	mg/L	-	
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	
13.	Sulfate	APHA 4500-SO42- E	28.4	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	9.0	mg/L	-	-

Page 1 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified

Any discrepancy in test result should be reported within 15Days.

The above Possilts are related to the tested sample only Review By:

Luckdow Jr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-015

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

		* ****	I ILLISOLULIS			
15.	Nitrate *	APHA 4500-NO3- B	7.2	mg/L	45.0	
16.	Free Residual Chlorine	APHA 4500-Cl B	<0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 CI A+B	38.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	Iron	APHA 3500 FeB	0.10	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zinc	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	652	μS/cm	No relaxation	No relaxation

Page 2 of 3

#### Notes

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 The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab

**Authorized Signatory** 

Authorised Signator

D. K. Yadav Lab In-charge



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TEST REPORT CODE: VGL/W/24/05/17/N-015

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (WATER) PART – B (BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	and the state of t	er IS 10500:1991 aff:2012)
	10.				Desirable	Permissible
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detected sample	table in any 100 ml

Page 3 of 3

#### Note

- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising modia without our special permission in writing.
- 2. The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Vi Kithorted Signalono

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-016

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P) PURAINA VILLAGE

Location of Sample Sample Description

GROUND WATER

Date & Time of Sampling Sample Collected by

13.05.2024

08:30 AM

Environmental Condition (Temp. & RH)

VGL STAFF

: 26.8 °C & 58%

Sample Packing

: SEALED

Sample Id No. Laboratory Sample Receiving Date : 016

**Duration of Sample Analysis** 

: 17.05.2024 : 18.05.2024 TO 24.05.2024

Method of Sampling

: APHA 1060B & 9060A

#### TECT DECLIETE

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.	12 112-21-22-22				Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.60	12	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.5	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+ B	188	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	492	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	204	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	44.8	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	22.4	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	22.0	mg/L	-	-
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-SO42- E	32.4	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	10.0	mg/L	-	-

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Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

sed Signatory

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-016

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

15.	Nitrate '	APHA 4500-NO3- B	9.8	mg/L	45.0	
16.	Free Residual Chlorine	APHA 4500-C1B	< 0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 CI A+B	46.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	Iron	APHA 3500 FeB	BDL	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zinc	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	758	μS/cm	No relaxation	No relaxation

Page 2 of 3

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 Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab
Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge



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TEST REPORT CODE: VGL/W/24/05/17/N-016

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART - B (BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	CONTRACTOR OF THE PARTY OF THE	er IS 10500:1991 aff:2012)
2000				Desirable	Permissible	
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

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- The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Technical Manager

Authorized Signatory

Saveed Ahmad Quality Manager



An Analytical faboratory

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TEST REPORT CODE: VGL/W/24/05/17/N-017

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description PAGRA VILLAGE GROUND WATER

Date & Time of Sampling

13.05.2024

09:00 AM

Sample Collected by

VGL STAFF

Environmental Condition (Temp. & RH) Sample Packing : 26.8 °C & 58% : SEALED

Sample Id No.

: SEA

Laboratory Sample Receiving Date

: 17.05.2024

**Duration of Sample Analysis** 

: 18.05.2024 TO 24.05.2024

Method of Sampling

: APHA 1060B & 9060A

#### TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.			22330333		Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.69	-	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	26.2	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	160.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	441.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	140.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	30.8	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	15.3	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	20.0	mg/L	~	i e
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	•
13.	Sulfate	APHA 4500-SO42- E	28.5	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	9.0	mg/L	_	-

Page 1 of 3

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Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-017

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

15.	Nitrate '	APHA 4500-NO3- B	8.1	mg/L	45.0	
16.	Free Residual Chlorine	APHA 4500-C1 B	<0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 Cl A+B	38.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	Iron	APHA 3500 FeB	0.19	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zinc	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	682	μS/cm	No relaxation	No relaxation
	-		D 2 - 62	-	-1	

Page 2 of 3

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 The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab

**Authorized Signatory** 

Author sed Signatory

D. K. Yadav Lab In-charge



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TEST REPORT CODE: VGL/W/24/05/17/N-017

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART – B (BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit		er IS 10500:1991 aff:2012)
1101				Desirable	Permissible	
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detected sample	table in any 100 ml

Page 3 of 3

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The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.

3. Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-018

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description UDLA VILLAGE GROUND WATER

Date & Time of Sampling Sample Collected by

13.05.2024

09:30 AM

Environmental Condition (Temp. & RH)

VGL STAFF 26.8 °C & 56%

Sample Packing Sample Id No.

SEALED

Laboratory Sample Receiving Date

018 17.05.2024

**Duration of Sample Analysis** 

18.05.2024 TO 24.05.2024 APHA 1060B & 9060A

Method of Sampling

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.					Desirable	Permissible
1.	pH at 25 ℃	APHA 4500H+A+B	7.32	*	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.8	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+ B	140.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	395.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	156.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	28.4	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	20.7	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	15.0	mg/L	-	
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-SO42- E	22.9	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	8.0	mg/L	-	-

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Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab

Authorized Signatory Toporosci

Authorised Signatory

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-018

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

		1123	RESOLIS		-	
15.	Nitrate	APHA 4500-NO3- B	7.1	mg/L	45.0	4
16.	Free Residual Chlorine	APHA 4500-C1 B	<0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 Cl A+B	36.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	Iron	APHA 3500 FeB	0.22	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zinc	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	612	μS/cm	No relaxation	No relaxation
	- A		Press 2 of 3		-1	

Page 2 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.
 The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-018

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART – B (BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit		er IS 10500:1991 eaff:2012)
110.					Desirable	Permissible
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

No.

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media without our special permission in writing.

The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 3Days.

4. The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised dignatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-019

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description SOTIPURA VILLAGE GROUND WATER

Date & Time of Sampling

: 13.05.2024

09:50 AM

Sample Collected by

: VGL STAFF

Environmental Condition (Temp. & RH) Sample Packing

: 26.5 °C & 57% : SEALED

Sample Id No.

: 019

Laboratory Sample Receiving Date

: 17.05.2024

**Duration of Sample Analysis** 

: 18.05.2024 TO 24.05.2024

Method of Sampling

APHA 1060B & 9060A

#### TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.				10000000	Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.42		6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.2	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+ B	152.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	418.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	160.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	28.4	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	21.7	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	18.0	mg/L	-	-
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-SO42- E	29.5	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	10.0	mg/L	-	-

Page 1 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Duys. The above Results are related to the tested sample only

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

ised Signatory

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



An Analytical Laboratory

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(An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/W/24/05/17/N-019

TEST REPORT ISSUE DATE: 24.05,2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

No.	Vacanta and a second second				
Nitrate	APHA 4500-NO3- B	10.1	mg/L	45.0	12.7
Free Residual Chlorine	APHA 4500-Cl B	< 0.2	mg/L	0.2	1.0
Chloride	APHA 4500 CLA+B	38.0	mg/L	250	1000
Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
Iron	APHA 3500 FeB	0.22	mg/L	0.3	No relaxation
Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
Zinc	APHA 3111 A+B	BDL	mg/L	5	15
Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
Electrical Conductivity	APHA 2510 B	658	μS/cm	No relaxation	No relaxation
	Chloride  Boron  Copper Cadmium  Iron  Lead  Nickel  Zinc  Fluoride  Hexavalent Chromium	Chloride APHA 4500 C1 A+B  Boron APHA 4500 B A+C  Copper APHA 3111 A+B  Cadmium APHA 3111 A+B  Iron APHA 3500 Fe B  Lead APHA 3111 A+B  Nickel APHA 3111 A+B  Zinc APHA 3111 A+B  Fluoride APHA 4500-C  Hexavalent Chromium APHA 3500 B	Chloride         APHA 4500 CI A+B         38.0           Boron         APHA 4500 B A+C         BDL           Copper         APHA 3111 A+B         BDL           Cadmium         APHA 3111 A+B         BDL           Iron         APHA 3500 FeB         0.22           Lead         APHA 3111 A+B         BDL           Nickel         APHA 3111 A+B         BDL           Zinc         APHA 3111 A+B         BDL           Fluoride         APHA 4500-C         ND           Hexavalent Chromium         APHA 3500 B         ND	Chloride         APHA 4500 CI A+B         38.0         mg/L           Boron         APHA 4500 B A+C         BDL         mg/L           Copper         APHA 3111 A+B         BDL         mg/L           Cadmium         APHA 3111 A+B         BDL         mg/L           Iron         APHA 3500 Fe B         0.22         mg/L           Lead         APHA 3111 A+B         BDL         mg/L           Nickel         APHA 3111 A+B         BDL         mg/L           Zinc         APHA 3111 A+B         BDL         mg/L           Fluoride         APHA 4500-C         ND         mg/L           Hexavalent Chromium         APHA 3500 B         ND         mg/L           Electrical Conductivity         APHA 2510 B         658         μS/cm	Chloride         APHA 4500 CIA+B         38.0         mg/L         250           Boron         APHA 4500 B A+C         BDL         mg/L         0.5           Copper         APHA 3111 A+B         BDL         mg/L         0.05           Cadmium         APHA 3111 A+B         BDL         mg/L         0.003           Iron         APHA 3500 FeB         0.22         mg/L         0.3           Lead         APHA 3111 A+B         BDL         mg/L         0.01           Nickel         APHA 3111 A+B         BDL         mg/L         0.02           Zinc         APHA 3111 A+B         BDL         mg/L         5           Fluoride         APHA 4500-C         ND         mg/L         1.0           Hexavalent Chromium         APHA 3500 B         ND         mg/L         0.001           Electrical Conductivity         APHA 2510 B         658         μS/cm         No relaxation

Page 2 of 3

Note:

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 Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-019

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART - B (BIOLOGICAL)

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	The latest the control of the contro	er IS 10500:1991 aff:2012)
110.					Desirable	Permissible
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	'Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

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The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Virat Global Lab

**Authorized Signatory** 

Sayeon Ahmad Quality Manager

Review By:

Dr. Ashok Kumar Technical Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-020

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (WATER) PART – A (CHEMICAL)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description HINAUTA VILLAGE GROUND WATER

13 05 2024 10:15

Date & Time of Sampling Sample Collected by : 13.05.2024

10:15 AM

Sample Collected by

VGL STAFF

Environmental Condition (Temp. & RH) Sample Packing 26.5 °C & 57%

Sample Id No.

: SEALED

Sample Id No.

Laboratory Sample Receiving Date

: 020

Duration of Sample Analysis

: 17.05.2024 : 18.05.2024 TO 24.05.2024

Method of Sampling

: APHA 1060B & 9060A

#### TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.				25-60000	Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.18	-	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.1	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	138.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	390.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	154.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	26.5	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	21.3	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	18.0	mg/L	-	-
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-SO42- E	26.2	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	9.0	mg/L		-

Page 1 of 3

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2 The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorization

Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-020

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

Nitrate *	APHA 4500-NO3- B	9.2	mg/L	45.0	
Free Residual Chlorine	APHA 4500-Cl B	< 0.2	mg/L	0.2	1.0
Chloride	APHA 4500 CLA+B	30.0	mg/L	250	1000
Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
Iron	APHA 3500 FeB	0.21	mg/L	0.3	No relaxation
Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
Zinc	APHA 3111 A+B	BDL	mg/L	5	15
Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
Electrical Conductivity	APHA 2510 B	598	μS/cm	No relaxation	No relaxation
	Free Residual Chlorine Chloride Boron Copper Cadmium Iron Lead Nickel Zinc Fluoride Hexavalent Chromium	Free Residual Chlorine  APHA 4500-NO3-B  Chloride  APHA 4500-C1 B  APHA 4500 C1 A+B  Boron  APHA 4500 B A+C  Copper  APHA 3111 A+B  Iron  APHA 3111 A+B  Iron  APHA 3100 Fe B  Lead  APHA 3111 A+B  Nickel  APHA 3111 A+B  Zinc  APHA 3111 A+B  Fluoride  APHA 3111 A+B  Fluoride  APHA 3500 Fe  APHA 3111 A+B  APHA 3111 A+B	Nitrate         APHA 4500-NO3-B         9.2           Free Residual Chlorine         APHA 4500-CLB         <0.2	Nitrate         APHA 4500-NO3-B         9.2         mg/L           Free Residual Chlorine         APHA 4500-Cl B         <0.2	Nitrate         APHA 4500-NO3-B         9.2         mg/L         45.0           Free Residual Chlorine         APHA 4500-CLB         <0.2

Page 2 of 3

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 Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By: Dr. Ashok Kumar

Technical Manager

Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-020

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (WATER) PART – B (BIOLOGICAL)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Control of the Contro	er IS 10500:1991 eaff:2012)
					Desirable	Permissible
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

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media without our special permission in writing.

The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-021

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (WATER) PART – A (CHEMICAL)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description PURWA VILLAGE GROUND WATER

Date & Time of Sampling

14.05.2024 09:00 AM

Sample Collected by

VGL STAFF

Environmental Condition (Temp. & RH)

26.5 °C & 57%

Sample Packing Sample Id No. : SEALED : 021

**Laboratory Sample Receiving Date** 

: 17.05.2024

**Duration of Sample Analysis** 

: 18.05.2024 TO 24.05.2024

Method of Sampling

: APHA 1060B & 9060A

# TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.					Desirable	Permissible
1.	pHat 25 °C	APHA 4500H+A+B	7.35	-	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	25.9	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+ B	128.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	312.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	132.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	25.3	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	16.7	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	15.0	mg/L	-	
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-SO42- E	22.1	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	7.0	mg/L	-	

Page 1 of 3

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Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-021

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

1110	RESOLIS			
APHA 4500-NO3- B	5.9	mg/L	45.0	
APHA 4500-C1 B	<0.2	mg/L	0.2	1.0
APHA 4500 CI A+B	26.0	mg/L	250	1000
APHA 4500 B A+C	BDL	mg/L	0.5	1.0
APHA 3111 A+B	BDL	mg/L	0.05	1.5
APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
APHA 3500 FeB	0.22	mg/L	0.3	No relaxation
APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
APHA 3111 A+B	BDL	mg/L	5	15
APHA 4500-C	ND	mg/L	1.0	1.5
APHA 3500 B	ND	mg/L	0.001	No relaxation
APHA 2510 B	542	μS/cm	No relaxation	No relaxation
	APHA 2510 B	APHA 2510 B 542	SERVICE PROTECTION CONTROL CON	TURNSTANDAME. STATES SERVICE STATES SERVICES SER

Page 2 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Lughow Dr. Ashok Kumar

Technical Manager

Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-021

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (WATER) PART – B (BIOLOGICAL)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	The state of the s	er IS 10500:1991 aff:2012)
110.				Desirable	Permissible	
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

#### Note

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- 2. The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.
   The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar

Technical Manager

irathorized Signatory

Authorized Signatory

Sayeed Ahmad Quality Manager



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/W/24/05/17/N-022

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

09:30 AM

DISTT. - PANNA, (M.P)

Location of Sample

Sample Description

Date & Time of Sampling

Sample Collected by

Environmental Condition (Temp. & RH)

Sample Packing

Sample Id No.

Laboratory Sample Receiving Date **Duration of Sample Analysis** 

Method of Sampling

(A UNIT OF JK CEMENT LIMITED.)

**AMANGANJ** 

GROUND WATER

14.05.2024

: VGL STAFF

: 25.5 °C & 56%

: SEALED

: 022

: 17.05.2024

: 18.05.2024 TO 24.05.2024

: APHA 1060B & 9060A

#### TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.		310,510 (310) 510,510 (310)		TO SHOW THE STATE OF THE STATE	Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.36	9"	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	26.0	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	160.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	428.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	172.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	30.5	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	23.3	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	25.0	mg/L	-	-
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-SO42- E	23.4	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	12.0	mg/L	*	2

Page 1 of 3

The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days. The above Residts are related to the tested sample only

Review By:

Dr. Ashek Kumar Technical Manager Virat Global Lab Authorized Signatory

> ad Signatory Authori

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739

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TEST REPORT CODE: VGL/W/24/05/17/N-022

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

		IES	RESULIS			
15.	Nitrate '	APHA 4500-NO3-B	9.5	mg/L	45.0	
16.	Free Residual Chlorine	APHA 4500-CI B	<0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 Cl A+B	46.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	Iron	APHA 3500 Fe B	0.18	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zinc	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	667	μS/cm	No relaxation	No relaxation

Page 2 of 3

#### Note

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media without our special permission in writing.

2. The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.
 The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav

Lab In-charge



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TEST REPORT CODE: VGL/W/24/05/17/N-022

TEST REPORT ISSUE DATE: 24.05,2024

## TEST REPORT (WATER) PART – B (BIOLOGICAL)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	The state of the s	er IS 10500:1991 eaff:2012)
5355				Desirable	Permissible	
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

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- The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar

Technical Manager

Virat Global Lab Authorized Signatory

Authorised Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-023

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample

BHUPAT PURA VILLAGE

Sample Description

GROUND WATER

Date & Time of Sampling

12.05.2024

05:30 AM

Sample Collected by Environmental Condition (Temp. & RH) VGL STAFF

: 25.5 °C & 56%

Sample Packing

: SEALED

Sample Id No.

: 023

Laboratory Sample Receiving Date

17.05.2024

**Duration of Sample Analysis** 

18.05.2024 TO 24.05.2024

Method of Sampling

APHA 1060B & 9060A

### TEST RESULTS

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.	187383483483577777				Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.29	-	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	26.5	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	(+.)	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	192.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	526.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	224.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	46.8	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	26.0	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	19.0	mg/L		
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-SO42- E	28.0	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	11.0	mg/L	-	

Page 1 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified

Any discrepancy in test result should be reported within 15Days. The above Results are related to the tested sample only

Review By: Luc

Dr. Ashok Kumar Technical Manager Virat Global Lab **Authorized Signatory** 

sed Signatory

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-023

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

		165	I KESULIS			
15.	Nitrate '	APHA 4500-NO3-B	9.8	mg/L	45.0	
16.	Free Residual Chlorine	APHA 4500-CI B	<0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 Cl A+B	48.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	Iron	APHA 3500 FeB	0.19	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zine	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	841	μS/cm	No relaxation	No relaxation

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Any discrepancy in test result should be reported within 15Days.
 The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge



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TEST REPORT CODE: VGL/W/24/05/17/N-023

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART - B (BIOLOGICAL)

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit		er IS 10500:1991 aff:2012)
			Desirable	Permissible		
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

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- The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only

Review By:

Technical Manager

d Signatory

Saveed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-024

TEST REPORT ISSUE DATE: 24.05.2024

# TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description MAHODKH VILLAGE GROUND WATER

Date & Time of Sampling Sample Collected by

12.05.2024

05:50 AM

Environmental Condition (Temp. & RH)

: VGL STAFF

: 25.5 °C & 56%

Sample Packing

: SEALED

Sample Id No.

: 024

Laboratory Sample Receiving Date

: 17.05.2024

**Duration of Sample Analysis** Method of Sampling

: 18.05.2024 TO 24.05.2024 : APHA 1060B & 9060A

#### TECT DECID TO

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
No.					Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.35		6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	26.2	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+B	160.0	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	432.0	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	172.0	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	40.1	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	17.5	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	25.0	mg/L	-	-
12.	Phosphate	APHA 4500-PD	BDL	mg/L		-
13.	Sulfate	APHA 4500-SO42- E	36.2	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	11.0	mg/L	-	_

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days. the above Results are related to the tested sample only

Review By:

Luc

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-024

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

	* *243	· MEDUCETO	111		
Nitrate	APHA 4500-NO3-B	9.5	mg/L	45.0	
Free Residual Chlorine	APHA 4500-CI B	<0.2	mg/L	0.2	1.0
Chloride	APHA 4500 CLA+B	46.0	mg/L	250	1000
Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
Cadmium	APHA 3111 <b>A</b> +B	BDL	mg/L	0.003	No relaxation
Iron	APHA 3500 FeB	0.12	mg/L	0.3	No relaxation
Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
Zinc	APHA 3111 A+B	BDL	mg/L	5	15
Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
Electrical Conductivity	APHA 2510 B	697	μS/cm	No relaxation	No relaxation
	Free Residual Chlorine Chloride Boron Copper Cadmium Iron Lead Nickel Zinc Fluoride Hexavalent Chromium	Nitrate APHA 4500-NO3-B Free Residual Chlorine APHA 4500-C1 B Chloride APHA 4500 C1 A+B Boron APHA 4500 B A+C Copper APHA 3111 A+B Cadmium APHA 3111 A+B Iron APHA 3500 Fe B Lead APHA 3111 A+B Nickel APHA 3111 A+B Tinc APHA 3111 A+B Fluoride APHA 4500-C Hexavalent Chromium APHA 3500 B	Free Residual Chlorine  APHA 4500-C1B  Chloride  APHA 4500 C1A+B  46.0  Boron  APHA 4500 B A+C  BDL  Copper  APHA 3111 A+B  BDL  Iron  APHA 3111 A+B  BDL  Iron  APHA 3500 Fe B  0.12  Lead  APHA 3111 A+B  BDL  Nickel  APHA 3111 A+B  BDL  Zinc  APHA 3111 A+B  BDL  Zinc  APHA 3111 A+B  BDL  Fluoride  APHA 3500 B  ND	Nitrate APHA 4500-NO3-B 9.5 mg/L Free Residual Chlorine APHA 4500-C1B <0.2 mg/L Chloride APHA 4500-C1A+B 46.0 mg/L Boron APHA 4500 BA+C BDL mg/L 'Copper APHA 3111 A+B BDL mg/L Cadmium APHA 3111 A+B BDL mg/L Iron APHA 3500 Fe B 0.12 mg/L Lead APHA 3111 A+B BDL mg/L Nickel APHA 3111 A+B BDL mg/L  Nickel APHA 3111 A+B BDL mg/L Fluoride APHA 3111 A+B BDL mg/L Fluoride APHA 3111 A+B BDL mg/L Hexavalent Chromium APHA 3500 B ND mg/L	Nitrate         APHA 4500-NO3-B         9.5         mg/L         45.0           Free Residual Chlorine         APHA 4500-CIB         <0.2

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media without our special permission in writing.

The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.

4. The above Results are related to the tested sample only

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

> D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-024

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART – B (BIOLOGICAL)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	The state of the s	er IS 10500:1991 aff:2012)
110.					Desirable	Permissible
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

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- The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

4. The above Results are related to the tested sample only

Review By:

Dr. Ashok Kumar

Technical Manager

Virat Global Lab Authorized Signatory

Authorise Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-025

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description

UMRI VILLAGE GROUND WATER

Date & Time of Sampling Sample Collected by

12.05.2024

06:00 AM

Environmental Condition (Temp. & RH)

VGL STAFF : 25.5 °C & 56%

Sample Packing

SEALED

Sample Id No.

025

Laboratory Sample Receiving Date **Duration of Sample Analysis** 

17.05.2024 : 18.05.2024 TO 24.05.2024

Method of Sampling

APHA 1060B & 9060A

#### TROT DECLIETO

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)		
No.		100000000000000000000000000000000000000			Desirable	Permissible	
1.	pH at 25 °C	APHA 4500H+A+B	7.52	-	6.5-8.5	No relaxation	
2.	Temperature	APHA 2550-A+B	26.2	°C	Not Specified	Not Specified	
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15	
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5	
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable	
6.	Alkalinity	APHA 2320-A+ B	128.0	mg/L	200	600	
7.	Total Dissolved Solids	APHA2540-C	355.0	mg/L	500	2000	
8.	Total Hardness	APHA 2340 A+C	152.0	mg/L	200	600	
9.	Calcium	APHA 3500 Ca- A+B	28.4	mg/L	75	200	
10.	Magnesium	APHA 3500 Mg A+B	19.7	mg/L	30	100	
11.	Sodium	APHA 3500 Na, A+B	17.0	mg/L	-	-	
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-	
13.	Sulfate	APHA 4500-SO42- E	22.9	mg/L	200	400	
14.	Potassium	APHA 3500 K, A+B	8.0	mg/L	-	-	
				The store was a			

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days. The above Results are related to the tested sample only

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab **Authorized Signatory** ware?

> Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-025

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (WATER) PART – A (CHEMICAL)

TEST RESULTS

		1.633	LESULIS			
15.	Nitrate '	APHA 4500-NO3-B	7.2	mg/L	45.0	
16.	Free Residual Chlorine	APHA 4500-CI B	< 0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 CI A+B	32.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	Iron	APHA 3500 Fe B	0.12	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zinc	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	546	μS/cm	No relaxation	No relaxation

Page 2 of 3

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2 The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.
 The above Results are related to the tested sample only.

Review By:

Luck

Dr. Ashok-Kumar Technical Manager Virat Global Lab Authorized Signatory

> Authorised Signatory D. K. Yadav

Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-025

TEST REPORT ISSUE DATE: 24.05.2024

# TEST REPORT (WATER) PART – B (BIOLOGICAL)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit		er IS 10500:1991 eaff:2012)
7,372					Desirable	Permissible
1	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of .

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  media without our special permission in writing.
- media without our special permission in writing.

  The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-026

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, (M.P)

Location of Sample Sample Description HARDUA VILLAGE

**GROUND WATER** Date & Time of Sampling 12.05.2024 06:35 AM

Sample Collected by

VGL STAFF

Environmental Condition (Temp. & RH) Sample Packing

25.5 °C & 56% : SEALED

Sample Id No.

026

Laboratory Sample Receiving Date **Duration of Sample Analysis** 

: 17.05.2024

Method of Sampling

18.05.2024 TO 24.05.2024 APHA 1060B & 9060A

Sr.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)		
No.					Desirable	Permissible	
1.	pH at 25 °C	APHA 4500H+A+B	7.42	-	6.5-8.5	No relaxation	
2.	Temperature	APHA 2550-A+B	26.2	°C	Not Specified	Not Specified	
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15	
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	I	5	
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable	
6.	Alkalinity	APHA 2320-A+B	168.0	mg/L	200	600	
7.	Total Dissolved Solids	APHA2540-C	435.0	mg/L	500	2000	
8.	Total Hardness	APHA 2340 A+C	172.0	mg/L	200	600	
9.	Calcium	APHA 3500 Ca- A+B	42.1	mg/L	75	200	
10.	Magnesium	APHA 3500 Mg A+B	16.3	mg/L	30	100	
11.	Sodium	APHA 3500 Na, A+B	20.0	mg/L	-	-	
12.	Phosphate	APHA 4500-PD	BDL	mg/L	-	-	
13.	Sulfate	APHA 4500-SO42- E	25.1	mg/L	200	400	
14.	Potassium	APHA 3500 K, A+B	10.0	mg/L		-	

Page I of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified

Any discrepancy in test result should be reported within 15Days. The above Results are related to the tested sample only

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522 -7118739



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/W/24/05/17/N-026

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (WATER) PART - A (CHEMICAL)

TEST RESULTS

		* ***	RESULIS			
15.	Nitrate	APHA 4500-NO3-B	9.2	mg/L	45.0	
16.	Free Residual Chlorine	APHA 4500-Cl B	<0.2	mg/L	0.2	1.0
17.	Chloride	APHA 4500 Cl A+B	28.0	mg/L	250	1000
18.	Boron	APHA 4500 B A+C	BDL	mg/L	0.5	1.0
19.	Copper	APHA 3111 A+B	BDL	mg/L	0.05	1.5
20.	Cadmium	APHA 3111 A+B	BDL	mg/L	0.003	No relaxation
21.	iron	APHA 3500 FeB	BDL	mg/L	0.3	No relaxation
22.	Lead	APHA 3111 A+B	BDL	mg/L	0.01	No relaxation
23.	Nickel	APHA 3111 A+B	BDL	mg/L	0.02	No relaxation
24.	Zinc	APHA 3111 A+B	BDL	mg/L	5	15
25.	Fluoride	APHA 4500-C	ND	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	ND	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	680	μS/cm	No relaxation	No relaxation

Page 2 of 3

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager irat Global Lab Authorized Signatory

Authorised Signatory D. K. Yadav

Lab In-charge



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL)
(An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

TEST REPORT CODE: VGL/W/24/05/17/N-026

TEST REPORT ISSUE DATE: 24.05.2024

TEST REPORT (WATER) PART – B (BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit		er IS 10500:1991 aff:2012)
					Desirable	Permissible
1.	Total Coliform Count	APHA 9221 B	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	
2.	Fecal coliform	APHA 9221 E	<2.0	MPN/100 ML	Shall not be detectable in any 100 ml sample	

Page 3 of 3

#### Note:

- This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising
  media without our special permission in writing.
- media without our special permission in writing.

  The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

4. The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

Sayeed Ahmad Quality Manager



Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/W/01-02

M/s JK Cement Works, Panna (A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

**Ground Water** 

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.:

VTL/W/2408300001-02

Format No.:

7.8 F-01 NIL.

Party Reference No.: Report Date:

20/09/2024

Period of Analysis: Receipt Date:

30/08/2024 to 20/09/2024 30/08/2024

Sampling Date: Sampling Quantity: 25/08/2024 2.0Ltr.+ 250 ml

Sampling Type:

Grab

	Parameters			MARKO LINES		Limits of 15	Limits of IS:10500-2012	
S.No.			Saptai Village	Dny Wel Kamtana Village	Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source	
1	pH (at 25°C)	IS 3025 (Part 11): 2022	7.32	7.29	**	6.5 to 8.5	No Relaxation	
2	Colour	IS 3025 (Part 4) : 2021	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	Hazen	5	15	
3	Turbidity	IS 3025 (Part 10): 2023	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	NTU	1	5	
4	Odour	IS 3025 (Part 5) ; 2018	Agreeable	Agreeable	#	Agreeable	Agreeable	
5	Temperature	IS 3025 (Part 9): 2023	24.2	24.5	-	24	144	
6	Total Hurdness as CaCO <sub>3</sub>	IS 3025 (Part 21): 2009, RA: 2019	121.0	142.0	mg/l	200	600	
7	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	32.0	37.0	mg/l	75	200	
8	Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23): 2023	72.16	64.18	mg/l	200	600	
9	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	67.49	58.21	mg/l	250	1000	
10	Residual free Chlorine	IS 3025 (Part 26) : 2021 Clause 7.0	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.2	1	
11	Phosphate	IS 3025 (Part 31)	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	10.		
12	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B. Calculation Method	10.0	12.07	mg/l	30	100	
13	Total Dissolved Solids	IS 3025 (Part 16) :2023	515.0	459.0	mg/l	500	2000	
14	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24/Sec 1) : 2022 Clause 5.0	42.19	38.54	mg/l	200	400	
15	Fluoride as F	APHA, 24th Edition, 4500F-D: 2023	0.38	0.32	mg/l	1.0	1.5	
16	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1) : 2023 Clause 6.4	10.24	9.68	mg/l	45	No Relaxatio	
17	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.18	0.16	mg/l	1.0	No Relaxatio	
18	Potassium	APHA 24th Edition, 3500 K, A+B	12.53	10.37	mg/l	10	24	
19	Boron	APHA, 24th Edition, 4500 B-C: 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.5	2.4	
20	Hexavalent Chromium as Cr+6	APHA, 24th Edition, 3500 Cr- B	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxatio	
21	Nickel	APHA, 24th Edition, 3111 B: 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.02	No Relaxatio	
22	Electrical Conductivity	IS 3025 (Part 14)	810	715	μs/cm	**	**	
23	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	5	15	
24	Copper as Cu	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	1.5	
25	Cadmium as Cd	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	*BLQ(**LOQ 0.002)	mg/l	0.003	No Relaxatio	
26	Lead as Pb	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.005)	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxatio	
27	Total Coliform	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100 ml	Shall not be	Detectable in	
28	E. Coli	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100 ml	Shall not be Detectable in Any 100 ml sample		





**RK Yadav** Lab Incharge Authorized Signatory

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com







Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/ W/03-04

M/s JK Cement Works, Panna (A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

**Ground Water** 

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.: Format No.:

Report Date:

VTL/W/2408300003-04

7.8 F-01

NIL

20/09/2024

Period of Analysis:

Party Reference No.:

30/08/2024 to 20/09/2024 30/08/2024

Receipt Date: Sampling Date:

25/08/2024

Sampling Quantity: Samp

2.0Ltr.+ 250 ml

ab

ling	Type:	Gra

						Limits of IS	5:10500-2012
S.No.	Parameters	Test-Method	Puraina Village	Pagra Village	Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source
1	pH (at 25°C)	IS 3025 (Part 11): 2022	7.41	7.35	111	6.5 to 8.5	No Relaxation
2	Colour	IS 3025 (Part 4): 2021	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	Hazen	5	15
3	Turbidity	IS 3025 (Part 10): 2023	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	NTU	1	5
4	Odour	IS 3025 (Part 5): 2018	Agreeable	Agreeable		Agreeable	Agreeable
5	Temperature	IS 3025 (Part 9): 2023	24.2	24.4	**	**	
6	Total Hurdness as CaCO <sub>3</sub>	IS 3025 (Part 21): 2009, RA: 2019	185.0	192.0	mg/l	200	600
7	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	52.0	54.0	mg/l	75	200
8	Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23) : 2023	56.31	60.30	mg/l	200	600
9	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	72.15	92.56	mg/l	250	1000
10	Residual free Chlorine	IS 3025 (Part 26): 2021 Clause 7.0	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.2	1
11	Phosphate	IS 3025 (Part 31)	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l		
12	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B, Calculation Method	13.43	13.92	mg/l	30	100
13	Total Dissolved Solids	IS 3025 (Part 16) :2023	580.0	658.0	mg/l	500	2000
14	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24/Sec 1): 2022 Clause 5.0	54.27	58.29	mg/l	200	400
15	Fluoride as F	APHA, 24th Edition, 4500F-D: 2023	0.40	0.38	mg/l	1.0	1.5
16	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1): 2023 Clause 6.4	13.82	16.84	mg/l	45	No Relaxation
17	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.24	0.28	mg/l	1.0	No Relaxation
18	Potassium	APHA 24th Edition, 3500 K, A+B	12.1	17.7	mg/l		64
19	Boron	APHA, 24th Edition, 4500 B-C: 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.5	2.4
20	Hexavalent Chromium as Cr+6	APHA, 24th Edition, 3500 Cr- B	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
21	Nickel	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.02	No Relaxation
22	Electrical Conductivity	IS 3025 (Part 14)	895	1030	µs/cm		**
23	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	5	15
24	Copper as Cu	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	1.5
25	Cadmium as Cd	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	*BLQ(**LOQ 0.002)	mg/l	0.003	No Relaxation
26	Lead as Pb	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.005)	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
27	Total Coliform	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100 ml	Shall not be	Detectable in
28	E. Colí	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100 ml		ml sample

\*BLQ-Below Limit of Quantification, \*\*LOQ-Limit of Quantification.





**RK Yadav** Lab Incharge Authorized Signatory

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com





Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/ W/05-06

M/s JK Cement Works, Panna (A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

**Ground Water** 

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.:

VTL/W/2408300005-06

Format No.:

7.8 F-01

Party Reference No.: Report Date:

NIL

Period of Analysis:

20/09/2024 30/08/2024 to 20/09/2024

Receipt Date:

30/08/2024

Sampling Date: Sampling Quantity: 25/08/2024

Sampling Type:

2.0Ltr.+ 250 ml

Grab

			BOTH STATE OF THE			Limits of IS	mits of IS:10500-2012	
S.No.	Parameters	Test-Method	Udla Village	Sotipura Village	Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source	
1	pH (at 25°C)	IS 3025 (Part 11) : 2022	7.26	7.38	**	6.5 to 8.5	No Relaxation	
2	Colour	IS 3025 (Part 4) : 2021	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	Hazen	5	15	
3	Turbidity	IS 3025 (Part 10): 2023	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	NTU	1	5	
4	Odour	IS 3025 (Part 5) : 2018 🕝	Agreeable	Agreeable		Agreeable	Agreeable	
5	Temperature	IS 3025 (Part 9) : 2023	24.1	24.3			**	
6	Total Hurdness as CaCO <sub>3</sub>	IS 3025 (Part 21): 2009, RA: 2019	152.0	132.0	mg/l	200	600	
7	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	48.0	41.0	mg/l	75	200	
8	Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23): 2023	52.8	49.2	mg/l	200	600	
9	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	62.1	57.3	mg/l	250	1000	
10	Residual free Chlorine	IS 3025 (Part 26) : 2021 Clause 7.0	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.2	1	
11	Phosphate	IS 3025 (Part 31)	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	**		
12	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B, Calculation Method	7.83	7.22	mg/l	30	100	
13	Total Dissolved Solids	IS 3025 (Part 16) :2023	511	578	mg/l	500	2000	
14	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24/Sec 1) : 2022 Clause 5.0	39.71	48.55	mg/l	200	400	
15	Fluoride as F	APHA, 24th Edition, 4500F-D : 2023	0.37	0.41	mg/l	1.0	1.5	
16	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1) : 2023 Clause 6.4	10.87	12.45	mg/l	45	No Relaxation	
17	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.18	0.25	mg/l	1.0	No Relaxation	
18	Potassium	APHA 24th Edition, 3500 K, A+B	9.67	13.27	mg/l	**		
19	Boron	APHA, 24th Edition, 4500 B-C: 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.5	2.4	
20	Hexavalent Chromium as Cr+6	APHA, 24th Edition, 3500 Cr- B	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation	
21	Nickel	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0 2)	mg/l	0.02	No Relaxation	
22	Electrical Conductivity	IS 3025 (Part 14)	790	895	µs/cm	, bet	**	
23	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**L00 0.2)	*BLQ(**LOQ 0.2)	mg/l	5	15	
24	Copper as Cu	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/I	0.05	1.5	
25	Cadmium as Cd	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	*BLQ(**LOQ 0.002)	mg/l	0.003	No Relaxation	
26	Lead as Pb	APHA, 24th Edition, 3111 B: 2023	*BLQ(**LOQ 0.005)	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation	
27	Total Coliform	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100			
28	E. Coli	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100 ml		Detectable in ml sample	

\*BLQ-Below Limit of Quantification, \*\*LOQ-Limit of Quantification.





RK Yadav Lab Incharge **Authorized Signatory** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com



Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/W/07-08

M/s JK Cement Works, Panna (A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

Ground Water

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.: Format No.:

Report Date:

VTL/W/2408300007-08

7.8 F-01

NIL

Party Reference No.:

20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024 30/08/2024

Receipt Date: Sampling Date:

25/08/2024

Sampling Quantity:

2.0Ltr.+ 250 ml

Samp

ab

ling	Type:	Gra
ning	Type:	GF

S.No.		STORY OF THE REST		Maria Cara Cara Cara Cara Cara Cara Cara	FE T	Limits of IS	:10500-2012
	Parameters			Purwa Village	Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source
1	pH (at 25°C)	IS 3025 (Part 11) : 2022	7.41	7.38	8.6	6.5 to 8.5	No Relaxation
2	Colour	IS 3025 (Part 4): 2021	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	Hazen	5	15
3	Turbidity	IS 3025 (Part 10): 2023	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	NTU	1	5
4	Odour	IS 3025 (Part 5) : 2018	Agreeable	Agreeable		Agreeable	Agreeable
5	Temperature	IS 3025 (Part 9) : 2023	24.5	24.2	**		
6	Total Hurdness as CaCO <sub>3</sub>	IS 3025 (Part 21): 2009, RA: 2019	162.0	148.0	mg/l	200	600
7	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	46.0	43.0	mg/l	75	200
8	Alkalinity as CaCO <sub>1</sub>	IS 3025 (Part 23) : 2023 🗼	55.72	49.83	mg/l	200	600
9	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	76.18	66.54	mg/l	250	1000
10	Residual free Chlorine	IS 3025 (Part 26) : 2021 Clause 7.0	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/I	0.2	1
11	Phosphate	IS 3025 (Part 31)	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l		(44)
12	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B, Calculation Method	11.48	9.89	mg/l	30	100
13	Total Dissolved Solids	IS 3025 (Part 16) :2023	486.0	512.0	mg/l	500	2000
14	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24/Sec 1): 2022 Clause 5.0	47.0	42.6	mg/l	200	400
15	Fluoride as F	APHA, 24th Edition, 4500F-D: 2023	0.38	0.37	mg/l	1.0	1.5
16	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1) : 2023 Clause 6.4	13.64	10.75	mg/l	45	No Relaxation
17	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.17	0.15	mg/l	1.0	No Relaxation
18	Potassium	APHA 24th Edition, 3500 K, A+B	16.7	13,4	mg/l		
19	Boron	APHA, 24th Edition, 4500 B-C: 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.5	2.4
20	Hexavalent Chromium as Cr+6	APHA, 24th Edition, 3500 Cr- B	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
21	Nickel	APHA, 24 <sup>th</sup> Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.02	No Relaxation
22	Electrical Conductivity	IS 3025 (Part 14)	752	790	μs/cm	**	**
23	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	5	15
24	Copper as Cu	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	1.5
25	Cadmium as Cd	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	*BLQ(**LOQ 0.002)	mg/l	0.003	No Relaxation
26	Lead as Pb	APHA, 24th Edition, 3111 B: 2023	*BLQ(**LOQ 0.005)	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
27	Total Coliform	IS 15185 : 2016, RA 2021 *	Absent	Absent	Per 100 ml		
28	E. Coli	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100 ml	Shall not be Detectable in Any 100 ml sample	





**RK Yadav** Lab Incharge **Authorized Signatory** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com



Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/ W/09-10

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

Panna

Ground Water

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.: Format No.: VTL/W/2408300009-10

7.8 F-01

NIL

Party Reference No.: Report Date:

20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024 30/08/2024

Receipt Date:

Sampling Date: Sampling Quantity: Sampling Type:

25/08/2024 2.0Ltr.+ 250 ml

Grab

					5	Limits of IS:10500-2012		
No.	Parameters	Test-Method	Amanganj	Bhupatpura Village	Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source	
1	pH (at 25°C)	IS 3025 (Part 11): 2022	7.34	7.42		6.5 to 8.5	No Relaxation	
2	Colour	IS 3025 (Part 4): 2021	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	Hazen	5	15	
3	Turbidity	IS 3025 (Part 10): 2023	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	NTU	1	5	
			41	and and sind	11111			

S.No.	Parameters	Test-Method	Amanganj	Village	Unit	Requirement (Acceptable Limits)	Limit in the Absence of Alternate Source
1	pH (at 25°C)	IS 3025 (Part 11) : 2022	7.34	7.42		6.5 to 8.5	No Relaxation
2	Colour	IS 3025 (Part 4): 2021	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	Hazen	5	15
3	Turbidity	IS 3025 (Part 10) : 2023	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	NTU	1	5
4	Odour	IS 3025 (Part 5): 2018	Agreeable	Agreeable	++	Agreeable	Agreeable
5	Temperature	IS 3025 (Part 9): 2023	24.1	24.5	77	**	**
6	Total Hurdness as CaCO <sub>3</sub>	IS 3025 (Part 21): 2009, RA: 2019	185.0	197.0	mg/l	200	600
7	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	52.0	55.0	mg/l	75	200
8	Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23): 2023	72.82	86.31	mg/l	200	600
9	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	85.46	92.38	mg/I	250	1000
10	Residual free Chlorine	IS 3025 (Part 26) : 2021 Clause 7.0	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.2	1
11	Phosphate	IS 3025 (Part 31)	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l		
12	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B, Calculation Method	13.43	14.53	mg/l	30	100
13	Total Dissolved Solids	IS 3025 (Part 16) :2023	590.0	645.0	mg/l	500	2000
14	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24/Sec 1) : 2022 Clause 5.0	48.76	52.69	mg/l	200	400
15	Fluoride as F	APHA, 24th Edition, 4500F-D : 2023	0.39	0.42 mg/l		1.0	1.5
16	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1) : 2023 Clause 6.4	11.78	17.48	The state of the s		No Relaxation
17	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.19	0.24	mg/l	1.0	No Relaxation
18	Potassium	APHA 24th Edition, 3500 K, A+B	12.54	16.20	mg/l	24	**
19	Boron	APHA, 24th Edition, 4500 B-C : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.5	2.4
20	Hexavalent Chromium as Cr+6	APHA, 24th Edition, 3500 Cr- B	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
21	Nickel	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.02	No Relaxation
22	Electrical Conductivity	IS 3025 (Part 14)	930	1010	μs/cm		
23	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**L00 0.2)	*BLQ(**LOQ 0.2)	mg/l	5	15
24	Copper as Cu	APHA, 24th Edition, 3111 B: 2023	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	1.5
25	Cadmium as Cd	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	*BLQ(**LOQ 0.002)	mg/l	0,003	No Relaxation
26	Lead as Pb	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.005)	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
27	Total Coliform	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100		
28	E. Coli	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100 Any 100 ml sai		

<sup>\*</sup>BLQ-Below Limit of Quantification, \*\*LOQ-Limit of Quantification.





**RK Yadav** Lab Incharge Authorized Signatory

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**3** 0141-2954638

bd@vibranttechnolab.com



Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/W/11-12

M/s |K Cement Works, Panna (A Unit Of |K Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

**Ground Water** 

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.:

VTL/W/2408300011-12

Format No.: 7.8 F-01

Party Reference No.: Report Date:

NIL 20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024

Receipt Date:

30/08/2024

Sampling Date:

25/08/2024

Sampling Quantity: Samp

2.0Ltr.+ 250 ml

rab

pling Type:	Gr
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S.No.			A THE			Limits of IS:10500-2012	
	Parameters			Umri Village	Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source
1	pH (at 25°C)	IS 3025 (Part 11): 2022	7.45	7.32		6.5 to 8.5	No Relaxation
2	Colour	IS 3025 (Part 4): 2021	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	Hazen	5	15
3	Turbidity	IS 3025 (Part 10): 2023	*BLQ(**LOQ 1.0)	*BLQ(**LOQ 1.0)	NTU	1	5
4	Odour	IS 3025 (Part 5): 2018	Agreeable	Agreeable		Agreeable	Agreeable
5	Temperature	IS 3025 (Part 9): 2023	24.3	24.7	77	**	
6	Total Hurdness as CaCO <sub>3</sub>	IS 3025 (Part 21): 2009, RA: 2019	158.0	173.0	mg/I	200	600
7	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	49.0	54.0	mg/l	75	200
8	Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23): 2023	56.81	68.37	mg/l	200	600
9	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	79.63	92.57	mg/l	250	1000
10	Residual free Chlorine	IS 3025 (Part 26) : 2021 Clause 7.0	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.2	1
11	Phosphate	IS 3025 (Part 31)	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	1,7150	
12	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B, Calculation Method	8.69	9.30	mg/l	30	100
13	Total Dissolved Solids	IS 3025 (Part 16) :2023	487.0	574.0	mg/l	500	2000
14	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24/Sec 1) : 2022 Clause 5.0	51.37	56.78	mg/l	200	400
15	Fluoride as F	APHA, 24th Edition, 4500F-D : 2023	0.32	0.43	mg/l	1.0	1.5
16	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1): 2023 Clause 6.4	17.84	12.50	mg/l	45	No Relaxation
17	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.16	0.32	mg/l	1.0	No Relaxation
18	Potassium	APHA 24th Edition, 3500 K, A+B	16.89	19.67	mg/l	**	**
19	Boron	APHA, 24th Edition, 4500 B-C : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	0.5	2.4
20	Hexavalent Chromium as Cr+6	APHA, 24 <sup>th</sup> Edition, 3500 Cr- B	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
21	Nickel	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/I	0.02	No Relaxation
22	Electrical Conductivity	IS 3025 (Part 14)	760	910	μs/cm		3463
23	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	*BLQ(**LOQ 0.2)	mg/l	5	15
24	Copper as Cu	APHA, 24th Edition, 3111 B: 2023	*BLQ(**LOQ 0.02)	*BLQ(**LOQ 0.02)	mg/l	0.05	1.5
25	Cadmium as Cd	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	*BLQ(**LOQ 0.002)	mg/l	0.003	No Relaxation
26	Lead as Pb	APHA, 24th Edition, 3111 B: 2023	*BLQ(**LOQ 0.005)	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
27	Total Coliform	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100		
28	E. Coli	IS 15185 : 2016, RA 2021	Absent	Absent	Per 100 ml	Shall not be Detectable in Any 100 ml sample	





**RK Yadav** Lab Incharge

Authorized Signatory

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

# Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**3 0141-2954638** 

bd@vibranttechnolab.com



Sample Description:

Sample Collected by:

Parameter Required:

Sampling and Analysis Protocol:

Preservation:

VTL/W/13

M/s JK Cement Works, Panna (A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

**Ground Water** 

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.: Format No.: VTL/W/2408300013

7.8 F-01

Party Reference No.:

NIL

Report Date:

20/09/2024

Period of Analysis: Receipt Date:

30/08/2024 to 20/09/2024 30/08/2024

Sampling Date:

25/08/2024

Sampling Quantity:

2.0Ltr.+ 250 ml

Sampling Type:

Grab

S.No.	Parameters Test-Method			Limits of IS: 10500-		
		Parameters Test-Method		Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source
1	pH (at 25°C)	IS 3025 (Part 11) : 2022	7.52	***	6.5 to 8.5	No Relaxatio
2	Colour	IS 3025 (Part 4) : 2021	*BLQ(**LOQ 1.0)	Hazen	5	15
3	Turbidity	IS 3025 (Part 10) : 2023	*BLQ(**LOQ 1.0)	NTU	1	5
4	Odour	IS 3025 (Part 5) : 2018	Agreeable	***	Agreeable	Agreeable
5	Temperature	IS 3025 (Part 9) : 2023	24.4	**	**	**
6	Total Hurdness as CaCO <sub>1</sub>	IS 3025 (Part 21) : 2009, RA : 2019	192.0	mg/l	200	600
7	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	57.0	mg/l	75	200
8	Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23) : 2023	73.62	mg/l	200	600
9	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	95.61	mg/l	250	1000
10	Residual free Chlorine	IS 3025 (Part 26) : 2021 Clause 7.0	*BLQ(**LOQ 0.2)	mg/l	0.2	1
11	Phosphate	IS 3025 (Part 31)	*BLQ(**LOQ 0.02)	mg/l	140	
12	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B, Calculation Method	12.10	mg/l	30	100
13	Total Dissolved Solids	IS 3025 (Part 16) :2023	720.0	mg/l	500	2000
14	Sulphate as SO₄	IS 3025 (Part 24/Sec 1): 2022 Clause 5.0	68.49	mg/l	200	400
15	Fluoride as F	APHA, 24th Edition, 4500F-D: 2023	0.52	mg/l	1.0	1.5
16	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1) : 2023 Clause 6.4	25.61	mg/l	45	No Relaxation
17	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.33	mg/l	1.0	No Relaxation
18	Potassium	APHA 24th Edition, 3500 K, A+B	26.34	mg/l	-14	
19	Boron	APHA, 24th Edition, 4500 B-C : 2023	*BLQ(**L0Q 0.2)	mg/l	0.5	2.4
20	Hexavalent Chromium as Cr+6	APHA, 24th Edition, 3500 Cr- B	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
21	Nickel	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	mg/l	0.02	No Relaxation
22	Electrical Conductivity	IS 3025 (Part 14)	1160	μs/cm	++	***
23	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	mg/l	5	15
24	Copper as Cu	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.02)	mg/l	0.05	1.5
25	Cadmium as Cd	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	mg/l	0.003	No Relaxation
26	Lead as Pb	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
27	Total Coliform	IS 15185 : 2016, RA 2021	Absent	Per 100	Va-22 (A) (1) (A) (A)	
28	E. Coli	IS 15185 : 2016, RA 2021	Absent	Per 100 ml	Shall not be Detectable in Any 100 ml sample	





**RK Yadav** Lab Incharge **Authorized Signatory** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com



Sample Number:

Name & Address of the Party:

Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/W/05-06

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

**Ground Water** 

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.:

VTL/W/2408300015

Format No.: Party Reference No.: 7.8 F-01 NIL

Report Date:

20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024

Receipt Date: Sampling Date: 30/08/2024 25/08/2024

Sampling Quantity:

2.0Ltr.+ 250 ml

Sampling Ty

ype:	Gra

LEV					Limits of IS:10500-2012	
S.No. Parameters		Kakra Mine Borewell	Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source	
1.	pH (at 25°C)	IS 3025 (Part 11) : 2022	7.06		6.5 to 8.5	No Relaxation
2.	Colour	IS 3025 (Part 4) : 2021	*BLQ(**LOQ 1.0)	Hazen	5	15
3.	Turbidity	IS 3025 (Part 10): 2023	*BLQ(**LOQ 1.0)	NTU	1	5
4.	Odour	IS 3025 (Part 5) : 2018	Agreeable	- 10	Agreeable	Agreeable
5.	Taste	IS 3025 (Part 8): 2023	Agreeable		Agreeable	Agreeable
6.	Total Hurdness as CaCO <sub>3</sub>	IS 3025 (Part 21): 2009, RA: 2019	180.90	mg/l	200	600
7.	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	55.40	mg/l	75	200
8.	Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23) : 2023	75.20	mg/l	200	600
9,	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	66.25	mg/l	250	1000
10.	Residual free Chlorine	IS 3025 (Part 26) : 2021 Clause 7.0	*BLQ(**LOQ 0.2)	mg/l	0.2	1
11.	Cyanide as CN	IS 3025 (Part 27/Sec 1): 2022	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
12.	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B, Calculation Method	10.37	mg/l	30	100
13.	Total Dissolved Solids	IS 3025 (Part 16) :2023	515	mg/l	500	2000
14.	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24/Sec 1) : 2022 Clause 5.0	55.50	mg/l	200	400
15.	Fluoride as F	APHA, 24th Edition, 4500F-D : 2023	0.52	mg/l	1.0	15
16.	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1): 2023 Clause 6.4	15.20	mg/l	45	No Relaxation
17.	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.22	mg/l	1.0	No Relaxation
18.	Aluminium as Al	IS 3025 (Part 55) : 2003, RA : 2019	*BLQ(**LOQ 0.03)	mg/l	0.03	0.2
19.	Boron	APHA, 24th Edition, 4500 B-C : 2023	*BLQ(**LOQ 0.2)	mg/l	0.5	2.4
20.	Total Chromium as Cr	APHA, 24th Edition, 3111 B: 2023	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
21.	Phenolic compound as C <sub>6</sub> H <sub>5</sub> OH	APHA, 24th Edition, 5530 C : 2023	*BLQ(**LOQ 0.001)	mg/l	0.001	0.002
22.	Anionic Detergent as MBAS	IS 3025 (Part 68): 2019	*BLQ(**LOQ 0.05)	mg/l	0.2	1.0
23.	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	mg/l	5	15
24.	Copper as Cu	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.02)	mg/l	0.05	1.5
25.	Manganese as Mn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOO 0.05)	mg/l	0.1	0.3
26.	Cadmium as Cd	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	mg/l	0.003	No Relaxation
27.	Lead as Pb	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
28.	Selenium as Se	APHA, 24th Edition, 3114 C : 2023	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
29.	Arsenic as As	APHA, 24th Edition, 3114 C : 2023	**BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
30.	Mercury as Hg	APHA, 24th Edition, 3112 B : 2023	*BLQ(**LOQ 0.001)	mg/l	0.001	No Relaxation
31.	Total Coliform	IS 15185 : 2016, RA 2021	Absent	Per 100 ml	Shall not be Detectable in Any 100 ml sample	
32.	E. Coli	IS 15185 : 2016, RA 2021	Absent	Per 100 ml		

Approved & Certified

Checked By ed EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

**RK Yadav** Lab Incharge Authorized Signatory

Vibrant Techno Lab Pvt. Ltd.

9 SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com



Sample Number: Name & Address of the Party:

Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/ W/07-08

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

**Ground Water** 

Vibrant Techno Lab Representative

Suitable Preservation As Per Work Order APHA 24th Edition 2023 Report No.:

VTL/W/2408300016

Format No.:

7.8 F-01 NIL

Party Reference No.: Report Date:

20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024

Receipt Date: Sampling Date: 30/08/2024

25/08/2024 2.0Ltr.+ 250 ml

Grab

Sampling Quantity: Sampling Type:

S.No.	Parameters				Limits of IS:10500-2012	
		Test-Method	Kakra Village (Hand Pump-01)	Unit	Requirement (Acceptable Limits)	Permissible Limit in the Absence of Alternate Source
1.	pH (at 25°C)	IS 3025 (Part 11) : 2022	7.03	-01	6.5 to 8.5	No Relaxation
2.	Colour	IS 3025 (Part 4) : 2021	*BLQ(**LOQ 1.0)	Hazen	5	15
3.	Turbidity	IS 3025 (Part 10) : 2023	*BLQ(**LOQ 1.0)	NTU	1	5
4.	Odour	IS 3025 (Part 5) : 2018	Agreeable	1775	Agreeable	Agreeable
S.	Taste	IS 3025 (Part 8) : 2023	Agreeable	et.	Agreeable	Agreeable
6.	Total Hurdness as CaCO <sub>3</sub>	IS 3025 (Part 21) : 2009, RA : 2019	211.40	mg/l	200	600
7.	Calcium as Ca	IS 3025 (Part 40): 1991, RA: 2019	59.10	mg/l	75	200
8.	Alkalinity as CaCO <sub>3</sub>	IS 3025 (Part 23) : 2023	78.60	mg/l	200	600
9,	Chloride as Cl	IS 3025 (Part 32): 1988, RA: 2019	99.60	mg/l	250	1000
10.	Residual free Chlorine	IS 3025 (Part 26): 2021 Clause 7.0	*BLQ(**LOQ 0.2)	mg/l	0.2	1
11.	Cyanide as CN	IS 3025 (Part 27/Sec 1): 2022	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
12.	Magnesium as Mg	APHA, 24th Edition, 3500 Mg B, Calculation Method	15.54	mg/l	30	100
13.	Total Dissolved Solids	IS 3025 (Part 16) :2023	580	mg/l	500	2000
14.	Sulphate as SO <sub>4</sub>	IS 3025 (Part 24/Sec 1) : 2022 Clause 5.0	62.20	mg/l	200	400
15.	Fluoride as F	APHA, 24th Edition, 4500F-D : 2023	0.55	mg/l	1.0	1.5
16.	Nitrate as NO <sub>3</sub>	IS 3025 (Part 34/Sec 1): 2023 Clause 6.4	17.30	mg/l	45	No Relaxation
17.	Iron as Fe	APHA 24th Edition, 3111 B, 2023	0.23	mg/l	1.0	No Relaxation
18.	Aluminium as Al	IS 3025 (Part 55) : 2003, RA : 2019	*BLQ(**LOQ 0.03)	mg/I	0.03	0.2
19.	Boron	APHA, 24th Edition, 4500 B-C : 2023	*BLQ(**L00 0.2)	mg/l	0.5	2.4
20.	Total Chromium as Cr	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.02)	mg/l	0.05	No Relaxation
21.	Phenolic compound as C <sub>6</sub> H <sub>5</sub> OH	APHA, 24th Edition, 5530 C : 2023	*BLQ(**LOQ 0.001)	mg/l	0,001	0.002
22.	Anionic Detergent as MBAS	IS 3025 (Part 68) : 2019	*BLQ(**LOO 0.05)	mg/l	0.2	1.0
23.	Zinc as Zn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.2)	mg/l	5	15
24.	Copper as Cu	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.02)	mg/l	0.05	1.5
25.	Manganese as Mn	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.05)	mg/l	0.1	0.3
26.	Cadmium as Cd	APHA, 24m Edition, 3111 B : 2023	*BLQ(**LOQ 0.002)	mg/l	0.003	No Relaxation
27.	Lead as Pb	APHA, 24th Edition, 3111 B : 2023	*BLQ(**LOQ 0.005)	mg/l	0.01	No Relaxation
28.	Selenium as Se	APHA, 24th Edition, 3114 C : 2023	*BLQ(**LOQ 0.005)	mg/i	0.01	No Relaxation
	Arsenic as As	APHA, 24th Edition, 3114 C : 2023	**BLQ(**LOQ 0.005)	mg/I	0.01	No Relaxation
30,	Mercury as Hg	APHA, 24th Edition, 3112 B: 2023	*BLQ(**LOQ 0.001)	mg/I	0.001	No Relaxation
31.	Total Coliform	IS 15185 : 2016, RA 2021	Absent	Per 100 ml	Shall not be Detectable in Any 100 ml sample	
32.	E. Coli	IS 15185 : 2016, RA 2021	Absent	Per 100 ml		

\*BLQ-Below Limit of Quantification, \*\*LOQ-Limit of Quantification.

1986 Recognised, ISO:9001 and OHSAS:45001 Certified

JAIPUR

RK Yadav Lab Incharge Authorized Signatory

Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

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TEST REPORT CODE: VGL/W/24/05/17/N-034

TEST REPORT ISSUE DATE: 24.05,2024

### TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

KEN RIVER NEAR TIGHRA VILLAGE

SURFACE WATER

12:30 PM 12.05.2024

VGL STAFF

CLEAR

17.05.2024

18.05.2024 TO 24.05.2024 APHA 1060B & 9060A

**Duration of Sample Analysis** 

Laboratory Sample Receiving Date

Date & Time of Sampling

Method of Sampling

Location of Sample

Sample Description

Sample Collected by Weather Condition

TECT DECLI TO

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
1.	рН	APHA 4500-H+	7.32	8	6.5 - 8.5
2.	Colour	APHA 2120-B	50.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.2	NTU	-
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	425.0	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	25.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	188.0	mg/L	2
7.	Total Hardness	APHA 2340 A+C	172.0	mg/L	
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	6.6	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C))	IS: 3025 (Part-44)	2.9	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	15.0	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl-)-B	58.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.69	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	37.5	mg/L	400
14.	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	9.9	mg/L	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.38	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified
22.	Chromium, (Cr <sup>-6</sup> )	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	

Page 1 of 2

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified any discrepancy in test result should be reported within 15Days.

be above Results are related to the tested sample only.

Review By:

Ashok Kumar Technical Manager

D. K. Yaday Authorisad Signatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-034

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.	Total Coliform Count	APHA 9221 B	430.0	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	110.0	MPN/100 ml	-

Page 2 of 2

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- The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager

Sayeed Ahmad

Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-035

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (SURFACE WATER) (PART A – CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

KEN RIVER NEAR SINGAURA VILLAGE

DISTT. - PANNA, 488441 (M.P)

Location of Sample Sample Description Date & Time of Sampling

: SURFACE WATER : 12.05.2024 12:40 PM

Sample Collected by Weather Condition : VGL STAFF : CLEAR

Laboratory Sample Receiving Date Duration of Sample Analysis : 17.05.2024 : 18.05.2024 TO 24.05.2024

Method of Sampling

: APHA 1060B & 9060A

# TEST RESULTS

TEST RESULTS					
Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per 1S:2296, Class C)
1.	pH	APHA 4500-H+	7.62	-	6.5 - 8.5
2.	Colour	APHA 2120-B	30.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.9	NTU	•
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	438.0	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	14.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	160.0	mg/L	
7.	Total Hardness	APHA 2340 A+C	184.0	mg/L	-
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.8	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C))	IS: 3025 (Part-44)	2.2	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	16.0	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl-)-B	62.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.54	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	42.1	mg/L	400
14.	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	10.4	mg/L	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	<0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.29	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified
22.	Chromium, (Cr+6)	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	-

Page 1 of 2

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2. The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.
The above Results are related to the tested sample only.

Review By:

Dr. Ashuk Kumar Technical Manager Authorized Signatory

Authoristay Signatory Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-035

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.1	Total Coliform Count	APHA 9221 B	240	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	80.0	MPN/100 ml	5

Page 2 of 2

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  The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified. Any discrepancy in test result should be reported within 3Days.

  The above Results are related to the tested sample only.

Virat Global Lab Authorized Signatory

sed Signatory

Sayeed Ahmad Quality Manager

Review By

Technical Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-036

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Location of Sample Sample Description

Date & Time of Sampling Sample Collected by

Weather Condition

Laboratory Sample Receiving Date

**Duration of Sample Analysis** Method of Sampling

SONAR RIVER NEAR VILLAGE SANTA

SURFACE WATER 12.05.2024

12:50 PM

VGL STAFF

CLEAR

17.05.2024

18.05.2024 TO 24.05.2024

APHA 1060B & 9060A

TEST DESILITS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per 1S:2296, Class C)
1.	рН	APHA 4500-H+	7.24		6.5 - 8.5
2.	Colour	APHA 2120-B	20.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.8	NTU	
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	365	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	17.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	172.0	mg/L	
7.	Total Hardness	APHA 2340 A+C	188.0	mg/L	*
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	6.2	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.6	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	20.0	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(CI-)-B	48.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.59	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	35.4	mg/L	400
14.	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	9.1	mg/L	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.28	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	<0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	<0.01	mg/L	Not Specified
22.	Chromium, (Cr <sup>-6</sup> )	APHA 3500:(Cr)-B	<0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	<0.01	mg/L	1.0
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	-

Page 1 of 2

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days. The above Results are related to the tested sample only.

Review Ry: Dr. Ashok Kumar Technical Manager Authorized Signatory Lab D. K. Yaday Easthreharge Signatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-036

TEST REPORT ISSUE DATE: 24.05.2024

## TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.1	Total Coliform Count	APHA 9221 B	350	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	105	MPN/100 ml	-

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- Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Technical Manager

irat Global Lab Authorized Signatory

Thorised Signatory Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-037

TEST REPORT ISSUE DATE: 24.05.2024

### TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P) NALA NEAR DEORA VILLAGE

Location of Sample Sample Description Date & Time of Sampling

01:20 PM

Sample Collected by Weather Condition

12.05.2024 VGL STAFF

Laboratory Sample Receiving Date

CLEAR 17.05.2024

**Duration of Sample Analysis** 

18.05.2024 TO 24.05.2024

SURFACE WATER

Method of Sampling

APHA 1060B & 9060A

## TECT DECILITE

TEST RESULTS					
Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per 1S:2296, Class C)
1.	pH	APHA 4500-H+	7.35	*	6.5 - 8.5
2.	Colour	APHA 2120-B	50.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.8	NTU	(*)
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	489.0	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	52.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	278.0	mg/L	
7.	Total Hardness	APHA 2340 A+C	244.0	mg/L	*:
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.9	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.4	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	36.0	mg/L	250
11	Chloride, (Cl)	APHA 4500:(CI-)-B	58.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.62	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	44.6	mg/L	400
14.	Phenolic Compound, (C6HsOH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO3)	APHA 4500:(NO3-)-B	10.5	mg/L	50
17.	Arsenic, (As)	APHA 3120B	<0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.29	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified
22.	Chromium, (Cr <sup>-6</sup> )	APHA 3500:(Cr)-B	<0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	

Page 1 of 2

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified

Any discrepancy in test result should be reported within 15Days. The above Results are related to the tested sample only.

ReviewBy: Dr. Ashok Kumar Technical Manager

lobal Lab Authorized Signatory

Anthorised Signatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-037

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.	Total Coliform Count	APHA 9221 B	350	MPN/100 ml	500
26.	Faccal Coliform	APHA 9221 E	140	MPN/100 ml	-

Page 2 of 2

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The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 3Days. The above Results are related to the tested sample only.

Review By:

Dr. Ashbk Kumar Technical Manager Virat Global Lab **Authorized Signatory** 

Authorised Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-038

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA, (A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P) POND NEAR CHIKHLA VILLAGE

Location of Sample Sample Description Date & Time of Sampling Sample Collected by

SURFACE WATER 01:50 PM 12.05.2024

Weather Condition Laboratory Sample Receiving Date

VGL STAFF CLEAR 17.05.2024

**Duration of Sample Analysis** 

18.05.2024 TO 24.05.2024 APHA 1060B & 9060A

Method of Sampling

### TEST DESILITS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
1.	pH	APHA 4500-H+	7.62	-	6.5 - 8.5
2.	Colour	APHA 2120-B	40.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	2.0	NTU	2
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	456	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	42.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	204.0	mg/L	4
7.	Total Hardness	APHA 2340 A+C	224.0	mg/L	-
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	4.9	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C))	IS: 3025 (Part-44)	2.4	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	32.0	mg/L	250
11.	Chloride, (CI)	APHA 4500:(Cl-)-B	62.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.61	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	42.2	mg/L	400
14.	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	10.9	mg/L	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.24	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified
22.	Chromium, (Cr <sup>-6</sup> )	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	-

Page 1 of 2

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.
The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Authorized Signatory Lab

D. K. Yadav Labila rabuseSignatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-038

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

TECT DECLI TO

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.	Total Coliform Count	APHA 9221 B	350	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	110	MPN/100 ml	-

Page 2 of 2

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Any discrepancy in test result should be reported within 3Days. The above Results are related to the tested sample only.

Review By:

Technical Manager

Virat Global Lab Authorized Signatory

sed Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-039

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA, (A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P) POND NEAR UMRI VILLAGE

Location of Sample Sample Description Date & Time of Sampling

SURFACE WATER 12.05.2024

02:10 PM

Sample Collected by Weather Condition

VGL STAFF 17.05.2024

CLEAR

Laboratory Sample Receiving Date **Duration of Sample Analysis** 

18.05.2024 TO 24.05.2024

Method of Sampling

APHA 1060B & 9060A

#### TEST RESULTS

1. 2. 3.	pH Colour Turbidity	APHA 4500-H+ APHA 2120-B	7.25		
3.		APHA 2120-B			6.5 - 8.5
	Tokide	3.00.012.01.00.000.0000	45.0	Hazen	300
	Turnicity	APHA 2130-A+B	1.6	NTU	
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	430	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	40.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	180.0	mg/L	
7.	Total Hardness	APHA 2340 A+C	208.0	mg/L	
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.5	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.2	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	28.0	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(CI-)-B	60.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.58	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	46.0	mg/L	400
14.	Phenolic Compound, (CsHsOH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	10.5	mg/L	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.42	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified
22.	Chromium, (Cr*6)	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	

Page 1 of 2

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days.
The above Results are related to the tested sample only.

Review

Dr. Ashok Kumar **Technical Manager** 

Virat Global Authorized Signatory

> D. K. Yadav Authorised Lab In-charge Signatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-039

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.	Total Coliform Count	APHA 9221 B	350	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	110	MPN/100 ml	-

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- media without our special permission in writing.

  The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
- Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-040

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

BETEHA NALLA NEAR SURAJPUR

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Location of Sample Sample Description Date & Time of Sampling

SURFACE WATER

Sample Collected by

02:30 PM 12.05.2024

Weather Condition Laboratory Sample Receiving Date

VGL STAFF CLEAR

**Duration of Sample Analysis** 

17.05.2024

18.05.2024 TO 24.05.2024 APHA 1060B & 9060A

Method of Sampling

TEST RESULTS						
Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)		
pH	APHA 4500-H+	7.36		6.5 - 8.5		
Colour	APHA 2120-B	70.0	Hazen	300		
Turbidity	APHA 2130-A+B	2.5	NTU			
Total Dissolved Solids, (TDS)	APHA 2540-C	592	mg/L	1500		
Total Suspended Solid as TSS	APHA (2540-D)	78.0	mg/L	100		
Alkalinity	APHA 2320-A+B	258.0	mg/L			
Total Hardness	APHA 2340 A+C	272.0	mg/L			
Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.2	mg/L	4 (MIN)		
Biological Oxygen Demand (BOD 3days 27°C))	IS: 3025 (Part-44)	3.0	mg/L	3		
Chemical Oxygen Demand as COD	APHA (5220-B)	38.0	mg/L	250		
Chloride, (Cl)	APHA 4500:(CI-)-B	80.0	mg/L	600		
Fluoride, (F)	APHA 4500:(F-)-D	0.52	mg/L	1.5		
Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	54.0	mg/L	400		
Phenolic Compound, (C6H5OH)	APHA 5530-C	< 0.01	mg/L	Not Specified		
Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified		
Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	10.2	mg/L	50		
Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2		
Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified		
Iron, (Fe)	APHA-3120B	0.28	mg/L	Not Specified		
Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified		
Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified		
Chromium, (Cr <sup>+6</sup> )	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified		
Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1		
Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	+		
	pH Colour Turbidity Total Dissolved Solids, (TDS) Total Suspended Solid as TSS Alkalinity Total Hardness Dissolved Oxygen (DO) Biological Oxygen Demand (BOD 3days 27°C)) Chemical Oxygen Demand as COD Chloride, (Cl) Fluoride, (F) Sulphate, (SO4) Phenolic Compound, (C6H5OH) Oil & Grease, (O & G) Nitrate, (NO3) Arsenie, (As) Copper, (Cu) Iron, (Fe) Zine, (Zn) Cadmium, (Cd) Chromium, (Cr <sup>46</sup> ) Lead, (Pb)	PH         APHA 4500-H+           Colour         APHA 2120-B           Turbidity         APHA 2130-A+B           Total Dissolved Solids, (TDS)         APHA 2540-C           Total Suspended Solid as TSS         APHA (2540-D)           Alkalimity         APHA 2320-A+B           Total Hardness         APHA 2340 A+C           Dissolved Oxygen (DO)         APHA 4500:(O)-C           Biological Oxygen Demand (BOD 3days 279°C))         IS: 3025 (Part-44)           Chemical Oxygen Demand as COD         APHA (5220-B)           Chloride, (Cl)         APHA 4500:(Cl-)-B           Fluoride, (F)         APHA 4500:(F-)-D           Sulphate, (SO4)         APHA 4500:(SO4)-E           Phenolic Compound, (C6H3OH)         APHA 5530-C           Oil & Grease, (O & G)         APHA 5520-D           Nitrate, (NO1)         APHA 3120B           Copper, (Cu)         APHA 3120B           Iron, (Fe)         APHA-3120B           Zine, (Zn)         APHA 3120B           Chromium, (Cd)         APHA 3500:(Cr)-B           Lead, (Pb)         APHA-3120B	Parameters         Test Method         Result           pH         APHA 4500-H+         7.36           Colour         APHA 2120-B         70.0           Turbidity         APHA 2130-A+B         2.5           Total Dissolved Solids, (TDS)         APHA 2540-C         592           Total Suspended Solid as TSS         APHA (2540-D)         78.0           Alkalimity         APHA 2320-A+B         258.0           Total Hardness         APHA 2340 A+C         272.0           Dissolved Oxygen (DO)         APHA 4500:(O)-C         5.2           Biological Oxygen Demand (BOD 3days 279C))         IS: 3025 (Part-44)         3.0           Chemical Oxygen Demand as COD         APHA (5220-B)         38.0           Chloride, (Cl)         APHA 4500:(CI-)-B         80.0           Fluoride, (F)         APHA 4500:(CI-)-B         80.0           Fluoride, (F)         APHA 4500:(F-)-D         0.52           Sulphate, (SO4)         APHA 4500:(SO4)-E         54.0           Phenolic Compound, (CaHsOH)         APHA 5530-C         <0.01	Parameters		

Page 1 of 2

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he sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified

Any discrepancy in test result should be reported within 15Days.

The above Results are related to the tested sample only.

Review By: Dr. Ashok Kumar

**Technical Manager** 

Virat Global Lab Authorized Signatory

D. K. Yaday Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-040

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

TECT DECLI TO

TEST RESULTS							
Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)		
25.	Total Coliform Count	APHA 9221 B	430	MPN/100 ml	500		
26.	Faecal Coliform	APHA 9221 E	120	MPN/100 ml	-		

Page 2 of 2

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Any discrepancy in test result should be reported within 3Days. The above Results are related to the tested sample only.

Review By:

Dr. Askok Kumar Technical Manager Virat Global Lab **Authorized Signatory** 

> ad Signatory Sayced Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-041

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A – CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA, (A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P) POND NEAR AMANGANJ

Location of Sample Sample Description Date & Time of Sampling Sample Collected by

Date & Time of Sampling Sample Collected by Weather Condition

Laboratory Sample Receiving Date Duration of Sample Analysis

Method of Sampling

: SURFACE WATER : 12.05.2024 03

02:45 PM

: VGL STAFF

: CLEAR

: 17.05.2024

: 18.05.2024 TO 24.05.2024 : APHA 1060B & 9060A

TEST RESULTS

	A STANDARD CONTRACTOR OF THE STANDARD CONTRACTOR							
Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)			
1.	pH	APHA 4500-H+	7.38		6.5 - 8.5			
2.	Colour	APHA 2120-B	35.0	Hazen	300			
3.	Turbidity	APHA 2130-A+B	1.5	NTU				
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	419	mg/L	1500			
5.	Total Suspended Solid as TSS	APHA (2540-D)	35.0	mg/L	100			
6.	Alkalinity	APHA 2320-A+B	180.0	mg/L				
7.	Total Hardness	APHA 2340 A+C	158.0	mg/L	3.5			
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.1	mg/L	4 (MIN)			
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.8	mg/L	3			
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	28.0	mg/L	250			
11.	Chloride, (Cl)	APHA 4500:(Cl-)-B	50.0	mg/L	600			
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.69	mg/L	1.5			
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	46.2	mg/L	400			
14.	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	APHA 5530-C	< 0.01	mg/L	Not Specified			
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified			
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	9.8	mg/L	50			
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2			
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified			
19.	Iron, (Fe)	APHA-3120B	0.28	mg/L	Not Specified			
20.	Zinc, (Zn)	APHA-3120B	<0.05	mg/L	Not Specified			
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified			
22.	Chromium, (Cr+6)	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified			
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1			
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L				

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Any discrepancy in test result should be reported within 15Days.
 The above Results are related to the tested sample only.

Review By:

Dr. Ashek Kumar Technical Manager Authorized Signatory

D. K. Yada

Lab In-charged Signatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-041

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.,	Total Coliform Count	APHA 9221 B	280	MPN/100 ml	500
26.	Faccal Coliform	APHA 9221 E	95	MPN/100 ml	*

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The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab

**Authorized Signatory** 

Sayeed Ahmad Quality Manager

Signatory



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TEST REPORT CODE: VGL/W/24/05/17/N-042

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

MIRHASAN RIVER NEAR AMANGANJ

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Location of Sample Sample Description Date & Time of Sampling

SURFACE WATER 12.05.2024

Sample Collected by Weather Condition

03:00 PM VGL STAFF

Laboratory Sample Receiving Date

: CLEAR 17.05.2024

**Duration of Sample Analysis** 

18.05.2024 TO 24.05.2024

Method of Sampling

: APHA 1060B & 9060A

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
1.	pH	APHA 4500-H+	7.40	*	6.5 - 8.5
2.	Colour	APHA 2120-B	30.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.5	NTU	
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	410	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	20.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	148.0	mg/L	
7.	Total Hardness	APHA 2340 A+C	184.0	mg/L	
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.2	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.3	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	20.0	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(CI-)-B	62.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.58	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	46.2	mg/L	400
14.	Phenolic Compound, (C6H3OH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	8.9	mg/L	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.24	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified
22.	Chromium, (Cr <sup>-6</sup> )	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	

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apple will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days. The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager irat Global Lab

D. K. Yadaz Lab in charge Signatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-042

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A – BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.	Total Coliform Count	APHA 9221 B	170	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	79	MPN/100 ml	

Page 2 of 2

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- The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.

3. Any discrepancy in test result should be reported within 3Days.

The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab

**Authorized Signatory** 

Authorised Signatory
Saveed Ahmad

Sayeed Ahmad Quality Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-043

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

Location of Sample Sample Description

Weather Condition

Method of Sampling

Date & Time of Sampling Sample Collected by

Laboratory Sample Receiving Date

**Duration of Sample Analysis** 

: M/s. J K CEMENT WORKS, PANNA, (A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

BERMA RIVER NEAR GAISABAD VILLAGE

SURFACE WATER

12.05.2024

03:25 PM

VGL STAFF

CLEAR

17.05.2024

18.05.2024 TO 24.05.2024

APHA 1060B & 9060A

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
1.	pH	APHA 4500-H+	7.48	•	6.5 - 8.5
2.	Colour	APHA 2120-B	28.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.9	NTU	
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	552	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	45.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	172.0	mg/L	4
7.	Total Hardness	APHA 2340 A+C	188.0	mg/L	¥
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.9	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.2	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	24.0	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(CI-)-B	48.2	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.60	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	42.5	mg/L	400
14.	Phenolic Compound, (C <sub>6</sub> H <sub>5</sub> OH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	9.6	mg/L	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.24	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified
22.	Chromium, (Cr+6)	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	-

Page 1 of 2

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15Days. The above Results are related to the tested sample only.

ReviewBy:

Dr. Ashok Kumar Technical Manager Virat Global Lab **Authorized Signatory** D. K. Yaday Lab in charge signatory

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TEST REPORT CODE: VGL/W/24/05/17/N-043

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25. ,	Total Coliform Count	APHA 9221 B	430	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	150	MPN/100 ml	

Page 2 of 2

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Virat Global Lab

**Authorized Signatory** 

ed Signatory

Sayeed Ahmad Quality Manager

Review By:

Technical Manager



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TEST REPORT CODE: VGL/W/24/05/17/N-044

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - CHEMICAL)

Name and Address of Customer

: M/s. J K CEMENT WORKS, PANNA,

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P) POND NEAR PAGRA VILLAGE

SURFACE WATER

03:50 PM

12.05.2024

VGL STAFF

CLEAR

17.05.2024

18.05.2024 TO 24.05.2024

**Duration of Sample Analysis** Method of Sampling

Location of Sample

Sample Description

Sample Collected by

Weather Condition

Date & Time of Sampling

Laboratory Sample Receiving Date

APHA 1060B & 9060A

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per 18:2296, Class C)
1.	pH	APHA 4500-H+	7.68		6.5 - 8.5
2.	Colour	APHA 2120-B	55.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.2	NTU	
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	427	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	26.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	170.0	mg/L	120
7.	Total Hardness	APHA 2340 A+C	208.0	mg/L	*
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	6.9	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.3	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	45.0	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl-)-B	58.1	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.52	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	66.4	mg/L	400
14.	Phenolic Compound, (C6H5OH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NOs)	APHA 4500:(NO3-)-B	10.4	mg/L	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.28	mg/L	Not Specified
20.	Zinc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	<0.01	mg/L	Not Specified
22.	Chromium, (Cr <sup>-6</sup> )	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	-

Page 1 of 2

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any decrepancy in test result should be reported within 15Days. The above Results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager

D. K. Yadav

Lab 4n charge Signatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) - 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-044

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.,	Total Coliform Count	APHA 9221 B	350	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	120	MPN/100 ml	

Page 2 of 2

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The above Results are related to the tested sample only.

Virat Global Lab
Authorized Signatory

Signatory

Sayeed Ahmad Quality Manager



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TE TEST REPORT CODE: VGL/W/24/05/17/N-045

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A – CHEMICAL)

Name and Address of Customer

: M/s, J K CEMENT WORKS, PANNA, (A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P) POND PURAINA VILLAGE

Location of Sample Sample Description Date & Time of Sampling Sample Collected by

: SURFACE WATER : 12.05.2024 04:00 PM

Sample Collected by Weather Condition : VGL STAFF : CLEAR

Laboratory Sample Receiving Date Duration of Sample Analysis : 17.05.2024 : 18.05.2024 TO 24.05.2024 : APHA 1060B & 9060A

Method of Sampling

### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
1.	pH	APHA 4500-H+	7.81	-	6.5 - 8.5
2.	Colour	APHA 2120-B	60.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.9	NTU	
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	428	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	46.0	mg/L	100
6.	Alkalinity	APHA 2320-A+B	188.0	mg/L	2
7.	Total Hardness	APHA 2340 A+C	204.0	mg/L	*
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.9	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.2	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	16.0	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl-)-B	38.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F-)-D	0.85	mg/L	1.5
13.	Sulphate, (SO <sub>4</sub> )	APHA 4500:(SO4)-E	54.2	mg/L	400
14.	Phenolic Compound, (C6H3OH)	APHA 5530-C	< 0.01	mg/L	Not Specified
15.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
16.	Nitrate, (NO <sub>3</sub> )	APHA 4500:(NO3-)-B	9.9	mg/L.	50
17.	Arsenic, (As)	APHA 3120B	< 0.01	mg/L	0.2
18.	Copper, (Cu)	APHA 3120B	< 0.01	mg/L	Not Specified
19.	Iron, (Fe)	APHA-3120B	0.26	mg/L	Not Specified
20.	Zînc, (Zn)	APHA-3120B	< 0.05	mg/L	Not Specified
21.	Cadmium, (Cd)	APHA 3120B	< 0.01	mg/L	Not Specified
22.	Chromium, (Cr <sup>-6</sup> )	APHA 3500:(Cr)-B	< 0.01	mg/L	Not Specified
23.	Lead, (Pb)	APHA-3120B	< 0.01	mg/L	0.1
24.	Mercury (Hg)	APHA-3112A+B	< 0.01	mg/L	*

Page 1 of 2

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Any discrepancy in test result should be reported within 15Days.
 The above Results are related to the tested sample only.

Review By

Dr. Ashok Rumat

Technical Manager

Virat Global Lab
Authorized Signatory

DIR Yada gnatory

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur, Sarojini Nagar, Lucknow (U.P.) – 226008, Mob. - +91-9990366186, 9415135012, 0522-7118739



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TEST REPORT CODE: VGL/W/24/05/17/N-045

TEST REPORT ISSUE DATE: 24.05.2024

#### TEST REPORT (SURFACE WATER) (PART A - BIOLOGICAL)

#### TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25. ,	Total Coliform Count	APHA 9221 B	170	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	70	MPN/100 ml	*

Page 2 of 2

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Any discrepancy in test result should be reported within 3Days. The above Results are related to the tested sample only.

Virat Global Lab Authorized Signatory

d Signatory

Sayeed Almad Quality Manager





Name & Address of the Party:

Sample Description:

Sample Collected by:

Preservation: Parameter Required:

Sampling and Analysis Protocol:

VTL/SW/01

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

Panna

Surface Water

Vibrant Techno Lab Team **Suitable Preservation** 

As Per Work Order

APHA 24th Edition 2023

Report No.:

VTL/W/2408300014

Format No.:

7.8 F-01 NIL.

Party Reference No.: Report Date:

20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024

Receipt Date:

30/08/2024

Sampling Date:

25/08/2024

Sampling Quantity: Sampling Type:

2.0Ltr.+ 250 ml

Grab

S. No.	Parameter	Test Method	Run Off Water Kakra Mine	Unit	
Physical	Parameters				
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.49	**	
2.	Colour	IS 3025(P-4): 2021	5	Hazen	
3.	Turbidity	IS 3025 (P-10): 2023	12	NTU	
Chemical	Parameters (mg/l)				
4.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21): 2009,RA: 2019	143.00	mg/l	
5.	Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23): 2023	58.00	mg/l	
6.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	47.0	mg/l	
7.	Total Dissolved Solids	IS 3025 (P-16): 2023	385.0	mg/l	
8.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24): Sec.1 : 2022	11.46	mg/l	
9.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.19	mg/l	
10.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34): 1988,(Chromotropic Method) Sec. 4 RA: 2022	8.26	mg/l	
11.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.29	mg/l	
12.	Chromium as Cr+6	APHA (23rd Edition),3500 CR-B	*BLQ(**LOQ-0.05)	mg/l	
13.	Phenolic Compounds	APHA 23rd Edition, 2017, 5530 C	*BLQ(**LOQ-0.001)	mg/l	
14.	Zinc as Zn	APHA (23rd Edition),3111 B: 2017	0.35	mg/l	
15.	Copper as Cu	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.02)	mg/l	
16.	Cadmium as Cd	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.002)	mg/l	
17.	Lead as Pb	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.005)	mg/l	
18.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	mg/l	
19.	Mercury as Hg	APHA (23rd Edition)3112 B,2017	*BLQ(**LOQ-0.001)	mg/l	
20.	Oil & Grease	IS:3025(P-39)	*BLQ(**LOQ-4.0)	mg/l	
21.	BOD (3days at 27°C)	IS:3025(P-44):1993, RA:2019	9.12	mg/l	
22.	COD	IS:3025(P-58):2006, RA:2017	45.0	mg/l	
23.	DO	IS:3025(P-38):1989, RA:2019	5.2	mg/l	
24.	TSS	IS:3025(P-17):2021	70.0	mg/l	
Action of the same of the same	logical Parameters		MAA - 43 150		
25.	Total Coliform	IS:15185: 2016	Present	Present/Absent per 10	
26.	Faecal Coliform	IS:15185: 2016	Present	ml	

\*\*\*End of the report\*\*\* "Experience the unimaginable"





RK Yadav ( Lab Incharge **Authorized Signatory** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

Vibrant Techno Lab Pvt. Ltd.

SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com





Name & Address of the Party:

Sample Description:

Sample Collected by: Preservation: Parameter Required: Sampling and Analysis Protocol: VTL/SW/01-03

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

Panna

Surface Water

Vibrant Techno Lab Team **Suitable Preservation** As Per Work Order APHA 24th Edition 2023

Report No.:

VTL/W/2408300017-19

Format No.: 7.8 F-01 Party Reference No.: NIL

Report Date:

Sampling Type:

20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024

Receipt Date: Sampling Date: Sampling Quantity: 30/08/2024 25/08/2024

2.0Ltr.+ 250 ml

Grab

Note: - \*BLQ-Below Limit of Quantification, \*\*LOQ-Limit of Quantification

S. No.	Parameter	Test Method	Pond Near Pagra Village	Ken River Near Tighra Village	Beteha Nalla Near Surajpur	Unit
Physi	cal Parameters				- January Par	
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.77	7.70	7.42	T
2.	Colour	IS 3025(P-4): 2021	6	9	12	Hazen
3.	Turbidity	IS 3025 (P-10): 2023	16	20	21	NTU
Chem	ical Parameters (mg/l)					1 1110
4.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21): 2009,RA: 2019	199.00	180.00	172.00	mg/l
5.	Alkalinity as CaCO3	IS: 3025 (P-23): 2023	72.00	64.00	57.00	mg/l
6.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	41.20	36.80	32.60	mg/l
7.	Total Dissolved Solids	IS 3025 (P-16): 2023	380	310	285	mg/l
8.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24): Sec.1: 2022	19,70	17.20	15.60	mg/l
9.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.27	0.21	0.18	mg/l
10.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34): 1988,(Chromotropic Method) Sec. 4 RA: 2022	8.70	7.99	6.32	mg/l
11.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.27	0.18	0.16	mg/l
12.	Chromium as Cr+6	APHA (23 <sup>rd</sup> Edition),3500 CR-B	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l
13.	Phenolic Compounds	APHA 23rd Edition, 2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
14.	Zinc as Zn	APHA (23 <sup>rd</sup> Edition),3111 B: 2017	0.32	0.25	0.22	mg/l
15.	Copper as Cu	APHA (23 <sup>rd</sup> Edition),3111 B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
16.	Cadmium as Cd	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l
17.	Lead as Pb	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
18.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
19.	Mercury as Hg	APHA (23rd Edition)3112 B,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
20.	Oil & Grease	IS:3025(P-39)	*BLQ(**LOQ-4.0)	*BLQ(**LOQ-4.0)	*BLQ(**LOQ-4.0)	mg/l
21.	BOD ( 3days at 27°C)	IS:3025(P-44):1993, RA:2019	14.10	12.30	10.90	mg/l
22.	COD	IS:3025(P-58):2006, RA:2017	36.40	32.10	28.60	mg/l
23.	DO	IS:3025(P-38):1989, RA:2019	6.6	6.4	6.2	mg/l
24.	TSS	IS:3025(P-17):2021	61	57	48	mg/l
dicrol	piological Parameters				10	mg/i
5.	Total Coliform	IS:15185: 2016	Present	Present	Present	Present/Abs
6.	Faecal Coliform	IS:15185: 2016	Present	Present	Present	nt per 100 m





RK Yadav

Lab Incharge **Authorized Signatory** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

### Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com





Name & Address of the Party:

Sample Description:

Sample Collected by:

Preservation: Parameter Required:

Sampling and Analysis Protocol:

VTL/SW/04-06

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

Panna

Surface Water

Vibrant Techno Lab Team

**Suitable Preservation** 

As Per Work Order

APHA 24th Edition 2023

Report No.:

Format No.:

Party Reference No.:

Report Date:

7.8 F-01 NIL 20/09/2024

30/08/2024 to 20/09/2024

VTL/W/2408300020-22

Period of Analysis: Receipt Date:

30/08/2024

Sampling Date:

25/08/2024

Sampling Quantity: Sampling Type:

2.0Ltr.+ 250 ml

Grab

S. No.	Parameter	Test Method	Mirhasan River Near Amangani	Ken River Near Singaura Village	Sonar River Near Village Santa	Unit
Physi	cal Parameters		* 1		Junta	
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.48	7.12	7.41	T
2.	Colour	IS 3025(P-4): 2021	6	10	8	Hazen
3.	Turbidity	IS 3025 (P-10): 2023	- 12	14	18	NTU
	ical Parameters (mg/l)			**		1 110
4.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21): 2009,RA: 2019	170.00	145.00	162.00	mg/l
5.	Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23): 2023	79.00	54.00	66.10	mg/l
6.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	48.90	40.50	44.70	mg/l
7.	Total Dissolved Solids	IS 3025 (P-16): 2023	350	290	325	mg/l
8.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24): Sec.1: 2022	17.40	15.90	16.60	mg/l
9.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.22	0.14	0.17	mg/l
10.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34): 1988,(Chromotropic Method) Sec. 4 RA: 2022	8.70	7.99	6.32	mg/l
11.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.26	0.19	0.23	mg/l
12.	Chromium as Cr+6	APHA (23rd Edition),3500 CR-B	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l
13.	Phenolic Compounds	APHA 23rd Edition, 2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
14.	Zinc as Zn	APHA (23rd Edition),3111 B: 2017	0.33	0.24	0.29	mg/l
15.	Copper as Cu	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
16.	Cadmium as Cd	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l
17.	Lead as Pb	APHA (23 <sup>rd</sup> Edition),3111 B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
18.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
19.	Mercury as Hg	APHA (23rd Edition)3112 B,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
20.	Oil & Grease	IS:3025(P-39)	*BLQ(**LOQ-4.0)	*BLQ(**LOQ-4.0)	*BLQ(**LOQ-4.0)	mad)
21.	BOD ( 3days at 27°C)	IS:3025(P-44):1993, RA:2019	15.10	10.40	13.40	mg/l mg/l
22.	COD	IS:3025(P-58):2006, RA:2017	38.90	31.30	35:10	mg/l
23.	DO	IS:3025(P-38):1989, RA:2019	6.5	6.1	6.3	mg/l
4.	TSS	IS:3025(P-17):2021	63	51	59	ma/l
ticrob	iological Parameters			71	37	mg/l
	Total Coliform	IS:15185: 2016	Present	Present	Present	Present/Abs
6.	Faecal Coliform	IS:15185: 2016	Present	Present	Present	nt per 100 m

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



JAIPUR

RK Yadav ( Lab Incharge

**Authorized Signatory** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

### Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com

### TEST REPORT



Sample Number:

Name & Address of the Party:

Sample Description:

Sample Collected by: Preservation:

Parameter Required: Sampling and Analysis Protocol: VTL/SW/07-08

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines

Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

Panna

**Surface Water** 

Vibrant Techno Lab Team Suitable Preservation

As Per Work Order

APHA 24th Edition 2023

Report No.: Format No.: VTL/W/2408300023-25

7.8 F-01

Party Reference No.:

NIL

Report Date: 20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024

Receipt Date: 30/08/2024

Sampling Date:

25/08/2024

Sampling Quantity:

2.0Ltr.+ 250 ml

ling	Type:	Gr

S. No.	Parameter	Test Method	Pond Near Chikhla Village	Pond Near Umri Village	Nala Near Deora Village	Unit
Physi	cal Parameters					
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.58	7.06	7.12	**
2.	Colour	IS 3025(P-4): 2021	7	12	5	Hazen
3,	Turbidity	IS 3025 (P-10): 2023	19	21	12	NTU
Chem	ical Parameters (mg/l)					-
4.	Total Hardness as CaCO <sub>2</sub>	IS: 3025 (P-21): 2009,RA: 2019	220.00	245.00	152.00	mg/l
5.	Alkalinity as CaCO3	IS: 3025 (P-23): 2023	88.50	75.00	52.0	mg/l
6.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	59.90	49.50	32.9	mg/l
7.	Total Dissolved Solids	IS 3025 (P-16): 2023	420	390	308	mg/l
8.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24): Sec.1 : 2022	21.50	19.70	14.52	mg/l
9.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.24	0.19	0.19	mg/l
10.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34): 1988,(Chromotropic Method) Sec. 4 RA: 2022	9.13	6.98	8.91	mg/l
11.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.27	0.22	0.27	mg/l
12.	Chromium as Cr+6	APHA (23rd Edition),3500 CR-B	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l
13.	Phenolic Compounds	APHA 23rd Edition, 2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
14.	Zinc as Zn	APHA (23 <sup>rd</sup> Edition),3111 B: 2017	0.33	0.25	0.25	mg/l
15.	Copper as Cu	APHA (23 <sup>rd</sup> Edition),3111 B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
16.	Cadmium as Cd	APHA (23 <sup>rd</sup> Edition),3111 B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l
17.	Lead as Pb	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
18.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
19.	Mercury as Hg	APHA (23rd Edition)3112 B,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
20.	Oil & Grease	IS:3025(P-39)	*BLQ(**LOQ-4.0)	*BLQ(**LOQ-4.0)	*BLQ(**LOQ-4.0)	mg/l
21.	BOD (3days at 27°C)	IS:3025(P-44):1993, RA:2019	19.20	16.80	13.40	mg/I
22.	COD	IS:3025(P-58):2006, RA:2017	45.70	38.10	35.10	mg/l
23.	DO	IS:3025(P-38):1989, RA:2019	6.4	6.2	6.3	mg/l
24.	TSS	IS:3025(P-17):2021	78	66	59	mg/l
dicrol	biological Parameters				47	1 1116/1
5.	Total Coliform	IS:15185: 2016	Present	Present	Present	Present/Abs
6.	Faecal Coliform	IS:15185: 2016	Present	Present	Present	nt per 100 m

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



JAIPUR

RK Yadav

Lab Incharge Authorized Signatory

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

### Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com

### TEST REPORT



Sample Number:

Name & Address of the Party:

Sample Description:

Sample Collected by:

Preservation: Parameter Required:

Sampling and Analysis Protocol:

VTL/SW/01-03

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amangani PIN-488441 Dist-

Panna

Surface Water

Vibrant Techno Lab Team Suitable Preservation As Per Work Order

APHA 24th Edition 2023

Report No.: Format No.: VTL/W/2408300026-28

7.8 F-01

Party Reference No.:

NIL

Report Date:

20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024 30/08/2024

Receipt Date: Sampling Date:

Sampling Quantity:

25/08/2024 2.0Ltr.+ 250 ml

Sampling Type:

Grab

S. No.	Parameter	Test Method	Pond Near Amangani	Berma River Near Gaisabad Village	Pond Puraina Village	Unit
Physi	cal Parameters					
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.29	7.18	7.58	
2.	Colour	IS 3025(P-4): 2021	5	10	22	Hazen
3.	Turbidity	IS 3025 (P-10): 2023	12	25	18	NTU
	ical Parameters (mg/l)	or and a second				1 1110
4.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21): 2009,RA: 2019	164.00	135.00	157.00	mg/l
5.	Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23): 2023	68.00	58.00	62.00	mg/l
6.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	36.19	29.43	30.12	mg/l
7.	Total Dissolved Solids	IS 3025 (P-16): 2023	298	332	412	mg/l
8.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24): Sec.1: 2022	22.10	15.23	28.14	mg/l
9.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.29	0.18	0.23	mg/l
10.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34): 1988,(Chromotropic Method) Sec. 4 RA: 2022	10.15	12.78	16.34	mg/l
11.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.30	0.21	0.26	mg/l
12.	Chromium as Cr+6	APHA (23 <sup>rd</sup> Edition),3500 CR-B	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	*BLQ(**LOQ-0.05)	mg/l
13.	Phenolic Compounds	APHA 23rd Edition, 2017, 5530 C	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
14.	Zinc as Zn	APHA (23rd Edition),3111 B: 2017	0.41	0.32	0.45	mg/l
15.	Copper as Cu	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	*BLQ(**LOQ-0.02)	mg/l
16.	Cadmium as Cd	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	*BLQ(**LOQ-0.002)	mg/l
17.	Lead as Pb	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
18.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	*BLQ(**LOQ-0.005)	mg/l
19.	Mercury as Hg	APHA (23rd Edition)3112 B,2017	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	*BLQ(**LOQ-0.001)	mg/l
0.	Oil & Grease	IS:3025(P-39)	*BLQ(**L00-4.0)	*BLQ(**LOQ-4.0)	*BLQ(**L00-4.0)	mg/l
1.	BOD (3days at 27°C)	IS:3025(P-44):1993. RA:2019	9.5	5.9	7.3	mg/l
2.	COD	IS:3025(P-58):2006, RA:2017	30.0	28.0	35.0	mg/l
.3.	DO	IS:3025(P-38):1989, RA:2019	7.1	5.2	6.9	mg/l
4.	TSS	IS:3025(P-17):2021	58	62	50	
licrob	olological Parameters				30	mg/l
	Total Coliform	IS:15185: 2016	Present	Present	Present	Descent /Ab.
6.	Faecal Coliform	IS:15185: 2016	Present	Present	Present	Present/Abs nt per 100 m

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



**RK Yadav** 

Lab Incharge **Authorized Signator** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

### Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**3** 0141-2954638

bd@vibranttechnolab.com





Name & Address of the Party:

Sample Description:

Sample Collected by:

Preservation:

Parameter Required:

Sampling and Analysis Protocol:

VTL/SW/01

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-

Panna

Surface Water

Vibrant Techno Lab Team

Suitable Preservation As Per Work Order

APHA 24th Edition 2023

Report No.:

VTL/W/2408300014

Format No.:

7.8 F-01

Party Reference No.: Report Date:

20/09/2024

Period of Analysis:

30/08/2024 to 20/09/2024

Receipt Date:

30/08/2024

Sampling Date:

25/08/2024

Sampling Quantity:

2.0Ltr.+ 250 ml

Sampling Type:

Grab

S. No.	Parameter	Test Method	Run Off Water Kakra Mine	Unit
Physical	Parameters	The state of the s		
1.	pH (at 25 °C)	IS 3025 (P-11): 2022	7.49	
2.	Colour	IS 3025(P-4): 2021	5	Hazen
3.	Turbidity	IS 3025 (P-10): 2023	12	NTU
Chemica	l Parameters (mg/l)			
4.	Total Hardness as CaCO <sub>3</sub>	IS: 3025 (P-21): 2009,RA: 2019	143.00	mg/l
5.	Alkalinity as CaCO <sub>3</sub>	IS: 3025 (P-23): 2023	58.00	mg/l
6.	Chloride as Cl	IS: 3025(Part 32):1988, RA:2019	47.0	mg/l
7.	Total Dissolved Solids	IS 3025 (P-16): 2023	385,0	mg/l
8.	Sulphate as SO <sub>4</sub>	IS: 3025 (P-24): Sec.1: 2022	11.46	mg/l
9.	Fluoride as F	APHA (23rd Edition), 4500FD:2017	0.19	mg/l
10.	Nitrate as NO <sub>3</sub>	IS: 3025 (P-34): 1988,(Chromotropic Method) Sec. 4 RA: 2022	8.26	mg/l
11.	Iron as Fe	APHA (23rd Edition),3113B: 2017	0.29	mg/l
12.	Chromium as Cr+6	APHA (23rd Edition),3500 CR-B	*BLQ(**LOQ-0.05)	mg/l
13.	Phenolic Compounds	APHA 23rd Edition, 2017, 5530 C	*BLQ(**LOQ-0.001)	mg/l
14.	Zinc as Zn	APHA (23rd Edition),3111 B: 2017	0.35	mg/l
15.	Copper as Cu	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.02)	mg/l
16.	Cadmium as Cd	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.002)	mg/l
17.	Lead as Pb	APHA (23rd Edition),3111 B: 2017	*BLQ(**LOQ-0.005)	mg/l
18.	Arsenic as As	APHA (23rd Edition),3114C,2017	*BLQ(**LOQ-0.005)	mg/l
19.	Mercury as Hg	APHA (23rd Edition)3112 B,2017	*BLQ(**LOQ-0.001)	mg/l
20.	Oil & Grease	IS:3025(P-39)	*BLQ(**LOQ-4.0)	mg/l
21.	BOD (3days at 27°C)	IS:3025(P-44):1993, RA:2019	9.12	mg/l
22.	COD	IS:3025(P-58):2006, RA:2017	45.0	mg/l
23.	DO	IS:3025(P-38):1989, RA:2019	5.2	mg/l
24.	TSS	IS:3025(P-17):2021	70.0	mg/l
Microbio	ological Parameters			
25.	Total Coliform	IS:15185: 2016	Present	Present/Absent per 10
26.	Faecal Coliform	IS:15185: 2016	Present	ml

Note: - \*BLQ-Below Limit of Quantification, \*\*LOQ- Limit of Quantification

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





RK Yadav Lab Incharge **Authorized Signatory** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

#### Vibrant Techno Lab Pvt. Ltd.

9 SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com



Annexure-10

An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

Test Report Code : VGL/N/24/05/17/N-042

Report Issue Date : 24.05.2024

### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

& 24 Hrs.

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

SIMARIYA VILLAGE

Date & Duration of Sampling

14.05.2024

Sampling Done by

VGL STAFF

Method of Sampling Sample Receiving Date IS:9989

Sample processing Date

17.05.2024 18.05.2024

AMBIENT NOISE RESULT

		Day Time		Night Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in
1.	SIMARIYA VILLAGE	6:00 AM TO 10:00 PM	51.2	10.00 PM TO 6:00 AM	39.3

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

#### Note:

1. This report is not to be reproduced wholly or in part and cannot be used as evidence in the court of law and should not be used in any advertising media without our special permission in writing.

2. The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15 Days.

4. The above results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab

Authorized Signatory ( tempo

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

Test Report Code

: VGL/N/24/05/17/N-043

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

TIGHRA VILLAGE

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by Method of Sampling VGL STAFF IS:9989

Sample Receiving Date Sample processing Date

17.05.2024

18.05.2024

AMBIENT NOISE RESULT

	No. 7-4-7-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-1-	Day Time	e	Night Tim	e
Sl. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	TIGHRA VILLAGE	6:00 AM TO 10:00 PM	51.8	10.00 PM TO 6:00 AM	40.2

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

C-1-	C-1	Limit in dB (A) Leq		
Area Code	Category of Area	Day Time	Night Time	
A	Industrial Area	75	70	
В	Commercial Area	65	55	
C	Residential Area	55	45	
D	Silence Zone	50	40	

#### Page 1 of 1

#### Note:

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- The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15 Days. 4. The above results are related to the tested sample only.

GLOA Review By:

Dr. Ashok Kumar Technical Manager Authorized Signatory ab

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical faboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

Test Report Code

: VGL/N/24/05/17/N-044

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

SUHWANI KALAN VILLAGE

Date & Duration of Sampling

& 24 Hrs. 14.05.2024

Sampling Done by

VGL STAFF

Method of Sampling Sample Receiving Date IS:9989

Sample processing Date

17.05.2024 18.05.2024

AMBIENT NOISE RESULT

		Day Time		Night Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	SUHWANI KALAN VILLAGE	6:00 AM TO 10:00 PM	49.3	10.00 PM TO 6:00 AM	39.2

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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The sample will be destroyed after 15days from the date of issue of test certificate unless otherwise specified.

Any discrepancy in test result should be reported within 15 Days.

The above results are related to the tested sample only.

LOA Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab

**Authorized Signatory** 

Authorised Signatory

D. K. Yadav Lab In-charge



An Analytical faboratory

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Test Report Code : VGL/N/24/05/17/N-045

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

KHOLKAHIYA VILLAGE

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date Sample processing Date : 17.05.2024

18.05.2024

#### AMBIENT NOISE RESULT

		Day Time	e	Night Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	KHOLKAHIYA VILLAGE	6:00 AM TO 10:00 PM	50.2	10.00 PM TO 6:00 AM	40.1

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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Any discrepancy in test result should be reported within 15 Days.

4. The above results are related to the tested sample only.

Review By:

Technical Manager

VAnthorized Signatory ab

ed Signatory

D. K. Yadav Lab In-charge



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Test Report Code

: VGL/N/24/05/17/N-046

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

GARHI KARHIYA VILLAGE

Date & Duration of Sampling

& 24 Hrs. 14.05.2024

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date Sample processing Date 17.05.2024 18.05.2024

MDIENT NOISE DECLII T

		AMBIENT	OISE RESULT		
		Day Time	e	Night Tim	e
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	GARHI KARHIYA VILLAGE	6:00 AM TO 10:00 PM	53.4	10.00 PM TO 6:00 AM	42.8

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

1 C-1-	C-1	Limit in dB (A) Leq		
Area Code	Category of Area	Day Time	Night Time	
A	Industrial Area	75	70	
В	Commercial Area	65	55	
C	Residential Area	55	45	
D	Silence Zone	50	40	

#### Page 1 of 1

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4. The above results are related to the tested sample only.

Review By:

Ashok Kumar Technical Manager Authorized Signatory ab

Authorised Signatory

D. K. Yadav Lab In-charge



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Test Report Code

: VGL/N/24/05/17/N-047

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s, J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

24 Hrs.

DISTT. - PANNA, 488441 (M.P)

&

Sampling Location

KHAMAGAUR VILLAGE

Date & Duration of Sampling

14.05.2024

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date Sample processing Date

17.05.2024 18.05.2024

AMRIENT NOISE RESULT

		AMBIENT	WISE RESULT		
		Day Time	e	Night Tim	e
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	KHAMAGAUR VILLAGE	6:00 AM TO 10:00 PM	52.4	10.00 PM TO 6:00 AM	41.9

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

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4. The above results are related to the tested sample only.

Review By:

Technical Manager

Virat Global Lab

Authorised Signatory

D. K. Yadav Lab In-charge



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Test Report Code

: VGL/N/24/05/17/N-028

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

NEAR OFFICE AREA (KAKRA MINE)

Date & Duration of Sampling

13.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling Sample Receiving Date

IS:9989 17.05.2024

Sample processing Date

18.05.2024

AMBIENT NOISE RESULT

	121 COLON WARRANCE	Day Time		Night Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	NEAR KAKRA OFFICE	6:00 AM TO 10:00 PM	62.5	10.00 PM TO 6:00 AM	51.8

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

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Review By:

Technical Manager

D. K. Yadav Lab In-charge



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Test Report Code : VGL/N/24/05/17/N-029

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

NEAR CRUSHER PLANT (KAKRA MINE)

Date & Duration of Sampling

13.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling Sample Receiving Date

IS:9989 17.05.2024

Sample processing Date

18.05.2024

AMBIENT NOISE RESULT

	Day Time		e	Night Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	KAKRA CRUSHER	6:00 AM TO 10:00 PM	69.9	10.00 PM TO 6:00 AM	52.1

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

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Review By:

Dr. Ashok Kumar Technical Manager

D. K. Yadav Lab In-charge



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Test Report Code : VGL/N/24/05/17/N-030

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s, J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

MINES PIT AREA (KAKRA MINE)

Date & Duration of Sampling

13.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling Sample Receiving Date IS:9989

Sample processing Date

17.05.2024 18.05.2024

AMBIENT NOISE RESULT

	Day Time		Night Time		e
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	KAKRA MINE PIT	6:00 AM TO 10:00 PM	67.1	10.00 PM TO 6:00 AM	46.8

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

	6-1	Limit in dB (A) Leq		
Area Code	Category of Area	Day Time	Night Time	
Α	Industrial Area	75	70	
В	Commercial Area	65	55	
C	Residential Area	55	45	
D	Silence Zone	50	40	

#### Page 1 of 1

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irat Global Lab

Authorised Signatory

D. K. Yadav Lab In-charge

Ashok Kumar **Fechnical Manager** 

Review By



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Test Report Code

: VGL/N/24/05/17/N-031

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s, J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ.

DISTT. - PANNA, 488441 (M.P)

Sampling Location

SECUIRTY CABIN (KAKRA MINE)

Date & Duration of Sampling

13.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling Sample Receiving Date

IS:9989 17.05.2024

Sample processing Date

18.05.2024

AMBIENT NOISE RESULT

		Day Time		Night Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	NEAR KAKRA MINE SECUIRTY CABIN	6:00 AM TO 10:00 PM	60.2	10.00 PM TO 6:00 AM	48.1

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

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Review By:

Technical Manager

Authorised Signatory

D. K. Yadav Lab In-charge



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Test Report Code

: VGL/N/24/05/17/N-032

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

KAKRA VILLAGE

Date & Duration of Sampling

13.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date Sample processing Date 17.05.2024 18.05.2024

AMBIENT NOISE RESULT

		Day Time		Night Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	KAKRA VILLAGE	6:00 AM TO 10:00 PM	52.8	10.00 PM TO 6:00 AM	42.1

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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4. The above results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge



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Test Report Code : VGL/N/24/05/17/N-048

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

PURAINA VILLAGE

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

Sl. No.		Day Time		Night Time	
	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	PURAINA VILLAGE	6:00 AM TO 10:00 PM	53.5	10.00 PM TO 6:00 AM	42.8

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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4. The above results are related to the tested sample only.

Virat Global Lab

Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge

Dr. Ashok Kumar Technical Manager

Review By:



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Test Report Code : VGL/N/24/05/17/N-049

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

PAGRA VILLAGE

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

		Day Time		Night Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	PAGRA VILLAGE	6:00 AM TO 10:00 PM	53.5	10.00 PM TO 6:00 AM	43.1

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

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4. The above results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Vinterized Signator Lab

Authorised Signatory

D. K. Yadav Lab In-charge



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Test Report Code

: VGL/N/24/05/17/N-050

Report Issue Date

: 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

AMANGANJ

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

	Day Time	e	Night Time		
Sl. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	AMANGANJ	6:00 AM TO 10:00 PM	51.4	10.00 PM TO 6:00 AM	40.2

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

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4. The above results are related to the tested sample only.

Review By

Dr. Ashok Kumar Technical Manager Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge

E-mail: viratgloballab@gmail.com, ceo.viratlab@gmail.com, Web: www.viratlab.com



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(An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

**Test Report Code** 

: VGL/N/24/05/17/N-051

Report Issue Date

: 24.05.2024

### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

SAPTAI VILLAGE

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

AMBIENT NOISE RESULT

Day Time	e	Night Time			
Sl. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	SAPTAI VILLAGE	6:00 AM TO 10:00 PM	50.3	10.00 PM TO 6:00 AM	42.2

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

Amer Code	C-1	Limit in dB (A) Leq		
Area Code	Category of Area	Day Time	Night Time	
Α	Industrial Area	75	70	
В	Commercial Area	65	55	
C	Residential Area	55	45	
D	Silence Zone	50	40	

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3. Any discrepancy in test result should be reported within 15 Days.

4. The above results are related to the tested sample only.

Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab

Authorised Signatory



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**Test Report Code** 

: VGL/N/24/05/17/N-052

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

KAMTANA VILLAGE

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

		Day Time	e	Night Time		
Sl. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)	
1.	KAMTANA VILLAGE	6:00 AM TO 10:00 PM	53.8	10.00 PM TO 6:00 AM	42.1	

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

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Any discrepancy in test result should be reported within 15 Days.

4. The above results are related to the tested sample only.

Review By

Dr. Ashok Kumar Technical Manager Authorized Signator Lab

Authorised Signatory



An Analytical Laboratory

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Test Report Code

: VGL/N/24/05/17/N-053

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

UDLA VILLAGE

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989 17.05.2024

Sample Receiving Date Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

		And the state of t	Night Tim	Night Time	
SL No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	UDLA VILLAGE	6:00 AM TO 10:00 PM	50.6	10.00 PM TO 6:00 AM	38.9

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

Anna Cada	C-1	Limit in dB (A) Leq		
Area Code	Category of Area	Day Time	Night Time	
A	Industrial Area	75	70	
В	Commercial Area	65	55	
С	Residential Area	55	45	
D	Silence Zone	50	40	

#### Page 1 of 1

#### Note:

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3. Any discrepancy in test result should be reported within 15 Days.

4. The above results are related to the tested sample only.

Virat Global Lab

Authorized Signatory

to como Authorised Signatory

> D. K. Yadav Lab In-charge

Dr. Ashok Kumar Technical Manager

Review By:



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Test Report Code

: VGL/N/24/05/17/N-054

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

SOTIPURA VILLAGE

Date & Duration of Sampling

14.05.2024 & 24 Hrs.

Sampling Done by Method of Sampling VGL STAFF IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

		Day Time	e	Night Time		
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)	
1.	SOTIPURA VILLAGE	6:00 AM TO 10:00 PM	52.1	10.00 PM TO 6:00 AM	39.6	

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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4. The above results are related to the tested sample only.

Review By

Dr. Ashok Kumar Technical Manager Virat Global Lab

D. K. Yadav Lab In-charge

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Test Report Code

: VGL/N/24/05/17/N-055

Report Issue Date

: 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

HINAUTA VILLAGE

Date & Duration of Sampling

15.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

			Night Tim	ght Time	
SI. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	HINAUTA VILLAGE	6:00 AM TO 10:00 PM	52.8	10.00 PM TO 6:00 AM	40.8

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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Review By:

Dr. Ashok Kumar Technical Manager Authorized Signatory

Authorised Signatory



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Test Report Code : VGL/N/24/05/17/N-056

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

PURWA VILLAGE

Date & Duration of Sampling

15.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

Sl. No.	Day Time		e	Night Time	
	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	PURWA VILLAGE	6:00 AM TO 10:00 PM	53.6	10.00 PM TO 6:00 AM	41.5

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

	C-1	Limit in dB (A) Leq		
Area Code	Category of Area	Day Time	Night Time	
A	Industrial Area	75	70	
В	Commercial Area	65	55	
C	Residential Area	55	45	
D	Silence Zone	50	40	

#### Page 1 of 1

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Review By:

Dr. Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory



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Test Report Code

: VGL/N/24/05/17/N-057

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

BHUPATPURA VILLAGE

Date & Duration of Sampling

15.05.2024 & 24 Hrs.

Sampling Done by Method of Sampling VGL STAFF IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

		Day Time		Night Time	
Sl. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	BHUPATPURA VILLAGE	6:00 AM TO 10:00 PM	52.4	10.00 PM TO 6:00 AM	42.8

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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Review By:

Dr. Ashok Kumar Technical Manager

Authorised Signatory



An Analytical Laboratory

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Test Report Code : VGL/N/24/05/17/N-058 Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

MAHODKH VILLAGE

Date & Duration of Sampling

& 24 Hrs. 15.05.2024

Sampling Done by Method of Sampling VGL STAFF

Sample Receiving Date

IS:9989 17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

Sl. No.		Day Time		Night Time	
	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	MOHADKH VILLAGE	6:00 AM TO 10:00 PM	51.9	10.00 PM TO 6:00 AM	40.8

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

C1-	C-1	Limit in dB (A) Leq		
Area Code	Category of Area	Day Time	Night Time	
A	Industrial Area	75	70	
В	Commercial Area	65	55	
C	Residential Area	55	45	
D	Silence Zone	50	40	

#### Page 1 of 1

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Review By:

Technical Manager

Virat Global Lab Authorized Signatory



An Analytical Laboratory

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Test Report Code

: VGL/N/24/05/17/N-059

Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s. J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

UMERI VILLAGE

Date & Duration of Sampling

15.05.2024 & 24 Hrs.

Sampling Done by

VGL STAFF

Method of Sampling

IS:9989

Sample Receiving Date Sample processing Date

17.05.2024 18.05.2024

AMBIENT NOISE RESULT

	Day Time		Night Time		
Sl. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	UMERI VILLAGE	6:00 AM TO 10:00 PM	52.8	10.00 PM TO 6:00 AM	42.1

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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4. The above results are related to the tested sample only.

Virat Global Lab

Authorized Signatory

Authorised Signatory

D. K. Yadav Lab In-charge

Dr. Ashok Kumar Technical Manager

Review By:



An Analytical Laboratory

Recognized by MoEF & CC, Accredited by ISO/IEC-17025:2017 (NABL) (An ISO 9001:2015, 14001:2015 & 45001:2018 Certified Company)

Test Report Code : VGL/N/24/05/17/N-060 Report Issue Date : 24.05.2024

#### TEST REPORT (NOISE)

Name and Address of Customer

M/s, J K CEMENT WORKS, PANNA

(A UNIT OF JK CEMENT LIMITED.)

VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,

DISTT. - PANNA, 488441 (M.P)

Sampling Location

HARDUA VILLAGE

Date & Duration of Sampling

& 24 Hrs. 15.05.2024

Sampling Done by Method of Sampling VGL STAFF IS:9989

Sample Receiving Date

17.05.2024

Sample processing Date

18.05.2024

#### AMBIENT NOISE RESULT

		Day Time		Night Time	
Sl. No.	Locations	Time	Leq Value in dB(A)	Time	Leq Value in dB(A)
1.	HARDUA VILLAGE	6:00 AM TO 10:00 PM	52.4	10.00 PM TO 6:00 AM	41.5

#### NOISE (AMBIENT STANDARDS AS PER CPCB)

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

#### Page 1 of 1

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Ashok Kumar Technical Manager Virat Global Lab Authorized Signatory

Authorised Signatory

#### TEST REPORT



Name & Address of Party:

VTL/ N/01-13

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna

Limestone Mines Village-Harduwaken Tehsil-

Amanganj PIN-488441 Dist-Panna

Sample Description:

Ambient Noise Level Monitoring

Report No .:

VTL/N/2409160001-13

Format No.:

7.8 F-04

Party Reference No.:

NIL

Report Date:

25/09/2024

Receipt Date:

16/09/2024

General Information:-

Sample collected by

Instrument Used

**Instrument Calibration Status** 

**Instrument Code** 

Meteorological condition during monitoring

Scope of Monitoring

Sampling & Analysis Protocol

Parameter Required

: VTL Team

:Sound Level Meter

:Calibrated

:VTL/SLM/01-04

:Clear Sky

: Regulatory Requirement

: IS 9989-1981 RA: 2020

: As per Work Order

S. No.	Location	Date	Test Parameter	Test R	esult dB (A)
3. IVU.	Location	Date	l'est Parameter	Day Time	Night Time
1	Hardua Village	08-09/09/2024	Leq	52.4	42.3
2	Saptai Village	08-09/09/2024	Leq	49.0	39.5
3	Puraina Village	08-09/09/2024	Leq	47.5	37.9
4	Pagra Village	09-10/09/2024	Leq	51.7	40.2
5	Kamtana Village	09-10/09/2024	Leq	49.2	38.0
6	Udla Village	09-10/09/2024	Leq	52.7	43.5
7	Sotipura Village	09-10/09/2024	Leq	53.2	42.8
8	Hinauta Village	09-10/09/2024	Leq	51.9	43.1
9	Purwa Village	10-11/09/2024	Leq	52.6	41.9
10	Amanganj	10-11/09/2024	Leq	54.3	43.7
11	Bhupat Pura Village	10-11/09/2024	Leq	52.8	42.3
12	Mohadkh Village	10-11/09/2024	Leq	53.2	41.5
13	Umeri Village	11-12/09/2024	Leq	52.8	42.1
Categ	ory of Zones		Leg in dB	(A)	

Category of Zones	Leq in dB (A)		
	Day	Night	
Industrial	. 75	70	
Commercial	- Inerion 650 The	unimaginahie 55	
Residential	55	45	
Silence Zone	50	40	

Day Time is from 6.00 AM to 10.00 PM.

Night Time is reckoned between 10.00 PM to 6.00 AM.

3. Silence Zone is defined as an area up to 100 m around premises of Hospitals, Educational and Courts. Use of vehicle horn, Loudspeaker 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



**RK Yadav** 

Lab Incharge

**Authorized Signatory** 

Approved & Certified EPA 1986 Recognised, ISO:9001 and OHSAS:45001 Certified

#### Vibrant Techno Lab Pvt. Ltd.

9 SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020

9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

bd@vibranttechnolab.com

www.vibranttechnolab.com

#### TEST REPORT



Name & Address of Party:

VTL/ N/01-11

M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna

Limestone Mines Village-Harduwaken Tehsil-

Amanganj PIN-488441 Dist-Panna

Sample Description:

**Ambient Noise Level Monitoring** 

Report No.:

VTL/N/2409160014-24

Format No.:

7.8 F-04

Party Reference No.:

NIL

Report Date:

25/09/2024

Receipt Date:

16/09/2024

General Information:-

Sample collected by

Instrument Used

:Sound Level Meter

**Instrument Calibration Status** 

:Calibrated

: VTL Team

**Instrument Code** 

:VTL/SLM/01-04

Meteorological condition during monitoring

:Clear Sky

Scope of Monitoring

: Regulatory Requirement

Sampling & Analysis Protocol

: IS 9989-1981 RA: 2020

Parameter Required

: As per Work Order

S. No.	Location	Date	Test Parameter	Test Result dB (A)	
				Day Time	Night Time
1	Near Kakra Office	07-08/09/2024	Leq	65.7	57.4
2	Kakra Crusher	07-08/09/2024	Leq	60.5	49.3
3	Kakra Mine Pit	07-08/09/2024	Leq	64.5	53.2
4	Near Kakra Mine Security Cabin	07-08/09/2024	Leq	57.3	44.6
5	Kakra Village	02-03/09/2024	Leq	51.5	38.9
6	Suhwani Kalan Village	11-12/09/2024	Leq	53.6	41.7
7	Simariya Village	11-12/09/2024	Leq	54.3	42.6
8	Tighara Village	11-12/09/2024	Leq	52.9	40.3
9	Khol Kahiya Village	12-13/09/2024	Leq	54.3	41.2
10	Garhi karhiya Village	12-13/09/2024	Leq	53.9	42.1
11	Khamagaur Village	12-13/09/2024	Leq	54.1	41.8

Category of Zones	Leq in dB (A)			
	Day	Night		
Industrial	"Evnorio75 on thouse	signatura (na la 70		
Commercial	ZAPETIC 65 CE CITE OI	minagimusic 55		
Residential	55	45		
Silence Zone	50	40		

Day Time is from 6.00 AM to 10.00 PM.

Night Time is reckoned between 10.00 PM to 6.00 AM.

Silence Zone is defined as an area up to 100 m around premises of Hospitals, Educational and Courts. Use of vehicle horn, Loudspeaker 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 sha apply





**RK Yadav** 

Lab Incharge Authorized Signatory

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### Vibrant Techno Lab Pvt. Ltd.

- SC-40, 3rd Floor, Narayan Vihar S, Ajmer Road, Jaipur Raj. 302020
- 9929108691, 9810205356, 8005707098, 9549956601

**2** 0141-2954638

M bd@vibranttechnolab.com

www.vibranttechnolab.com

#### TEST REPORT



Sample Number:

VTL/WZN/01

Name & Address of the Party:

M M/s JK Cement Works, Panna

(A Unit Of JK Cement Ltd.) Kakra- Panna

Limestone Mines Village-Harduwaken Tehsil-Amanganj PIN-488441 Dist-Panna

Sample Description:

Work Zone Noise

Scope of Monitoring

Regulatory Requirement

Protocol Used: Instrument Used IS 9989: IS 9876

SLM

Report No.:

VTL/WZN/2409160001-5

Format No.:

7.8 F 04

Party Reference No.:

NIL

Report Date:

25/09/2024

Receipt Date:

16/09/2024

Sampling Duration

30 Min.

Sample Collected by

Instrument Calibration

VTL Team Calibrated

Status

General Information:-

Sampling Location

**Instrument Code** 

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Parameter Required

: Mines Area

: VTL/SLM/01

Clear sky

10/09/2024

: 10:00 to 10:30 Hrs.

: Min 35°C

: Human & Mining Activity

: Leq

Sr.No.	Test Parameter	Protocol	Result	Unit	Limit
1.	Drill Operator Cabin	IS:9989,IS 9876:1981	79.4	dB(A)	90.0
2.	Exavatore Operator Cabin	IS:9989,IS 9876:1981	82.2	dB(A)	90.0
3.	Dumpar Operator Cabin	IS:9989,IS 9876:1981	75.9	dB(A)	90.0
4.	Crusher Operator Cabin	IS:9989,IS 9876:1981	81.6	dB(A)	90.0
5.	Weigh Bridge Operator Cabin	IS:9989,IS 9876:1981	73.4	dB(A)	90.0





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## Awareness on Plastic Waste Campaign in nearby School of dated 29.08.2024

## School Name Photo





### Puraina School





## Awareness on Plastic Waste Campaign in nearby School of dated 30.08.2024

### **School Name**

### **Photo**





### **Boda School**





### Awareness on Plastic Waste Campaign in nearby School of dated 31.08.2024

### School Name Photo





Pagra School





### Awareness on Plastic Waste Campaign in nearby School of dated 04.09.2024

### School Name Photo





### Kamtana School



