

Ref. No.: JKCEMENT/ENV./EC/KAKRA/03/12

Dated: 28.11.2023

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 Environmental Clearance Compliance Status Report for period from April 2023 to September 2023 of Kakra Panna Limestone Mine for 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 J-11015/190/2016-IA.II (M) dated 31.08.2020
2- Corrigendum in EC letter no. J-11015/190/2016-IA.II (M) dated 08.03.2021
3- Amendment EC letter no. -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 are submitting Half Yearly Environmental Clearance Compliance Status Report for period from April 2023 to September 2023 of Kakra Panna Limestone Mine for J K Cement Ltd. located at Villages Kakra, Kamtana, Saptai, Judi, Devri Purohit & Devra, Tehsil: Amanganj, Dist. Panna, Madhya Pradesh through email, this for your kind information and record please.

Thanking you,

Yours Sincerely
For: Kakra-Panna Limestone Mine
(A Unit of J K Cement Ltd.)


Kapil Agrawal
(Unit Head)

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

1. Member Secretary, MP Pollution Control Board, Paryawaran Parisar,
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 Paryawaran Bhavan, New Delhi-11003



Corporate Office

- 📍 Padam Tower, 19 DDA Community Centre Okhla, Phase - 1, New Delhi - 110020, India
- ☎ +011-49220000
- 📧 admin.padamtower@jkcement.com
- 🌐 www.jkcement.com

**JK SUPER
CEMENT**
BUILD SAFE

Manufacturing Units at :
Nimbahera, Mangrol, Gotan (Rajasthan) | Muddapur (Karnataka)
Jharli (Haryana) | Katni (M.P.) | Aligarh (U.P.) | Balasinar (Gujarat)

**JK CEMENT
WallMaxX**
White Cement Wall Putty

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

Environmental Clearance to M/s Kakra-Panna Limestone Mine of J K Cement Limited 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], located at Villages Kakra, Kamtana, Saptai, Judi, Devri Purohit and Devra, Tehsil Amanganj, District Panna, Madhya Pradesh (ML Area- 1594.34 Ha)		
Environment Clearance vide no F. No. J-11015/190/2016-IA. II (M) dated 31st August 2020, Corrigendum in EC vide letter No. J-11015/190/2016-IA.II (M) dated 8th March, 2021 and Amendment in EC vide F. No. J-11015/190/2016-IA. II (M) dated 18th October 2023		
Specific Condition		
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 re-validation or amendment in environmental clearance for permission for the entire area proposed for mining within the ML area	This condition has been amended by MoEF&CC vide Amended EC no. F. No. J-11015/190/2016-IA. II (M) dated 18th October 2023 , to carry out mining activity in the entire lease area as per the approved mining 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.	Agreed. An appropriate safety barrier from village/ Habitation, both side of Nallah, village roads have been left as non-mining zone and thick green belt will be developed with native species.
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.	Agreed. No mining will 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.
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.	Agreed and being followed.

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

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.	Agreed and monitored during every blast performed.
VI.	No external dumping of overburden and/or sub-grade material shall be made outside the mining lease area.	Agreed. No external dumping is proposed for the subject proposal.
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	Agreed and being complied We have deposited an amount of Rs. 123.51 lakhs for wild life conservation plan. Copy of letter is attached as Annexure 1
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 Interburden, Soil/Alluvium 1.26 MTPA, Mine Waste 0.18 MTPA.	Agreed and is being followed.
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 saplings 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.	Agreed and it will be 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 near by Crusher area. A total of 4522 no. of sapling have been planted in 1.91 Ha of area.
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	Agreed. The commitments made on the issues raised in PH and activities proposed under CER are being executed. The record of the same is being maintained (Present CER expenditure status is mentioned below.)

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

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

S.No.	Activities	CER Expenditure (In Lakh)
1	Health (Infrastructure for Primary Health Center, Mobile Health Clinic, Veterinary Hospitals/ Dispensaries)	181.7
2	Actions for COVID-19 (Supply of Hospital beds, Ventilator, Sanitation equipment, PPE Kits, Body Temperature Scanner, etc.)	
3	Education (Construction/ Extension/ additional facilities e.g. Laboratory, Library, Computer class, Toilets, Drinking Water Facilities etc. for village schools)	51.06
4	Sanitation (Construct Community Toilets, Construct Drainage System, Solid Waste Management etc.) and Drinking Water Facilities (Hand Pumps, Wells, Tap Water, Water Storage Tanks, Deepening & Cleaning of Ponds, Roof Top Rain Water Harvesting Structure etc.)	32.51
5	Activity Centre for SHGs. SHGs planned for tailoring, production of daily need items, etc. Same facility shall be used for Skill Development Training for women as well. eg. Beautician course, handicraft etc.	1.21
6	Infrastructure (Concrete Roads, Electrification including Solar Power, Panchayat Bhawan, Community Centers, etc.)	35
7	Others Local Social Needs	45.03
8	Greenery Development Nearby Area - Free distribution of Saplings or seedlings for fruit or non-fruit bearing trees. Community Plantation drive in surrounding villages. Expert guidance to local farmers for adoption of improved agriculture practices to increase of yield of crops & Fodders, Cattle Farming etc.	192
Total		538.51

XI.	All the mitigation measures committed / envisaged in the EIA/EMP report and subsequent submission shall be implemented.	Agreed The proposal of mitigation measures for control of pollution is being done effectively.
XII.	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to 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. As per proposal re-grassing the mining area and any other area which may have been disturbed due to mining activities will be undertaken and restore the land to a condition which is fit for growth of fodder, flora, fauna etc. after ceasing mining operations to comply with direction of honorable supreme court.

B. Standard EC Conditions:

I. Statutory compliance

1	The EC granted to the project/ activity is strictly under the provisions of the EIA Notification, 2006	Agreed
---	--	--------

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	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.	
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.	Noted & to be 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.	Agreed. The subject proposal is green field project. The mining activity will be 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".	We have been granted mining lease area after leaving of habitation and villages part. However we assure that we will follow the mitigation measures provided in MoEFCC's Office Memorandum No. Z-11013/57/2014-IA.II (M), dated 29 th 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.	The copy of EC letter has been provided to 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 of acknowledgement is enclosed as Annexure-2
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	The condition is related to SPCB.
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	The advertisement about the grant of EC letter for the project has been published in two local newspapers namely Dainik Jagran and Raj

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	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.	Express dated 04.09.2020 and copy of the same already send to all concerns on 07.09.2020. Copy is enclosed as Annexure-3
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.	Agreed and Complied
II. Air quality monitoring and preservation		
9	<p>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 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 dated 18.11.2009 covering the aspects of transportation and use of heavy machinery in the impact zone.</p> <p>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.</p>	<p>Agreed. We have installed 02 Nos. Continuous Ambient Air Quality Monitoring Station (CAAQMS) close to boundary of mine lease, out of minimum 03 Online Ambient Air Quality Monitoring Stations requirement. 01 Nos. CAAQMS is under installation.</p> <p>The ambient air quality in core zone and buffer zone is also being monitored by NABL approved lab. Monitoring Reports are enclosed as Annexure-4</p>
10	Effective safeguard measures for prevention of 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	<p>Being Complied</p> <p>Water sprinkling is being carried out for controlling the fugitive dust emission. Fugitive Emission reports are enclosed as Annexure-5</p>

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	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	
III. Water quality monitoring and preservation		
11	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 has already been obtained vide no. CGWA/NOC/ MIN/ORIG/2020/7359 dated 05.02.2020 for use of ground water as well as for intersection of water table during the course of mining operation. NOC is enclosed as Annexure-6
12	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.	Agreed and complying. We are monitoring and maintaining records w.r.t. ground water level and quality in and around the mine. Ground water level and Quality reports are enclosed as Annexure-7A and Annexure-7B
13	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	Agreed. Regular water quality is being performed as per proposal given under environmental monitoring programme for the parameters include their water quality vis-à-vis suitability for usage as per CPCB criteria and flow rate. Surface water quality reports are enclosed as Annexure-8

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	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 six-monthly basis.	
14	<p>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).</p> <p>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.</p>	<p>Agreed.</p> <p>Regular monitoring is being carried out as per the given direction. Being a lime stone mines, no acid mine drainage is anticipated.</p> <p>The monitored data has been 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 will be referred in this regard after commencement of mining operations.</p>
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.	<p>Agreed.</p> <p>The rainwater harvesting structure will be developed as per the approved hydrogeological study report and consultation with Central Ground Water Board.</p>
16	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 concerned State Pollution Control Board (SPCB). The workshop effluent shall be treated after its initial passage through Oil and grease trap.	<p>Agreed.</p> <p>Construction of workshop at this mine is under progress. Oil and grease trapping system is proposed for work shop effluent. We assure that we will maintain the standards as prescribed in Consent to Operate (CTO) issued by concerned State Pollution Control Board (SPCB).</p>
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.	Agreed and we will comply with the given direction.
<u>IV. Noise and vibration monitoring and prevention</u>		
18	The peak particle velocity at 500m distance or within the nearest habitation, whichever is closer shall be monitored periodically as per applicable DGMS guidelines	<p>Being Complied</p> <p>Peak Particle velocity is being monitored as per applicable DGMS guidelines</p>

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

19	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.	Being Complied The illumination and Noise levels are being maintained within the prescribed limits in day/night hours. Reports are enclosed as Annexure-9
20	The Project Proponent shall take measures for control of noise levels below 85 dBA in the work environment. The workers engaged in 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.	Being Complied Regular maintenance of HEMM is being carried out. PPEs like earplugs/muffs etc. has been provided to workers working near high noise area. Training and awareness programs on health and safety aspects are organized periodically.
V) Mining Plan		
21	The Project Proponent shall adhere to approved mining plan, inter alia, including, total excavation (quantum of mineral, waste, over burden, inter burden and top soil etc.); mining technology; lease area; scope of working (method of mining, overburden & dump management, O.B. & dump mining, mineral transportation mode, ultimate depth of mining, concurrent reclamation and reclamation at mine closure; land-use of the mine lease area at various stages of mining scheme as well as at the end-of-life; etc.).	Being Complied Mining activities are being carried out as per approved mining plan.
22	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.	Being Complied Mining activities and land use planning being done as per approved mining plan. Backfilling has not started yet and afforestation will be done on reclaimed area as per approved mining plan.
<u>VI. Land reclamation</u>		

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

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.	Being Complied OB and topsoil generated during the mining operations are stacking at earmarked OB dump site. 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 as per the guidelines/circulars issues by the DGMS. The top soil is being used for plantation and stored in the designated areas.
24	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.	Agreed and to be complied as per approved mining plan.
25	Catch drains, settling tanks and siltation ponds of appropriate size shall be constructed around the mine working, mineral yards and Top 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	Agreed and will be complied We have just started the mining activity in the lease area. Bunds has been created around the mine working pit. 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.
26	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	Agreed and will be 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 will be constructed at the corners of the garland drain.

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	pits/ sumps shall be constructed at the corners of the garland drains.	
<u>VII. Transportation</u>		
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 the traffic load. The pollution due to 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 testing centers. [If applicable in case of road transport]	Being Complied No Transportation of the minerals is being passed through villages/ habitations. 2 nos. Water tankers have been deployed for sprinkling over haul road. Vehicular emissions are being kept under control and regularly monitored. PUC of all vehicles are done periodically.
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 dust suppression arrangements. The air pollution control equipments 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.	Agreed. As the main haulage road is under construction therefore Permanent water sprinkling arrangement will be done after completion of haul road. Roads within the mine lease is being wetted regularly with tanker-mounted water sprinkling system. Dust suppression arrangements have 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.
<u>VIII. Green Belt</u>		
29	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	Agreed and being complied.

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	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.	Plantation is being carried out in 7.5 m ML boundary and near by Crusher area. A total of 4522 no. of sapling have been planted in 1.91 Ha of area.
30	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	Agreed & will be complied when the backfilled area is available.
31	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 mid-day shelter from the scorching sun, should be scrupulously guarded/ protected against felling and plantation of such trees should be promoted	There is no grazing land in mine lease area.
<u>IX. Public hearing and human health issues</u>		
32	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	Complied Mine is adjacent to cement plant and labor colony has been provided with all amenities within the cement plant premises. STP has been installed for treatment of Sewage water.

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	with STP in order to avoid contamination of underground water.	
X. Corporate Environment Responsibility (CER)		
33	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 same along with documentary proof viz. 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		
34	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.	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.
35	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.	Noted and complied
36	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.	Complying. 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.
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.
38	The concerned Regional Office of the MoEFCC shall randomly monitor compliance of the stipulated conditions. The project authorities should extend full cooperation to the	Agreed and noted.

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	MoEFCC officer(s) by furnishing the requisite data / information / monitoring reports.	
39	In pursuant to Ministry's O.M No 22-34/2018-IA.III dated 16.01.2020 to 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.	Noted and Agreed
40	The Ministry or any other competent authority may alter/modify the above conditions or stipulate any further condition in the interest of environment protection	Noted and agreed
41	Concealing factual data or submission of false/fabricated data and failure to comply with any of the conditions mentioned above may result in withdrawal of this clearance and attract action under the provisions of Environment (Protection) Act, 19	Noted and agreed
42	The above conditions will be enforced inter-alia, 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.	Noted and agreed
43	Any appeal against this environmental clearance 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.	Noted and agreed
Amendment in EC vide F. No. J-11015/190/2016-IA. II (M) dated 18th October 2023		
1	Dust suppression	
1.1	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	Agreed and will be complied Permanent water sprinklers will be provided on the Mine Haulage road after construction.


Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	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.	Fogging systems are installed at unloading point. Regular water sprinkling has been carried out on mine haulage road to control the fugitive dust emission. Bag filter has been installed and belt conveyors with covered corrugated sheets are installed to control the fugitive dust emission. 2 nos. of CAAQMS have been installed at boundary of the ML.
2	Single use plastic	
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.	Awareness program among the local people working within the project area as well as its surrounding area on the ban of Single Use Plastic (SUP) has been carried out and report with photographs are enclosed as Annexure-10
3	Clean energy	
3.1	The Project Proponent shall explore the possibility of using at least 20% of electric vehicles/CNG/Solar instead of diesel operation within three years.	Noted and Will be complied
4	Greater panna landscape	
4.1	The Project Proponent shall not transport the mineral through tiger dispersal route and it should be routed through other side without causing traffic, pollution and roadkill in the tiger reserve area.	As the mining lease area is not falling under tiger dispersal route hence causing traffic, pollution and road kill in tiger reserve area is not anticipated.
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
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.	Agreed and will be complied
4.4	Biodiversity management plan, including restoration and carbon offset scheme shall be included in the mine plan and operation.	We 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	Agreed

Half Yearly Environment Clearance Compliance Report of M/s J K Cement Limited, Panna for Period from April 2023 to September 2023
Environment Clearance vide no J-11015/190/2016-IA. II (M) dated 31st August 2023

	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.	The apprenticeship training to the local peoples is being provided and data of out come have been maintained.
6	Miscellaneous	
6.1	All other terms and conditions mentioned in the EC letter dated 31.08.2020 shall remain unchanged.	Noted and Agreed

Yours Sincerely
For: Kakra - Panna Limestone Mine
(Wholly Owned Subsidiary of JK Cement Ltd.)


Kapil Agrawal
(Unit Head)



Jaykaycem (Central) Ltd.

(Wholly Owned Subsidiary of JK Cement Ltd.)

Integrated Cement Manufacturing Unit

Village : Harduwakan, Tehsil: Amanganj,

District: Panna, M.P., India, Pin - 488441

CIN: U72305UP1987PLC009162

☎ 9329141591

✉ jkc.panna@jkcement.com

Ref. No.: PCP/EMD/MoEF/F 04/12

Dated: 31.07.2023

To,
District Forest Officer,
South Panna,
Panna 488001

Subject: To comply with Wild Life Conservation Plan Approval Letter for Kakra Panna Limestone Mine and Jaykaycem Central Limited Integrated Cement Project located in Village(s)- Kakra, Kamtana, Saptai, Judi, Devri Purohit, Devra, Harduwaken, Puraina, Sotipura & Madaiyan Tehsil – Amanganj, Dist. Panna, implementation of Wildlife Conservation Plan and specific condition no. vii of Environment Clearance- reg.

Ref.: Approved WLCP Approval Letter no. V.Pra/Ma.Chi./8847 dated 13.12.2019

Dear Sir,

With reference to approved wild life conservation plan letter no. V.Pra/Ma.Chi./8847 dated 13.12.2019, we would like to inform you that we have deposited three year's amount i.e. total Rs.123.51 Lakh via. Cheques no. 977920 of Rs. 1977000/-, 977919 of Rs. 802000/-, 977918 of Rs. 2000000/-, 977917 of Rs. 1572000/-, 977916 of Rs. 2000000/-, 977915 of Rs. 2000000/-, and 977914 of Rs. 2000000/-dated 31.07.2023 into the account of Divisional Forest Officer, South Panna (Chief Executive Officer, South Panna) in Account Number: 63033636857, IFSC Code: SBIN0030436.

We are enclosing herewith copies of the cheques for your reference, please. This is as part of compliance from our end to meet the condition of environment clearance issued for our Kakra Panna Limestone Mine and Jaykaycem Central Limited Integrated Cement Project.

Therefore, we request your good office to kindly constitute the committee to comply with environmental clearance condition, please.

Thanking you
Yours Faithfully
For: Jaykaycem (Central) Limited

Kapil Agrawal
Kapil Agrawal
(Unit Head)

Encl: As above

CC to:

1. PCCF (Wildlife) and Chief Wildlife Warden, Bhopal, M.P.
2. The Field Director, Panna Tiger Reserve, Panna- 488001 (MP)
3. Chief Conservator of Forest, Chhatarpur-471001



(00447)-PANNA
POST BAG NO.3, PANNA,
CHHATRASAL COLLEGE ROAD, BENISAGAR, DIST: PANNA,
Tel : 91 7732252019 Fax : IFS Code : SBIN0000447 SWIFT :
SBININ33

केवल 3 महीने के लिए वैध / VALID FOR 3 MONTHS ONLY

1A6ES2

PAY. C.E.O F.D.A South Forest Division Jaunpur को या उनके आदेश पर OR ORDER

रुपये RUPEES Twinty Lakhs only

अदा करें	₹	20,50,000/-
----------	---	-------------

ब्रा. सं.
A/c No. 41674121525

CURRENT A/C

PREFIX:
1515600001

VALID UPTO ₹ 50 LACS AT NON-HOME BRANCH FOR NON-CASH TRANSACTION ONLY

52512147614

JAY KAYCEM (CENTRAL) LTD.

Please sign above

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

29 "924000 :1100200884 "476226" "977914"



(00447)-PANNA
POST BAG NO.3, PANNA,
CHHATRASAL COLLEGE ROAD, BENISAGAR, DIST: PANNA,
Tel : 91 7732252019 Fax : IFS Code : SBIN0000447 SWIFT :

क्रेडिट 3 महीने के लिए वैध / VALID FOR 3 MONTHS ONLY

380017	2	1	0	7	2	0	2	3
	D	D	M	M	Y	Y	Y	Y

TZLLQO

PAY C.E.O F.O.A South forest Division PANDU को या उनके आदेश पर OR ORDER TILLOO

रुपये RUPEES Twenty 20/00 Only

अदा करें	₹	20,00,000/-
----------	---	-------------

41674121525

CURRENT A/C

52512147614

VALID UP TO ₹ 60 LACS AT NON-HOME BRANCH FOR NON-CASH TRANSACTION ONLY

PREFIX:
1515600001

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

JAY KAY CEM (CENTRAL) LTD.

Please sign above

29 "924000 1100200884 4880020011 51626" "977915" "977915"

[illegible]



100447-PANNA
POST BAG NO.3, PANNA,
CHHATTISGARH COLLEGE ROAD, BENISAGAR DIST PANNA, MADHYA PRADESH 486004
Tel: 91 7732252019 Fax: IFS Code: SBIN0000447 SWIFT:

वेब 3 महीने के लिए वैध है / VALID FOR 3 MONTHS ONLY
21072023
D D M M Y Y Y Y

PAY C.E.O F.O.A South forest Division Panna को या उनके आदेश पर OR ORDER

रुपये RUPEES Twenty एक हजार only

अदा करें ₹ 20,00,000/-

का. सं. A/c No 41674121525

VALID UP TO 50 LACS AT NON-HOME BRANCH FOR NON-CASH TRANSACTION ONLY

CURRENT A/C

PREFIX: 1515600001

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

JAY KAY CEM (CENTRAL) LTD.

Please sign above

॥९११११८॥ ५८८००२०० ५: ०००५२६॥ २९



100447-PANNA
POST BAG NO.3, PANNA,
CHHATTISGARH COLLEGE ROAD, BENISAGAR DIST PANNA, MADHYA PRADESH 486004
Tel: 91 7732252019 Fax: IFS Code: SBIN0000447 SWIFT:

वेब 3 महीने के लिए वैध है / VALID FOR 3 MONTHS ONLY
21072023
D D M M Y Y Y Y

PAY C.E.O F.O.A South forest Division Panna को या उनके आदेश पर OR ORDER

रुपये RUPEES Eight एक हजार thousand only

अदा करें ₹ 8,00,000/-

का. सं. A/c No 41674121525

VALID UP TO 50 LACS AT NON-HOME BRANCH FOR NON-CASH TRANSACTION ONLY

CURRENT A/C

PREFIX: 1515600001

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

JAY KAY CEM (CENTRAL) LTD.

Please sign above

॥९११११९॥ ५८८००२०० ५: ०००५२६॥ २९



100447-PANNA
POST BAG NO.3, PANNA,
CHHATTISGARH COLLEGE ROAD, BENISAGAR DIST PANNA, MADHYA PRADESH 486004
Tel: 91 7732252019 Fax: IFS Code: SBIN0000447 SWIFT:

वेब 3 महीने के लिए वैध है / VALID FOR 3 MONTHS ONLY
21072023
D D M M Y Y Y Y

PAY C.E.O F.O.A South forest Division Panna को या उनके आदेश पर OR ORDER

रुपये RUPEES Niveten एक हजार Seventy thousand only

अदा करें ₹ 19,77,000/-

का. सं. A/c No 41674121525

VALID UP TO 50 LACS AT NON-HOME BRANCH FOR NON-CASH TRANSACTION ONLY

CURRENT A/C

PREFIX: 1515600001

MULTI-CITY CHEQUE Payable at Par at All Branches of SBI

JAY KAY CEM (CENTRAL) LTD.

Please sign above

॥९११११०॥ ५८८००२०० ५: ०००५२६॥ २९

Jaykaycem (Central) Ltd.

GSTIN-23AABCB4401G2Z6

Ref. No. PN/EMD/CWLA/F 12/022

प्रति,

मुख्य कार्यपालन अधिकारी
जिला पंचायत, पन्ना
जिला पन्ना (म०प्र०)

Regd Office : Kamla Tower
Kanpur-208001 (India)

Project Office : My Home Residency,
Opp. Essar Petrol Pump, Katni Road
Amanganj - 488441 Panna (M.P.)
दिनांक - 05.09.2020

विषय—पर्यावरण अनुमति सूचना—पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय भारत सरकार नई दिल्ली ने मेसर्स जेकेसेम(सेन्ट्रल) लिमिटेड की प्रस्तावित चूना पत्थर खनन परियोजना ग्राम—ककरा, कमताना, सप्तई, जूड़ी, देवरी पुरोहित एवं देवरा तहसील—अमानगंज, जिला—पन्ना (म०प्र०)।

सन्दर्भ— पर्यावरण स्वीकृति पत्र क्रमांक J-11015/190/2016-IA.II (M), दिनांक 31.08.2020।

महोदय,

आपको सूचित किया जाता है कि पर्यावरण, वन और जलवायु परिवर्तन मंत्रालय (एम.ओ.ई.एफ.सी.सी.) भारत सरकार नई दिल्ली ने ई.आई.ए. अधिसूचना 2006 के अधीन मेसर्स जेकेसेम(सेन्ट्रल) लिमिटेड की प्रस्तावित चूना पत्थर खनन परियोजना ग्राम—ककरा, कमताना, सप्तई, जूड़ी, देवरी पुरोहित एवं देवरा तहसील—अमानगंज, जिला—पन्ना (म०प्र०) की प्रस्तावित चूना पत्थर खनन परियोजना के लिए पर्यावरण अनुमति प्रदान की गई है।

वास्ते जेकेसेम (सेन्ट्रल) लिमिटेड

(आदित्य प्रताप सिंह)
महाप्रबन्धक—परियोजना

संलग्नक— पर्यावरण स्वीकृति पत्र क्रमांक J-11015/190/2016-IA.II (M), दिनांक 31.08.2020

प्रतिलिपि—

1. सरपंच/सचिव ग्राम पंचायत सिधोरा (ग्राम ककरा व सप्तई) जिला पन्ना (म०प्र०)

2. सरपंच/सचिव ग्राम पंचायत कमताना (ग्राम कमताना) जिला पन्ना (म०प्र०)

3. सरपंच/सचिव ग्राम पंचायत पगरा (ग्राम जूड़ी) जिला पन्ना (म०प्र०)

4. सरपंच/सचिव ग्राम पंचायत बिल्हा (ग्राम देवरी पुरोहित) जिला पन्ना (म०प्र०)

5. सरपंच/सचिव ग्राम पंचायत देवरा (ग्राम देवरा) जिला पन्ना (म०प्र०)

ग्राम पंचायत देवरा
अ.प. देवरा, जिला पन्ना (म.प्र.)

CM/11727051/1022701/2000145

जनसूचना

सर्वसाधारण को सूचित किया जाता है कि जे.के. सेम (सेन्दल) लिमिटेड को लाइमस्टोन माइन्स जो कि ग्राम ककरा, कमताना, सप्तई, जुड़ी, देवरीपुरोहित एवं देवरा, तहसील अमानगंज, जिला पन्ना में अवस्थित है, को 1594.34 हेक्टेयर क्षेत्रफल (विभिन्न खसरा नं.) के लिए पर्यावरणीय स्वीकृति, पर्यावरण एवं वन, जलवायु परिवर्तन मंत्रालय, भारत सरकार के पत्रांक F.No. J-11015/190/2016-IA(M) के द्वारा दिनांक 31.08.2020 को मिल गयी है। पर्यावरणीय स्वीकृति की कॉपी राजकीय प्रदूषण बोर्ड के कार्यालय में भी उपलब्ध है तथा इसे www.parivesh.nic.in पर भी देखा जा सकता है।

प्रोजेक्ट अधाटी

**जे.के. सेम (सेन्दल) लिमिटेड
अमानगंज, पन्ना (म.प्र.)**

राज एक्सप्रेस

पन्ना एक्सप्रेस 12

रातना

रविवार, 4 सितंबर 2020

:- जन सूचना:-

सर्व साधारण को सूचित किया जाता है कि जे.के.सेम(सेन्दल) लिमिटेड को लाइमस्टोन माइन्स जो कि ग्राम ककरा, कमताना, सप्तई, जुड़ी, देवरी पुरोहित एवं देवरा तहसील अमानगंज जिला पन्ना में अवस्थित है, को 1594.34 हेक्टेयर क्षेत्रफल (विभिन्न खसरा नं.) के लिए पर्यावरणीय स्वीकृति, पर्यावरणीय एवं वन, जलवायु परिवर्तन मंत्रालय, भारत सरकार के पत्रांक F-NO.J.11015/190/2016-IA(M) के द्वारा दिनांक 31.08.2020 को मिल गई है। पर्यावरणीय स्वीकृति की कॉपी राजकीय प्रदूषण बोर्ड के कार्यालय में भी उपलब्ध है तथा इसे www.parivesh.nic.in पर भी देखा जा सकता है।

प्रोजेक्ट अधाटी

जे.के.सेम(सेन्दल) लिमिटेड अमानगंज जिला पन्ना (म.प्र.)

Kakra-Panna Limestone Mine

(A unit Of J K Cement Limited, Panna)

AMBIENT AIR QUALITY MONITORING DATA

Month	PM10 (µg/Cum)			PM2.5 (µg/Cum)			SO2 (µg/Cum)			NO2 (µg/Cum)			CO (mg/Cum)		
	Permissible Limit for 24 hours - 100 (µg/Cum)			Permissible Limit for 24 hours - 60 (µg/Cum)			Permissible Limit for 24 hours - 80 (µg/Cum)			Permissible Limit for 24 hours - 80 (µg/Cum)			Permissible Limit for CO for 1 hour weighted Avg@4(mg/Cum)		
	Kakra Village	Deora Village	Kamtana Village	Kakra Village	Deora Village	Kamtana Village	Kakra Village	Deora Village	Kamtana Village	Kakra Village	Deora Village	Kamtana Village	Kakra Village	Deora Village	Kamtana Village
Apr-23	59.30	58.71	62.34	35.60	34.67	34.75	13.21	12.34	11.36	25.46	23.28	21.36	0.45	0.43	0.32
May-23	60.20	62.50	65.30	40.20	34.50	36.20	14.50	11.50	12.80	26.50	25.30	22.50	0.63	0.58	0.57
Jun-23	57.46	58.37	61.37	40.09	35.27	34.37	13.71	12.46	13.25	24.26	26.63	23.45	0.63	0.35	0.33
Jul-23	58.49	57.96	62.45	39.26	34.27	33.28	14.27	11.37	14.27	25.27	27.36	21.37	0.45	0.53	0.61
Aug-23	65.80	60.37	57.90	32.20	33.78	30.80	15.60	15.38	11.80	25.40	23.27	22.50	0.65	0.65	0.46
Sep-23	63.26	61.36	59.26	31.25	33.60	34.26	15.25	14.27	11.37	23.16	23.26	23.47	0.44	0.51	0.34
Minimum	65.80	62.50	65.30	40.20	35.27	36.20	15.60	15.38	14.27	26.50	27.36	23.47	0.65	0.65	0.61
Maximum	57.46	57.96	57.90	31.25	33.60	30.80	13.21	11.37	11.36	23.16	23.26	21.36	0.44	0.35	0.32
Average	60.75	59.88	61.44	36.43	34.35	33.94	14.42	12.89	12.47	25.01	24.85	22.44	0.54	0.51	0.44



VIRAT GLOBAL LAB

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/23/08/31/013

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P)

Sampling Location : NEAR PIT KAKRA MINE

Duration of Sampling : 29.08.2023 TO 29.08.2023

Time of Sampling : 9:45 AM TO 5:45 PM

Sample Done By : VGL STAFF

Packing Condition : SEALED

Environmental Condition : TEMP.(°C)- 32.2 & RH (%) - 55.0

Method of Sampling : IS:5182

Sample Receiving Date : 31.08.2023

Sample Processing Date : 31.08.2023 TO 09.09.2023

Equipment Used : HIGH VOLUME 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/m ³	600

Page 1 of 1

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.
- 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 Virat Global Lab

(Signature)
Authorised Signatory

D. K. Yadav
Lab In-charge

TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P)

Sampling Location : NEAR KAKRA MINE CRUSHER

Duration of Sampling : 29.08.2023 TO 29.08.2023

Time of Sampling : 09:55 AM TO 5:55 PM

Sample Done By : VGL STAFF

Packing Condition : SEALED

Environmental Condition : TEMP.(⁰C)- 32.2 & RH (%) - 55.0

Method of Sampling : IS:5182

Sample Receiving Date : 31.08.2023

Sample Processing Date : 31.08.2023 TO 09.09.2023

Equipment Used : RESPIRABLE DUST SAMPLER

TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	272.6	µg/m ³	600

Page 1 of 1

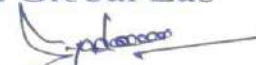
Note:

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



Dr. Ashok Kumar
Technical Manager

Authorized Signatory
Virat Global Lab


Authorized Signatory

D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/FE/23/08/31/015

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P)

Sampling Location : KAKRA MINE NEAR SECURITY CABIN

Duration of Sampling : 29.08.2023 TO 30.08.2023

Time of Sampling : 6:30 PM TO 2:30 AM

Sample Done By : VGL STAFF

Packing Condition : SEALED

Environmental Condition : TEMP.(°C)- 29.4 & RH (%) - 55.0

Method of Sampling : IS:5182

Sample Receiving Date : 31.08.2023

Sample Processing Date : 31.08.2023 TO 09.09.2023

Equipment Used : HIGH VOLUME SAMPLER

TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	212.0	µg/m ³	600

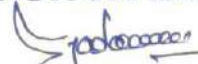
Page 1 of 1

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 15 days from the date of issue of test certificate unless otherwise specified.
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**Authorized Signatory**

Virat Global Lab


Authorized SignatoryD. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/FE/23/08/31/016

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer : **M/s JAYKAYCEM (CENTRAL) LIMITED,**
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P)

Sampling Location : **NEAR KAKRA MINE BACK SIDE**

Duration of Sampling : 29.08.2023 TO 30.08.2023

Time of Sampling : 06:55 PM TO 2:55 AM

Sample Done By : VGL STAFF

Packing Condition : SEALED

Environmental Condition : TEMP.(°C)- 29.4 & RH (%) - 55.0

Method of Sampling : IS:5182

Sample Receiving Date : 31.08.2023

Sample Processing Date : 31.08.2023 TO 09.09.2023

Equipment Used : RESPIRABLE DUST SAMPLER

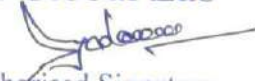
TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	268.2	µg/m ³	600

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.
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. Ashok Kumar
Technical Manager**Authorized Signatory**
Virat Global Lab
Authorized SignatoryD. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/FE/23/08/31/018

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (FUGITIVE EMISSION)

Name & Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P)

Sampling Location : NEAR OFFINE KAKRA MINE

Duration of Sampling : 30.08.2023 TO 30.08.2023

Time of Sampling : 07:55 AM TO 3:55 PM

Sample Done By : VGL STAFF

Packing Condition : SEALED

Environmental Condition : TEMP.(°C)- 32.7 & RH (%) - 55.0

Method of Sampling : IS:5182

Sample Receiving Date : 31.08.2023

Sample Processing Date : 31.08.2023 TO 09.09.2023

Equipment Used : RESPIRABLE DUST SAMPLER

TEST RESULTS

SL. NO.	PARAMETERS	TEST METHOD	RESULTS	UNIT	SPECIFICATION / LIMIT (AS PER CPCB)
1	Suspended Particulate Matter (SPM)	IS 5182 (Part-4)	270.2	µg/m ³	600

Page 1 of 1

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.
- The sample will be destroyed after 15 days 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.

Review By:Dr. Ashok Kumar
Technical Manager**Authorized Signatory**

Virat Global Lab


Authorized SignatoryD. K. Yadav
Lab In-charge

**REVISED NOC**

भारत सरकार
जल शक्ति मंत्रालय
जल संसाधन, नदी विकास
और गंगा संरक्षण विभाग
केन्द्रीय भूमि जल प्राधिकरण
Government of India
Ministry of Jal Shakti
Department of Water Resources,
River Development & Ganga Rejuvenation
Central Ground Water Authority

(भूजल निकासी हेतु अनापत्ति प्रमाण पत्र)

NO OBJECTION CERTIFICATE (NOC) FOR GROUND WATER ABSTRACTION

Project Name:	Kakra Kamtana Limestone Mining Lease		
Project Address:	Jaykaycem (central) Ltd., Village Kakra, Kamtana, Saptai, Judi, Devri Purohit, Devra,		
Village:	Kakra	Block:	Gunour
District:	Panna	State:	Madhya Pradesh
Pin Code:			
Communication Address:	Jaykaycem (central) Limited, My Home Residency, Opposite Essar Petrol Pump, Katni Road, Amanganj, , Panna, Madhya Pradesh - 488441		
Address of CGWB Regional Office :	Central Ground Water Board North Central Region, Block-1, 4th Floor, Paryawas Bhawan, Area Hills, Jail Road, Bhopal, Madhya Pradesh - 462011		

1.	NOC No.:	CGWA/NOC/MIN/ORIG/2020/7359													
2.	Application No.:	21-4/864/MP/MIN/2019					3.	Category: (GWRE 2020)			Safe				
4.	Project Status:	New Project					5.	NOC Type:			Extension				
6.	Valid from:	03/02/2022					7.	Valid up to:			02/02/2024				
8.	Ground Water Abstraction Permitted:														
Fresh Water		Saline Water				Dewatering				Total					
m³/day		m³/year		m³/day		m³/year		m³/day		m³/year		m³/day		m³/year	
20.00		7300.00						3913.69		1428496.85		3933.69		1435797.00	
9.	Details of ground water abstraction /Dewatering structures														
Total Existing No.:1							Total Proposed No.:0								
		DW	DCB	BW	TW	MP	MPu	DW	DCB	BW	TW	MP	MPu		
Abstraction Structure*		0	0	1	0	0	0	0	0	0	0	0	0		
Dewatering Structure*		0	0	0	0	0	0	0	0	0	0	0	4		
*DW- Dug Well; DCB-Dug-cum-Bore Well; BW-Bore Well; TW-Tube Well; MP-Mine Pit;MPu-Mine Pumps															
10.	Ground Water Abstraction/Restoration Charges paid (Rs.):							3589493							
11.	Number of Piezometers (Observation wells) to be constructed/ monitored & Monitoring mechanism.		No. of Piezometers	Monitoring Mechanism											
Manual				DWLR**			DWLR With Telemetry								
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2		0			1			1					
		2													

(Compliance Conditions given overleaf)

This is an auto generated document & need not to be signed.

Validity of this NOC shall be subject to compliance of the following mandatory conditions:

- 1) No additional ground water abstraction and/or de-watering structures shall be constructed for this purpose without prior approval of the Central Ground Water Authority (CGWA).
- 2) The proponent shall seek prior permission from CGWA for any increase in quantum of groundwater abstraction (more than that permitted in NOC for specific period).
- 3) All new as well as existing ground water abstraction/ de-watering structures shall be fitted with digital water flow meters by the firm at its own cost immediately on completion of their construction or grant of NOC as the case may be. In case of renewal of NOCs, all existing ground water abstraction structures shall continue to be fitted with digital water flow meters. Intimation of installation of flow meters shall be sent by the proponent to the Regional Director of CGWB within 6 months of grant of NOC. Daily ground water abstraction data shall be monitored / continue to be monitored (in case of renewal) by the firm and recorded in a log book. Details of month-wise ground water abstraction shall be submitted to the Regional Director, CGWB, once every year.
- 4) In case the ground water abstraction is more than 10 m³/day, monthly water level monitoring data shall be maintained and submitted annually to the Regional Office of CGWB. Wherever groundwater withdrawal is more than 500 m³/day, the firm shall install telemetry system in one of the piezometers and share USER ID and password of the telemetry system with the Regional Director, CGWB.
- 5) In case ground water abstraction is more than 10 m³/day, ground water quality shall be monitored once in a year (during pre- monsoon period) and the report submitted to the Regional Office, CGWB. Wherever the extraction is less than 10 m³/day, ground water quality report shall be submitted by the proponent at the time of submission of self-compliance report.
- 6) Ground water augmentation measures, as stipulated in the NOC, shall be implemented (in new cases) / continue to be maintained (in case of renewal) in consultation with the concerned Regional Director, CGWB.
- 7) Proof of recharge/water harvesting structures constructed (photographs of structures) shall be submitted to the concerned Regional Director, CGWB within 6 months from the date of issue of NOC. The firm shall also undertake periodic maintenance of recharge structures at its own cost.
- 8) The project proponent shall take all necessary measures to prevent contamination of ground water in the premises failing which the firm shall be responsible for any consequences arising thereupon.
- 9) In case of industries that are likely to contaminate the ground water, no recharge measures shall be taken up by the firm inside the plant premises. The runoff generated from the rooftop shall be stored and put to beneficial use by the firm.
- 10) The firm shall optimize water use through recycling/ reuse of waste water after proper treatment.
- 11) Wherever the NOC is for abstraction of saline water and the existing wells (s) is /are yielding fresh water, the same shall be sealed and new tubewell(s) tapping saline water zone shall be constructed within 3 months of the issuance of NOC. The firm shall also ensure safe disposal of saline residue, if any.
- 12) In case of mining projects, additional key wells shall be established in consultation with the Regional Director, CGWB for ground water level monitoring four (4) times a year (January, May, August and November) in core as well as buffer zones of the mine.
- 13) Unexpected variations in inflow of ground water into the mine pit, if any, shall be reported to the concerned Regional Director, Central Ground Water Board.
- 14) The firm shall report compliance of the NOC conditions online in the website (www.cgwa-noc.gov.in) within one year from the date of issue of this NOC.
- 15) This NOC is subject to prevailing Central/State Government rules/laws/norms or Court orders related to construction of tube well/ground water abstraction structure / recharge or conservation structure/discharge of effluents or any such matter as applicable.
- 16) This NOC does not absolve the proponents of their obligation / requirement to obtain other statutory and administrative clearances from appropriate authorities.
- 17) The issue of this NOC does not imply that other statutory / administrative clearances shall be granted to the project by the concerned authorities. Such authorities would consider the project on merits and take decisions independently of the NOC.
- 18) This NOC is being issued without any prejudice to the directions of the Hon'ble NGT/court orders in cases related to ground water or any other related matters.
- 19) Application for renewal can be submitted online from 90 days before the expiry of NOC. Ground water withdrawal, if any, after expiry of NOC shall be illegal & liable for legal action as per provisions of Environment (Protection) Act, 1986.

(Non-compliance of the conditions mentioned above is likely to result in the cancellation of NOC and legal action against the proponent.)

HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

to Name & Address Of The Customer TO, M/s Jaykaycem (Central) Ltd. Village Harduaken, Tehsil - Amanganj, District - Panna (M.P.)		Report No	UES/TR/23-24/02243
		Lab Ref No	UES/23-24/W/04720-04725
		Date Of Sampling	22/05/2023
		Date Of Report	25/05/2023
SAMPLE DETAILS			
Sampling Location	Kakra Mine	Customer Ref. No. & Date	Verbal Communication, Dated: 22/05/2023
Monitoring For	Ground Water Level Monitoring	Sample Condition At Receipt	Ok
Sample Collected By	Laboratory Chemist		

SR. NO.	LOCATION	LATITUDE	LONGITUDE	UNIT	RESULT (DEPTH/BELOW GROUND WATER LEVEL)
1	PAGRA VILLAGE (DUGWELL)	N 24°21'08.72"	E 80°00'00.08"	METER	0.98
2	PURAINA VILLAGE (BORE WELL)	N 24°19'00.00"	E 79°58'35.50"	METER	2.61
3	DEVRA VILLAGE (DUGWELL)	N 24°22'20.93"	E 79°58'15.98"	METER	1.54
4	KAKRA VILLAGE (DUGWELL)	N 24°21'18.40"	E 79°57'01.37"	METER	2.97
5	KAMTANA VILLAGE (DUGWELL)	N 24°22'49.45"	E 79°57'32.86"	METER	1.09
6	HINAUTA VILLAGE (BORE WELL)	N 24°23'12.75"	E 80°00'52.40"	METER	2.96

Note: BGWL -Below Ground Water Level.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above test(s) only.

 25/05/23 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS  AUTHORIZED SIGNATORY
---	---	--

-----End of the test report-----

TEST REPORT CODE: VGL/WL/23/08/31/01-36

TEST REPORT ISSUE DATE: 09.09.2023

WATER LEVEL MONITORING REPORT

Name And Address of Customer : **M/s JAYKAYCEM (CENTRAL) LIMITED,**
VILLAGE-HARDUWAKEN, TEHSIL- ,
DISTT. - PANNA, (M.P)

Date of Monitoring : 27.08.2023

Monitoring Done By : VGL STAFF

RESULT

SL.N	Location	Person Name	Location(dd°mm'ss'')		Water Level (Below Ground Level)- Meter
			Latitude (N)	Longitude (E)	
1	Puraina Village Borewell	Vishwa Nath Sahu	24.314232	79.975905	3.40
2	Tighara Village Borewell	Brij Mohan Singh	24.294028	79.963214	3.20
3	Tighara Village Borewell	Sandeep	24.294027	79.963213	3.14
4	Sanaura Village Dugwell	Siyaram Patel	24.418861	79.97881	4.00
5	Kamtana Village Dugwell	Govt.	24.384879	79.958523	4.50
6	Kamtana Village Dugwell	Govt.	24.383922	79.958833	10.10
7	Kamtana Village Dugwell	Govt.	24.386512	79.958723	9.40
8	Kamtana Village Borewell	Rajrendra Singh	24.383429	79.959408	6.60
9	Kamtana Village Borewell	Pawan Kumar Khare	24.383367	79.959541	12.20
10	Kamtana Village Borewell	Monoj Khampariya	24.383362	79.958243	10.5
11	Kamtana Village Borewell	Ramfal Dubey	24.383732	79.958729	7.50
12	Kamtana Village Borewell	ChandraBhansen	24.384587	79.958502	9.00
13	Singhaura Village Borewell	Govt. School	24.404519	79.935819	5.55
14	Sirshi patna Village Borewell	Govt.	24.388487	79.906193	5.70
15	Sirshi patna Village Dugwell	Govt.	24.387825	79.906517	4.60
16	Sunwani Kalan Borewell	Kanchhedi Lal Pathak	24.358643	79.888548	6.50
17	Sunwani Khurd Borewell	Govt.	24.361943	79.920049	5.90
18	Simra Khurd Borewell	Dhani Ram Dhai	24.351478	79.912537	13.50
19	Banbhai Borewell	Arvind	24.329875	79.899603	3.90
20	Maharajganj Borewell	Govt.	24.305336	79.894123	5.10

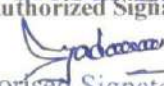
21	Karia Borewell	Govt.	24.263893	79.981769	3.40
22	Karia Dugwell	Ramchandra Tiwari	24.3636552	79.982056	3.0
23	Umri Village Borewell	Bijju Chaoudhari	24.26652	79.936928	1.90
24	Umri Village Dugwell	Govt.	24.266701	79.936928	1.10
25	Palohi village Borewell	Govt. School	24.265933	79.960298	2.30
26	Palohi village Dugwell	Darbari Rajak	24.265717	79.96011	2.05
27	Mahod Kalan Village Dugwell	Govt.	24.279306	80.017584	2.10
28	Mahod Kalan Village Borewell	Jitendra Singh	24.279386	80.017659	3.60
29	Bhupat Pura Borewell	Near Main Road	24.42591346	80.01900857	1.10
30	Simariya Village Borewell	Dangal Prasad Balmiki	24.28162146	79.89725613	3.40
31	Boda Village Dugwell	Govt. Near Temple	24.1741964	79.572004	2.75
32	Guda Village Borewell	Govt.	24.30541246	79.89403365	6.70
33	Guda Village Borewell	Charan Das Ray	24.32400349	79.88198007	6.40
34	Koni Village Borewell	Kallu Bhai	24.33056234	79.90068975	4.50
35	Koni village Borewell	Naresh patel	24.33057235	79.90068783	4.80
36	Maharajganj Borewell	Govt.	24.305336	79.894123	5.10

Not:-

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.
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
Authorized Signatory

Authorised Signatory
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/WL/23/08/31/37-86

TEST REPORT ISSUE DATE: 09.09.2023

WATER LEVEL MONITORING REPORT

Name And Address of Customer : **M/s JAYKAYCEM (CENTRAL) LIMITED,**
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P)
Date of Monitoring : 28.08.2023
Monitoring Done By : VGL STAFF

RESULT

SLN	Location	Person Name	Location(dd°mm'ss")		Water Level (Below Ground Level)- Meter
			Latitude (N)	Longitude (E)	
37	Bamhori Village Borewell	Ram Saran	24.33664463	80.0380059	4.40
38	Bamhori Village Dugwell	Govt.	24.31678	80.104644	1.70
39	Bamhori Village Borewell	Pyare Lal Vish karma	24.33536802	80.03276469	4.50
40	Bamhori Village borewell	Raj Kumar	24.33725971	80.03266198	5.30
41	Bamhori Village borewell	Raj Kumar	24.33684576	80.03796254	2.10
42	Jharkuwa Village Dugwell	Govt.	24.35447818	80.04507126	1.55
43	Jharkuwa Village Borewell	Durjna Prasad	24.35393729	80.04480821	1.10
44	Itauri Village Borewell	Ramshay	24.36419376	80.04177377	2.20
45	Itauri Village Borewell	Daj Narayan	24.36641386	80.04199907	2.50
46	Itauri Village Borewell	Govt.	24.39039877	80.03923784	4.70
47	Itauri Village Dug well	Ghanshyam Pandey	24.39055834	80.04011205	1.60
48	Amanganj Borewell	Kalpna Palace	24.4241417	80.0342961	2.80
49	Amanganj Borewell	Govt. Near Tigadda	24.41839209	80.0331857	2.40
50	Amanganj Borewell	Saduwa Chaoudhari	24.42437250	80.0332154	5.60
51	Hinauta Borewell	Govt. School	24.388563	80.01382649	3.90
52	Hinauta Dugwell	Govt.	24.38684007	80.01410258	2.60
53	Hinauta Dugwell	Brij Lal Kushwaha	24.3869625	80.01445089	2.40
54	Madaiyan Borewell	Amit Goswami	24.3870598	80.01344178	3.30
55	Madaiyan Dugwell	Govt.	24.37842479	80.01052868	3.00
56	Deora Village Dugwell	Govt.	24.33662268	79.96825672	1.10
57	Deora Village Dugwell	Govt.	24.33851758	79.97188548	1.20
58	Deora Village Dugwell	Govt.	24.34473355	79.97200211	2.20
59	Deora Village Dugwell	Govt.	24.3466679	79.9949703	1.30
60	Deora Village Dugwell	Govt.	24.34655777	79.97239277	1.50
61	Deora Village Borewell	Near Road	24.33232328	79.98093834	2.70
62	Deora Village Borewell	Govt. Near Panchayat	24.33838338	79.97177768	2.10
63	Deora Village Borewell	Brindavan Tiwari	24.33876411	79.97214955	2.15

64	Deora Village Borewell	Salikram Tiwari	24.34175291	79.97189798	1.90
65	Deora Village Borewell	Govt. Near Tample	24.34152108	79.97203621	2.50
66	Deora Village Borewell	Kishun Dash	24.34478814	79.97198335	4.20
67	Deora Village Borewell	Ramcharan pyashi	24.34486148	79.97133575	4.60
68	Deora Village Borewell	Balram singh	24.34566888	79.97181327	5.5
69	Deora Village Borewell	Harnam singh	24.3322903	98.124707	5.8
70	Deora Village Borewell	Govt. Near Hanuman Tample	24.34567758	79.97174564	2.20
71	Deora Village Borewell	Ashish Pathak	24.3403033	79.9876304	2.60
72	Purwa Village Borewell	Khet	24.33599338	79.9635235	4.50
73	Purwa Village Borewell	Khet	24.33780336	79.95513308	4.80
74	Purwa Village Borewell	Shiv Kumar	24.3469887	79.9610619	5.30
75	Kakra Village Borewell	Govt.	24.35772144	79.94992569	2.10
76	Kakra Village Borewell	Vijay Lodhi	24.35553216	79.95064759	3.15
77	Kakra Village Borewell	Kali Charan Sen	24.35570297	79.94977787	2.20
78	Kakra Village Borewell	Ganga Ram	24.3821511	79.9099998	3.40
79	Kakra Village Borewell	Shiv Kishor Tiwari	24.35030255	79.95552624	1.70
80	Kakra Village Dugwell	Ashok Kumar Tiwari	24.33904669	79.97119546	4.35
81	Kakra Village Borewell	Neeraj Lodhi	24.352488	79.950509	1.50
82	Kakra Village Borewell	Rajendra Tiwari	24.355165	79.950488	3.40
83	Kakra Village Borewell	Vishnu Kant Sen	24.356175	79.951568	2.90
84	Kakra Village Borewell	Prem Das Kushwaha	24.355189	79.951453	3.90
85	Kakra Village Borewell	Battu lal	24.3524422	79.9095892	5.90
86	Kakra Village Dugwell	Govt.	24.356529	79.952143	3.80

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.
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
Authorized Signatory

Authorized Signatory

D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/WL/23/08/31/87-103

TEST REPORT ISSUE DATE: 09.09.2023

WATER LEVEL MONITORING REPORT

Name And Address of Customer : **M/s JAYKAYCEM (CENTRAL) LIMITED,**
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P.)
Date of Monitoring : 29.08.2023
Monitoring Done By : VGL STAFF

RESULT

SL.N	Location	Person Name	Location(dd°mm'ss'')		Water Level (Below Ground Level)- Meter
			Latitude (N)	Longitude (E)	
87	Bilha Village borewell	Rohit Tiwari	24.383448	79.999435	1.85
88	Jhagra Village Borewell	Dwarika Patel	24.39795765	79.98435206	3.20
89	Dharampura Village Dug well	Govt.	24.39406932	79.98249481	4.35
90	Ramanpura Village Borewell	Cheta Chaoudhari	24.37941909	79.98398717	1.60
91	Saptaiya Village Borewell	Govt.	24.35658	80.053129	4.50
92	Saptaiya Village Borewell	Tunra Prasad Harwar	24.35787906	80.0650542	3.30
93	Judi Village Borewell	Bajrang Dairy	24.35797237	79.98952222	1.10
94	Judi Village Dug well	Keshav Pratap Singh	24.35762556	79.9909353	2.85
95	Judi Village Borewell	Prem Narayan Singh Tomer	24.35843427	79.99083729	2.70
96	Judi Village Borewell	Kripal Singh Chandel	24.35882056	79.99086533	1.90
97	Judi Village Borewell	Sahab Singh Chandel	24.35866387	79.99125347	1.95
98	Judi Village Borewell	Hiralal Kushwaha	24.3582755	79.99140577	1.40
99	Judi Village Borewell	Ram Dayal Kushwaha	24.35854074	79.99219464	1.10
100	Pgara village Borewell	Govt. Near School	24.35196983	79.99827417	4.25
101	Pgara village Dugwell	Govt.	24.35235402	79.99988624	1.50
102	Pgara village Dugwell	Sukhdev Dubey	24.35248791	80.00010214	1.30
103	Pgara village Borewell	Mohammad Khan	24.35103883	80.00003505	2.50

Page 1 of 1

Not: -

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.
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
Authorized Signatory


Authorized Signatory

D. K. Yadav
Lab In-charge



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Name & Address Of The Customer		Report No.	UES/TR/23-24/02076	
To, M/s Jaykay Cement (Central) Ltd. Village Harduaken, Tehsil - Amanganj, District - Panna (M.P.)		Lab Ref No.	UES/23-24/W/04476	
		Date of Sampling	15/05/2023	
		Date of Receipt	16/05/2023	
		Date of Report	20/05/2023	
		Date of Analysis	Start: 16/05/2023	End: 20/05/2023
SAMPLE DETAILS				
Customer Ref. No. & Date	Verbal Communication, Dated: 15/05/2023.			
Customer Sample Id / Sampling Location	Kakra Mine Kakra Mine (Core Zone) (Hand Pump near house of Laxman Singh)	Latitude	24°18'19.92"N	
		Longitude	79°53'38.50"E	
Sample Type	Ground Water	Sample Condition At Receipt	Ok	
Packing Of Sample	Jerry can (Approx. 3 Ltr.) Glass Bottle (Approx. 1 Ltr.X2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx 5 Ltr. each	

Rep. No. 02076

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
1	pH Value at 25.3°C	-	IS:3025:(Part-11)	6.5-8.5	No Relaxation	7.44
2	Colour	Hazen	IS:3025:(Part-4)	5	15	<1
3	Taste	-	IS 3025(part-8)	Agreeable	Agreeable	Agreeable
4	Odour	-	IS 3025(part-5)	Agreeable	Agreeable	Agreeable
5	Total Dissolved Solids	mg/L	IS:3025:(Part-16)	500	2000	239
6	Conductivity	µS/Cm	IS 3025:(Part-14)	-	-	398.6
7	Turbidity	NTU	IS 3025:(Part-10)	1	5	0.74
8	Total Alkalinity (as CaCO ₃)	mg/L	IS 3025:(Part-23)	200	600	156
9	Total Hardness (as CaCO ₃)	mg/L	IS 3025:(Part-21)	200	600	172
10	Calcium (as Ca)	mg/L	IS 3025:(Part-40)	75	200	48.09
11	Magnesium (as Mg)	mg/L	IS 3025:(Part-46)	30	100	12.64
12	Sodium	mg/l	IS 3025:(Part-45)	-	-	7.47
13	Potassium	mg/l	IS 3025:(Part-45)	-	-	1.61
14	Nitrate (as NO ₃)	mg/L	IS 3025(part-34)	45	No Relaxation	16.88
15	Total Phosphate	mg/L	IS:3025:(Part-31)	--	--	N.D.
16	Chloride (as Cl)	mg/L	IS 3025:(Part-32)	250	1000	44.9
17	Sulphate (as SO ₄)	mg/L	IS 3025:(Part-24)	200	400	37.24
18	Fluoride (as F)	mg/L	IS 3025(part-60)	1	1.5	0.11



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Rep. No. 02076

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
19	Cyanide (as CN)	mg/L	IS:3025:(part-27)	0.05	No Relaxation	N.D.
20	Phenolic Compound (as C ₆ H ₅ OH)	mg/L	IS 3025 (Part-43)	0.001	0.002	N.D.
21	Arsenic (as As)	mg/L	IS 3025 (Part-37)	0.01	0.05	N.D.
22	Mercury (as Hg)	mg/L	IS 3025 (Part-48)	0.001	No Relaxation	N.D.
23	Lead (as Pb)	mg/L	IS 3025 (Part-47)	0.01	No Relaxation	N.D.
24	Cadmium (as Cd)	mg/L	IS 3025 (Part-41)	0.003	No Relaxation	N.D.
25	Free Residual Chlorine	mg/L	IS:3025:(Part-26)	0.2	1	N.D.
26	Chromium (as Cr)	mg/L	Annex J of IS:13428	0.05	No Relaxation	N.D.
27	Copper (as Cu)	mg/L	IS 3025 (Part-42)	0.05	1.5	N.D.
28	Zinc (as Zn)	mg/L	IS 3025 (Part-49)	5	15	N.D.
29	Selenium (as Se)	mg/L	IS 3025 (Part-56)	0.01	No Relaxation	N.D.
30	Iron (as Fe)	mg/L	IS 3025 (Part-53)	0.3	No Relaxation	0.14
31	Manganese (as Mn)	mg/L	IS:3025:(Part-59)	0.1	0.3	N.D.
32	Total Coliform	MPN/100ml	IS:1622:1981:RA:2019	Shall not be detectable in any 100 ml sample		Absent

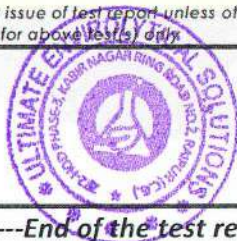
Note: mg/lit.:milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The above analysis report refers to the particular sample received at our end and the use of the report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above tests only.

Reviewed
20/05/23
REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

Subhajeet

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Name & Address Of The Customer		Report No.	UES/TR/23-24/02078	
To, M/s Jaykaycem (Central) Ltd. Village Harduaken, Tehsil - Amanganj, District - Panna (M.P.)		Lab Ref No.	UES/23-24/W/04478	
		Date of Sampling	15/05/2023	
		Date of Receipt	16/05/2023	
		Date of Report	20/05/2023	
		Date of Analysis	Start: 16/05/2023	End: 20/05/2023
SAMPLE DETAILS				
Customer Ref. No. & Date	Verbal Communication, Dated: 15/05/2023.			
Customer Sample Id / Sampling Location	Puraina Village Buffer Zone (Bore Well near Hanuman Temple)	Latitude	24°20'22.92"N	
		Longitude	79°58'18.79"E	
Sample Type	Ground Water	Sample Condition At Receipt	Ok	
Packing Of Sample	Jerry can (Approx. 3 Ltr.) Glass Bottle (Approx. 1 Ltr.x2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx 5 Ltr. each	

Rep. No. 02078

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
1	pH Value at 25.3°C	-	IS:3025:(Part-11)	6.5-8.5	No Relaxation	7.48
2	Colour	Hazen	IS:3025:(Part-4)	5	15	<1
3	Taste	-	IS 3025(part-8)	Agreeable	Agreeable	Agreeable
4	Odour	-	IS 3025(part-5)	Agreeable	Agreeable	Agreeable
5	Total Dissolved Solids	mg/L	IS:3025:(Part-16)	500	2000	277
6	Conductivity	µS/Cm	IS 3025:(Part-14)	-	-	461.97
7	Turbidity	NTU	IS 3025:(Part-10)	1	5	0.62
8	Total Alkalinity (as CaCO ₃)	mg/L	IS 3025:(Part-23)	200	600	162
9	Total Hardness (as CaCO ₃)	mg/L	IS 3025:(Part-21)	200	600	184
10	Calcium (as Ca)	mg/L	IS 3025:(Part-40)	75	200	51.30
11	Magnesium (as Mg)	mg/L	IS 3025:(Part-46)	30	100	13.61
12	Sodium	mg/l	IS 3025:(Part-45)	-	-	7.74
13	Potassium	mg/l	IS 3025:(Part-45)	-	-	1.80
14	Nitrate (as NO ₃)	mg/L	IS 3025(part-34)	45	No Relaxation	21.48
15	Total Phosphate	mg/L	IS:3025:(Part-31)	--	--	N.D.
16	Chloride (as Cl)	mg/L	IS 3025:(Part-32)	250	1000	40.9
17	Sulphate (as SO ₄)	mg/L	IS 3025:(Part-24)	200	400	47.09
18	Fluoride (as F)	mg/L	IS 3025(part-60)	1	1.5	0.18



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Rep. No. 02078

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
19	Cyanide (as CN)	mg/L	IS:3025:(part-27)	0.05	No Relaxation	N.D.
20	Phenolic Compound (as C ₆ H ₅ OH)	mg/L	IS 3025(Part-43)	0.001	0.002	N.D.
21	Arsenic (as As)	mg/L	IS 3025(Part-37)	0.01	0.05	N.D.
22	Mercury (as Hg)	mg/L	IS 3025(Part-48)	0.001	No Relaxation	N.D.
23	Lead (as Pb)	mg/L	IS 3025(Part-47)	0.01	No Relaxation	N.D.
24	Cadmium (as Cd)	mg/L	IS 3025(Part-41)	0.003	No Relaxation	N.D.
25	Free Residual Chlorine	mg/L	IS:3025:(Part-26)	0.2	1	N.D.
26	Chromium (as Cr)	mg/L	Annex J of IS:13428	0.05	No Relaxation	N.D.
27	Copper (as Cu)	mg/L	IS 3025(Part-42)	0.05	1.5	N.D.
28	Zinc (as Zn)	mg/L	IS 3025(Part-49)	5	15	N.D.
29	Selenium (as Se)	mg/L	IS 3025(Part-56)	0.01	No Relaxation	N.D.
30	Iron (as Fe)	mg/L	IS 3025(Part-53)	0.3	No Relaxation	0.16
31	Manganese (as Mn)	mg/L	IS:3025:(Part-59)	0.1	0.3	N.D.
32	Total Coliform	MPN/100ml	IS:1622:1981:RA:2019	Shall not be detectable in any 100 ml sample		Absent

Note: mg/lit.:milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The above analysis report refers to the particular sample received at our end and the use of the report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above test(s) only.

[Signature]
20/05/23
REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

[Signature]
Subhajeet

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Name & Address Of The Customer		Report No.	UES/TR/23-24/02079	
To, M/s Jaykaycem (Central) Ltd. Village Harduaken, Tehsil - Amanganj, District - Panna (M.P.)		Lab Ref No.	UES/23-24/W/04479	
		Date of Sampling	15/05/2023	
		Date of Receipt	16/05/2023	
		Date of Report	20/05/2023	
		Date of Analysis	Start: 16/05/2023	End: 20/05/2023
SAMPLE DETAILS				
Customer Ref. No. & Date	Verbal Communication, Dated: 15/05/2023.			
Customer Sample Id / Sampling Location	Pagra Village Buffer Zone (Govt. Hand Pump near Shad Khan House)	Latitude	24°21'09.06"N	
		Longitude	79°58'58.79"E	
Sample Type	Ground Water	Sample Condition At Receipt	Ok	
Packing Of Sample	Jerry can (Approx. 3 Ltr.) Glass Bottle (Approx. 1 Ltr.X2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx 5 Ltr. each	

Rep. No. 02079

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible Limit	
1	pH Value at 25.3°C	-	IS:3025:(Part-11)	6.5-8.5	No Relaxation	7.45
2	Colour	Hazen	IS:3025:(Part-4)	5	15	<1
3	Taste	-	IS 3025(part-8)	Agreeable	Agreeable	Agreeable
4	Odour	-	IS 3025(part-5)	Agreeable	Agreeable	Agreeable
5	Total Dissolved Solids	mg/L	IS:3025:(Part-16)	500	2000	273
6	Conductivity	µS/Cm	IS 3025:(Part-14)	-	-	455.3
7	Turbidity	NTU	IS 3025:(Part-10)	1	5	0.89
8	Total Alkalinity (as CaCO ₃)	mg/L	IS 3025:(Part-23)	200	600	162
9	Total Hardness (as CaCO ₃)	mg/L	IS 3025:(Part-21)	200	600	178
10	Calcium (as Ca)	mg/L	IS 3025:(Part-40)	75	200	49.70
11	Magnesium (as Mg)	mg/L	IS 3025:(Part-46)	30	100	13.12
12	Sodium	mg/l	IS 3025:(Part-45)	-	-	7.8
13	Potassium	mg/l	IS 3025:(Part-45)	-	-	1.79
14	Nitrate (as NO ₃)	mg/L	IS 3025(part-34)	45	No Relaxation	14.94
15	Total Phosphate	mg/L	IS:3025:(Part-31)	--	--	N.D.
16	Chloride (as Cl)	mg/L	IS 3025:(Part-32)	250	1000	41.9
17	Sulphate (as SO ₄)	mg/L	IS 3025:(Part-24)	200	400	32.87
18	Fluoride (as F)	mg/L	IS 3025(part-60)	1	1.5	0.16



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Rep. No. 02079

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
19	Cyanide (as CN)	mg/L	IS:3025:(part-27)	0.05	No Relaxation	N.D.
20	Phenolic Compound (as C ₆ H ₅ OH)	mg/L	IS 3025(Part-43)	0.001	0.002	N.D.
21	Arsenic (as As)	mg/L	IS 3025(Part-37)	0.01	0.05	N.D.
22	Mercury (as Hg)	mg/L	IS 3025(Part-48)	0.001	No Relaxation	N.D.
23	Lead (as Pb)	mg/L	IS 3025(Part-47)	0.01	No Relaxation	N.D.
24	Cadmium (as Cd)	mg/L	IS 3025(Part-41)	0.003	No Relaxation	N.D.
25	Free Residual Chlorine	mg/L	IS:3025:(Part-26)	0.2	1	N.D.
26	Chromium (as Cr)	mg/L	Annex J of IS:13428	0.05	No Relaxation	N.D.
27	Copper (as Cu)	mg/L	IS 3025(Part-42)	0.05	1.5	N.D.
28	Zinc (as Zn)	mg/L	IS 3025(Part-49)	5	15	N.D.
29	Selenium (as Se)	mg/L	IS 3025(Part-56)	0.01	No Relaxation	N.D.
30	Iron (as Fe)	mg/L	IS 3025(Part-53)	0.3	No Relaxation	0.15
31	Manganese (as Mn)	mg/L	IS:3025:(Part-59)	0.1	0.3	N.D.
32	Total Coliform	MPN/100ml	IS:1622:1981:RA:2019	Shall not be detectable in any 100 ml sample		Absent

Note: mg/lit.:milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The above analysis report refers to the particular sample received at our end and the use of the report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above test(s) only.

[Signature]
20/05/23

REVIEWED BY



For ULTIMATE ENVIROLYTICAL SOLUTIONS

[Signature]

AUTHORIZED SIGNATORY

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Name & Address Of The Customer To, M/s Jaykaycem (Central) Ltd. Village Harduaken, Tehsil - Amanganj, District - Panna (M.P.)		Report No.	UES/TR/23-24/02081	
		Lab Ref No.	UES/23-24/W/04481	
		Date of Sampling	15/05/2023	
		Date of Receipt	16/05/2023	
		Date of Report	20/05/2023	
		Date of Analysis	Start: 16/05/2023	End: 20/05/2023
SAMPLE DETAILS				
Customer Ref. No. & Date	Verbal Communication, Dated: 15/05/2023.			
Customer Sample Id / Sampling Location	Tighara Village Buffer Zone Govt. Hand Pump near Govt. School	Latitude	24°17'36.40"N	
		Longitude	79°57'51.82"E	
Sample Type	Ground Water	Sample Condition At Receipt	Ok	
Packing Of Sample	Jerry can (Approx. 3 Ltr.) Glass Bottle (Approx. 1 Ltr.x2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx 5 Ltr. each	

Rep. No. 02081

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
1	pH Value at 25.3°C	-	IS:3025:(Part-11)	6.5-8.5	No Relaxation	7.68
2	Colour	Hazen	IS:3025:(Part-4)	5	15	<1
3	Taste	-	IS 3025(part-8)	Agreeable	Agreeable	Agreeable
4	Odour	-	IS 3025(part-5)	Agreeable	Agreeable	Agreeable
5	Total Dissolved Solids	mg/L	IS:3025:(Part-16)	500	2000	287
6	Conductivity	µS/Cm	IS 3025:(Part-14)	-	-	478.6
7	Turbidity	NTU	IS 3025:(Part-10)	1	5	0.72
8	Total Alkalinity (as CaCO ₃)	mg/L	IS 3025:(Part-23)	200	600	172
9	Total Hardness (as CaCO ₃)	mg/L	IS 3025:(Part-21)	200	600	184
10	Calcium (as Ca)	mg/L	IS 3025:(Part-40)	75	200	60.12
11	Magnesium (as Mg)	mg/L	IS 3025:(Part-46)	30	100	8.26
12	Sodium	mg/l	IS 3025:(Part-45)	-	-	7.28
13	Potassium	mg/l	IS 3025:(Part-45)	-	-	1.41
14	Nitrate (as NO ₃)	mg/L	IS 3025(part-34)	45	No Relaxation	15.61
15	Total Phosphate	mg/L	IS:3025:(Part-31)	--	--	N.D.
16	Chloride (as Cl)	mg/L	IS 3025:(Part-32)	250	1000	34.9
17	Sulphate (as SO ₄)	mg/L	IS 3025:(Part-24)	200	400	36.48
18	Fluoride (as F)	mg/L	IS 3025(part-60)	1	1.5	0.15
19	Cyanide (as CN)	mg/L	IS:3025:(part-27)	0.05	No Relaxation	N.D.



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Rep. No. 02081

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
20	Phenolic Compound (as C ₆ H ₅ OH)	mg/L	IS 3025 (Part-43)	0.001	0.002	N.D.
21	Arsenic (as As)	mg/L	IS 3025 (Part-37)	0.01	0.05	N.D.
22	Mercury (as Hg)	mg/L	IS 3025 (Part-48)	0.001	No Relaxation	N.D.
23	Lead (as Pb)	mg/L	IS 3025 (Part-47)	0.01	No Relaxation	N.D.
24	Cadmium (as Cd)	mg/L	IS 3025 (Part-41)	0.003	No Relaxation	N.D.
25	Free Residual Chlorine	mg/L	IS:3025: (Part-26)	0.2	1	N.D.
26	Chromium (as Cr)	mg/L	Annex J of IS:13428	0.05	No Relaxation	N.D.
27	Copper (as Cu)	mg/L	IS 3025 (Part-42)	0.05	1.5	N.D.
28	Zinc (as Zn)	mg/L	IS 3025 (Part-49)	5	15	N.D.
29	Selenium (as Se)	mg/L	IS 3025 (Part-56)	0.01	No Relaxation	N.D.
30	Iron (as Fe)	mg/L	IS 3025 (Part-53)	0.3	No Relaxation	0.11
31	Manganese (as Mn)	mg/L	IS:3025: (Part-59)	0.1	0.3	N.D.
32	Total Coliform	MPN/100ml	IS:1622:1981:RA:2019	Shall not be detectable in any 100 ml sample		Absent

Note: mg/lit.:milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The above analysis report refers to the particular sample received at our end and the use of the report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above test(s) only.

 20/05/23 REVIEWED BY		For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
-----------------------------	--	--

-----End of the test report-----



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Name & Address Of The Customer To, M/s Jaykaycem (Central) Ltd. Village Harduaken, Tehsil - Amanganj, District - Panna (M.P.)		Report No.	UES/TR/23-24/02082	
		Lab Ref No.	UES/23-24/W/04482	
		Date of Sampling	15/05/2023	
		Date of Receipt	16/05/2023	
		Date of Report	20/05/2023	
		Date of Analysis	Start: 16/05/2023	End: 20/05/2023
SAMPLE DETAILS				
Customer Ref. No. & Date	Verbal Communication, Dated: 15/05/2023.			
Customer Sample Id / Sampling Location	SaptaiVillage Buffer Zone (Govt. Hand Pump near Brijesh Sharma House)	Latitude	24°20'30.63"N	
		Longitude	79°58'14.10"E	
Sample Type	Ground Water	Sample Condition At Receipt	Ok	
Packing Of Sample	Jerry can (Approx. 3 Ltr.) Glass Bottle (Approx. 1 Ltr.X2)	Sample Collected By	Laboratory Chemist	
Other Details	Sealed	Quantity Received	Approx 5 Ltr. each	

Rep. No. 02082

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
1	pH Value at 25.3°C	-	IS:3025:(Part-11)	6.5-8.5	No Relaxation	7.54
2	Colour	Hazen	IS:3025:(Part-4)	5	15	<1
3	Taste	-	IS 3025(part-8)	Agreeable	Agreeable	Agreeable
4	Odour	-	IS 3025(part-5)	Agreeable	Agreeable	Agreeable
5	Total Dissolved Solids	mg/L	IS:3025:(Part-16)	500	2000	293
6	Conductivity	µS/Cm	IS 3025:(Part-14)	-	-	488.6
7	Turbidity	NTU	IS 3025:(Part-10)	1	5	0.47
8	Total Alkalinity (as CaCO ₃)	mg/L	IS 3025:(Part-23)	200	600	152
9	Total Hardness (as CaCO ₃)	mg/L	IS 3025:(Part-21)	200	600	182
10	Calcium (as Ca)	mg/L	IS 3025:(Part-40)	75	200	43.29
11	Magnesium (as Mg)	mg/L	IS 3025:(Part-46)	30	100	17.98
12	Sodium	mg/l	IS 3025:(Part-45)	-	-	6.90
13	Potassium	mg/l	IS 3025:(Part-45)	-	-	1.29
14	Nitrate (as NO ₃)	mg/L	IS 3025(part-34)	45	No Relaxation	22.96
15	Total Phosphate	mg/L	IS:3025:(Part-31)	--	--	N.D.
16	Chloride (as Cl)	mg/L	IS 3025:(Part-32)	250	1000	27.9
17	Sulphate (as SO ₄)	mg/L	IS 3025:(Part-24)	200	400	50.63
18	Fluoride (as F)	mg/L	IS 3025(part-60)	1	1.5	0.12
19	Cyanide (as CN)	mg/L	IS:3025:(part-27)	0.05	No Relaxation	N.D.



HDD-272, Phase III - Near JP Chowk
Ring Road No.-2, Kabir Nagar, Raipur (C.G.) - 492099
Ph : 0771 - 4027777 | Email : ultimatenviro@gmail.com

Recognized by Ministry of Environment Forest and Climate Change under EP act 1996

Rep. No. 02082

TEST REPORT

SR. NO.	PARAMETER	UNIT	METHOD OF TEST	AS PER IS 10500:2012		RESULT
				Acceptable Limit	Permissible limit	
20	Phenolic Compound (as C_6H_5OH)	mg/L	IS 3025 (Part-43)	0.001	0.002	N.D.
21	Arsenic (as As)	mg/L	IS 3025 (Part-37)	0.01	0.05	N.D.
22	Mercury (as Hg)	mg/L	IS 3025 (Part-48)	0.001	No Relaxation	N.D.
23	Lead (as Pb)	mg/L	IS 3025 (Part-47)	0.01	No Relaxation	N.D.
24	Cadmium (as Cd)	mg/L	IS 3025 (Part-41)	0.003	No Relaxation	N.D.
25	Free Residual Chlorine	mg/L	IS:3025: (Part-26)	0.2	1	N.D.
26	Chromium (as Cr)	mg/L	Annex J of IS:13428	0.05	No Relaxation	N.D.
27	Copper (as Cu)	mg/L	IS 3025 (Part-42)	0.05	1.5	N.D.
28	Zinc (as Zn)	mg/L	IS 3025 (Part-49)	5	15	N.D.
29	Selenium (as Se)	mg/L	IS 3025 (Part-56)	0.01	No Relaxation	N.D.
30	Iron (as Fe)	mg/L	IS 3025 (Part-53)	0.3	No Relaxation	0.15
31	Manganese (as Mn)	mg/L	IS:3025: (Part-59)	0.1	0.3	N.D.
32	Total Coliform	MPN/100ml	IS:1622:1981:RA:2019	Shall not be detectable in any 100 ml sample		Absent

Note: mg/lit.:milligram per liter, N.D.: Not Detected.

REMARKS: RESULTS ARE AS ABOVE

Terms & conditions

- The above analysis report refers to the particular sample received at our end and the use of the report for publication, arbitration or as legal dispute is forbidden.
- Test sample will be retained for 15 days after issue of test report unless otherwise agreed with customer.
- This is for information as the party has asked for above test(s) only.

 20/05/23 REVIEWED BY	 	For ULTIMATE ENVIROLYTICAL SOLUTIONS AUTHORIZED SIGNATORY
-----------------------------	------	--

-----End of the test report-----

TEST REPORT CODE: VGL/W/23/08/31/005

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P.)

Location of Sample : SAPTAI VILLAGE

Sample Description : GROUND WATER

Date & Time of Sampling : 28.08.2023 1: 47 PM

Sample Collected by : SHIVAM KUMAR

Environmental Condition (Temp. & RH) : 31.5 °C & 55%

Sample Packing : SEALED

Sample Id No. : 005

Laboratory Sample Receiving Date : 31.08.2023

Duration of Sample Analysis : 31.08.2023 TO 09.09.2023

Method of Sampling : APHA 1060B & 9060A

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
					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	25.0	°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	182	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	462	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	192	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	58.2	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	8.5	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	24.0	mg/L	-	-
12.	Phosphate	APHA 4500-SO42- E	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-PD	52.0	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	12.0	mg/L	-	-


Page 1 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.
- 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

TEST REPORT CODE: VGL/W/23/08/31/005

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (WATER)
PART – A (CHEMICAL)

TEST RESULTS

15.	Nitrate	APHA 4500-NO3-B	5.7	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	33.0	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	0.22	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	0.11	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	<0.05	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	765	μS/cm	No relaxation	No relaxation

Page 2 of 3

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 15 days from the date of issue of test certificate unless otherwise specified.
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
Dr. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

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

TEST REPORT CODE: VGL/W/23/08/31/005

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (WATER)
PART – B (BIOLOGICAL)

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff: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:

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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

Authorized Signatory
Sayeed Ahmad
Quality Manager

TEST REPORT CODE: VGL/W/23/08/31/006

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (WATER) PART – A (CHEMICAL)

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P.)

Location of Sample : DNY WELL KAMTANA VILLAGE

Sample Description : GROUND WATER

Date & Time of Sampling : 28.08.2023 2:20 PM

Sample Collected by : SHIVAM KUMAR

Environmental Condition (Temp. & RH) : 31.2 °C & 55%

Sample Packing : SEALED

Sample Id No. : 006

Laboratory Sample Receiving Date : 31.08.2023

Duration of Sample Analysis : 31.08.2023 TO 09.09.2023

Method of Sampling : APHA 1060B & 9060A

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
					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	24.8	°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	165	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	437	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	188	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	62.4	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	7.8	mg/L	30	100
11.	Sodium	APHA 3500 Na, A+B	17.0	mg/L	-	-
12.	Phosphate	APHA 4500-SO42- E	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-PD	44.0	mg/L	200	400
14.	Potassium	APHA 3500 K, A+B	12.0	mg/L	-	-

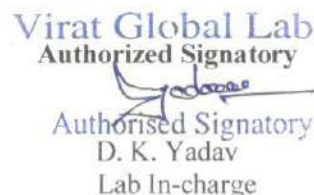
Page 1 of 3

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.
- The sample will be destroyed after 15 days 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.

Review By:

Dr. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

Authorised Signatory
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/006

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (WATER)
PART – A (CHEMICAL)

TEST RESULTS

15.	Nitrate	APHA 4500-NO3- B	12.3	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	56.0	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	0.16	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	1.01	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	<0.05	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	716	µS/cm	No relaxation	No relaxation

Page 2 of 3

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 15 days from the date of issue of test certificate unless otherwise specified.
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:

(Signature)
Dr. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

(Signature)
Authorized Signatory
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/006

TEST REPORT ISSUE DATE: 09.09.2023

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

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff: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:

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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



Sayed Ahmad
Quality Manager

TEST REPORT CODE: VGL/W/23/08/31/007

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (WATER) PART - A (CHEMICAL)

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, (M.P)

Location of Sample : PURAINA VILLAGE

Sample Description : GROUND WATER

Date & Time of Sampling : 28.08.2023 3:00 PM

Sample Collected by : VIRENDRA KUMAR

Environmental Condition (Temp. & RH) : 31.5 °C & 55%

Sample Packing : SEALED

Sample Id No. : 007

Laboratory Sample Receiving Date : 31.08.2023

Duration of Sample Analysis : 31.08.2023 TO 09.09.2023

Method of Sampling : APHA 1060B & 9060A

TEST RESULTS

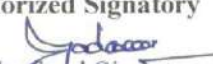
Sr. No.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff:2012)	
					Desirable	Permissible
1.	pH at 25 °C	APHA 4500H+A+B	7.54	-	6.5-8.5	No relaxation
2.	Temperature	APHA 2550-A+B	24.5	°C	Not Specified	Not Specified
3.	Colour	APHA 2120-B	<5.0	Hazen	5	15
4.	Turbidity	APHA 2130-A+B	<1.0	NTU	1	5
5.	Odour	APHA 2150-B	Agreeable	-	Agreeable	Agreeable
6.	Alkalinity	APHA 2320-A+ B	192	mg/L	200	600
7.	Total Dissolved Solids	APHA2540-C	461	mg/L	500	2000
8.	Total Hardness	APHA 2340 A+C	192	mg/L	200	600
9.	Calcium	APHA 3500 Ca- A+B	46.2	mg/L	75	200
10.	Magnesium	APHA 3500 Mg A+B	18.6	mg/L	30	100
11.	Sodium	APHA 3500 Na. A+B	22.0	mg/L	-	-
12.	Phosphate	APHA 4500-SO42- E	BDL	mg/L	-	-
13.	Sulfate	APHA 4500-PD	40.0	mg/L	200	400
14.	Potassium	APHA 3500 K. A+B	10.0	mg/L	-	-

Page 1 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.
- 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:
Lucknow
Dr. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

Authorized Signatory
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/007

TEST REPORT ISSUE DATE: 09.09.2023

TEST REPORT (WATER)
PART – A (CHEMICAL)

TEST RESULTS

15.	Nitrate	APHA 4500-NO ₃ -B	8.5	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	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	0.17	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	0.8	mg/L	1.0	1.5
26.	Hexavalent Chromium	APHA 3500 B	<0.05	mg/L	0.001	No relaxation
27.	Electrical Conductivity	APHA 2510 B	744	μS/cm	No relaxation	No relaxation

Page 2 of 3

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.
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. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

Authorised Signatory
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/007

TEST REPORT ISSUE DATE: 09.09.2023

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

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Limit as per IS 10500:1991 (Reaff: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

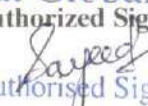
Note:

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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



VIRAT GLOBAL LAB

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/23/08/31/002

TEST REPORT ISSUE DATE: 09.09.2023

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

Name and Address of Customer	: M/s JAYKAYCEM (CENTRAL) LIMITED, VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ, DISTT. - PANNA, 488441 (M.P)
Location of Sample	: KEN RIVER NEAR TIGHRA VILLAGE
Sample Description	: SURFACE WATER
Date & Time of Sampling	: 28.08.2023 2:15 PM
Sample Collected by	: VGL STAFF
Weather Condition	: CLEAR
Laboratory Sample Receiving Date	: 31.08.2023
Duration of Sample Analysis	: 31.08.2023 TO 09.09.2023
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+	7.62	-	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	490	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	25.4	mg/L	100
6.	Alkalinity	APHA 2320-A+B	188	mg/L	-
7.	Total Hardness	APHA 2340 A+C	164	mg/L	-
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.6	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)	22.5	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	48.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.50	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	45.2	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-B	7.8	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	-

Page 1 of 2

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.
- The sample will be destroyed after 15 days 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.

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,

Somaiji Nagar, Lucknow (U.P.) 226008. Mob. +91-9990366186, 9415135012, 0522-7118739

TEST REPORT CODE: VGL/W/23/08/31/002

TEST REPORT ISSUE DATE: 09.09.2023

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	340	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	110.0	MPN/100 ml	-

Page 2 of 2

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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


Authorized SignatorySayeed Ahmad
Quality Manager

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

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, 488441 (M.P.)

Location of Sample : KEN RIVER NEAR SINGAURA VILLAGE

Sample Description : SURFACE WATER

Date & Time of Sampling : 28.08.2023 2:15 PM

Sample Collected by : VGL STAFF

Weather Condition : CLEAR

Laboratory Sample Receiving Date : 31.08.2023

Duration of Sample Analysis : 31.08.2023 TO 09.09.2023

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+	7.84	-	6.5 - 8.5
2.	Colour	APHA 2120-B	30.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.4	NTU	-
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	445	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	12	mg/L	100
6.	Alkalinity	APHA 2320-A+B	180	mg/L	-
7.	Total Hardness	APHA 2340-A+C	160	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)	2.4	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	26.2	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	62.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.55	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	45.2	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-B	7.9	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	0.22	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

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.
- The sample will be destroyed after 15 days 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.

Review By:

Dr. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

D. K. Yadav
Authorized Signatory
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/003

TEST REPORT ISSUE DATE: 09.09.2023

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	380	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	90.0	MPN/100 ml	-

Page 2 of 2

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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

Authorized Signatory

Sayeed Ahmad
Quality Manager

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

Name and Address of Customer	: M/s JAYKAYCEM (CENTRAL) LIMITED, VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ, DISTT. - PANNA, 488441 (M.P)
Location of Sample	: SONAR RIVER NEAR VILLAGE SANTA
Sample Description	: SURFACE WATER
Date & Time of Sampling	: 30.08.2023 5:00 PM
Sample Collected by	: VGL STAFF
Weather Condition	: CLEAR
Laboratory Sample Receiving Date	: 31.08.2023
Duration of Sample Analysis	: 31.08.2023 TO 09.09.2023
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+	7.12	-	6.5 - 8.5
2.	Colour	APHA 2120-B	30.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.1	NTU	-
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	385	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	14.8	mg/L	100
6.	Alkalinity	APHA 2320-A+B	170	mg/L	-
7.	Total Hardness	APHA 2340 A+C	138	mg/L	-
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	6.3	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)	30.8	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	62.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.48	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	32.8	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-B	8.8	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	0.18	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

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.
- The sample will be destroyed after 15 days 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.

Review By:

(Signature)
Dr. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

(Signature)
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/004

TEST REPORT ISSUE DATE: 09.09.2023

**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	140.0	MPN/100 ml	-

Page 2 of 2

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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**
Authorized SignatorySayeed Ahmad
Quality Manager

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

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, 488441 (M.P.)
Location of Sample : NALA NEAR DEORA VILLAGE
Sample Description : SURFACE WATER
Date & Time of Sampling : 28.08.2023 2:15 PM
Sample Collected by : VGL STAFF
Weather Condition : CLEAR
Laboratory Sample Receiving Date : 31.08.2023
Duration of Sample Analysis : 31.08.2023 TO 09.09.2023
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+	7.15	-	6.5 - 8.5
2.	Colour	APHA 2120-B	80.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.8	NTU	-
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	482	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	42.4	mg/L	100
6.	Alkalinity	APHA 2320-A+B	182	mg/L	-
7.	Total Hardness	APHA 2340 A+C	152	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)	2.8	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	52.4	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	64.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.64	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	48.4	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-B	10.2	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.	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

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.
- 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

D. K. Yadav
Authorized Signatory
Lab In-charge

Address: Ground Floor, Khasra No.973, BDS Hostel Campus, Opp. Gate No.2 CRPF Camp, Bijnaur,

Sarsai Nagan, Lucknow (U.P.) 226008 Mob. : +91-9990366186 9415135012 0522-7118739

TEST REPORT CODE: VGL/W/23/08/31/005

TEST REPORT ISSUE DATE: 09.09.2023

**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	410	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	220.0	MPN/100 ml	-

Page 2 of 2

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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**
Sayeed Ahmad
Quality Manager

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

Name and Address of Customer	: M/s JAYKAYCEM (CENTRAL) LIMITED, VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ, DISTT. - PANNA, 488441 (M.P)
Location of Sample	: POND NEAR CHIKHLA VILLAGE
Sample Description	: SURFACE WATER
Date & Time of Sampling	: 30.08.2023 2:15 PM
Sample Collected by	: VGL STAFF
Weather Condition	: CLEAR
Laboratory Sample Receiving Date	: 31.08.2023
Duration of Sample Analysis	: 31.08.2023 TO 09.09.2023
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+	7.88	-	6.5 - 8.5
2.	Colour	APHA 2120-B	60.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.4	NTU	-
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	438	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	32.5	mg/L	100
6.	Alkalinity	APHA 2320-A+B	178	mg/L	-
7.	Total Hardness	APHA 2340 A+C	184	mg/L	-
8.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	4.8	mg/L	4 (MIN)
9.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.7	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	40.2	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	72.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.62	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	48.4	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-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	0.21	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

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.
- 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

D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/006

TEST REPORT ISSUE DATE: 09.09.2023

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	400	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	210.0	MPN/100 ml	-

Page 2 of 2

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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**
Authorized Signatory

Sayeed Ahmad
Quality Manager

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

Name and Address of Customer 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	: M/s JAYKAYCEM (CENTRAL) LIMITED, VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ, DISTT. - PANNA, 488441 (M.P) : POND NEAR UMRI VILLAGE : SURFACE WATER : 30.08.2023 2:15 PM : VGL STAFF : CLEAR : 31.08.2023 : 31.08.2023 TO 09.09.2023 : 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+	7.08	-	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	458	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	34.5	mg/L	100
6.	Alkalinity	APHA 2320-A+B	172	mg/L	-
7.	Total Hardness	APHA 2340 A+C	148	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)	2.2	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	26.8	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	40.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.52	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	38.0	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-B	10.2	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	0.20	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

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.
- The sample will be destroyed after 15 days 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.

Review By:

(Signature)
Dr. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

(Signature)
Authorized Signatory
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/007

TEST REPORT ISSUE DATE: 09.09.2023

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	340	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	140.0	MPN/100 ml	-

Page 2 of 2

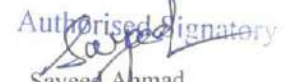
Note:

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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


Sayeed Ahmad
Quality Manager

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

Name and Address of Customer	: M/s JAYKAYCEM (CENTRAL) LIMITED, VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ, DISTT. - PANNA, 488441 (M.P)
Location of Sample	: BETEHA NALLA NEAR SURAJPUR
Sample Description	: SURFACE WATER
Date & Time of Sampling	: 28.08.2023 2:15 PM
Sample Collected by	: VGL STAFF
Weather Condition	: CLEAR
Laboratory Sample Receiving Date	: 31.08.2023
Duration of Sample Analysis	: 31.08.2023 TO 09.09.2023
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+	7.38	-	6.5 - 8.5
2.	Colour	APHA 2120-B	90.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.4	NTU	-
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	488	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	52.4	mg/L	100
6.	Alkalinity	APHA 2320-A+B	170	mg/L	-
7.	Total Hardness	APHA 2340 A+C	160	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)	2.5	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	72.2	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	54.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.49	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	62.5	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-B	9.2	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	0.18	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

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.
- 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:

(Signature)
Dr. Ashok Kumar
Technical Manager

Virat Global Lab
Authorized Signatory

(Signature)
Authorized Signatory
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/008

TEST REPORT ISSUE DATE: 09.09.2023

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	380	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	160.0	MPN/100 ml	-

Page 2 of 2

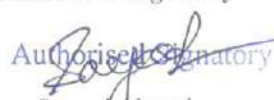
Note:

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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


Sayeed Ahmad
Quality Manager

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

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, 488441 (M.P.)
Location of Sample : POND NEAR AMANGANJ
Sample Description : SURFACE WATER
Date & Time of Sampling : 30.08.2023 2:15 PM
Sample Collected by : VGL STAFF
Weather Condition : CLEAR
Laboratory Sample Receiving Date : 31.08.2023
Duration of Sample Analysis : 31.08.2023 TO 09.09.2023
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+	7.55	-	6.5 - 8.5
2.	Colour	APHA 2120-B	40.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.1	NTU	-
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	395	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	32.5	mg/L	100
6.	Alkalinity	APHA 2320-A+B	168	mg/L	-
7.	Total Hardness	APHA 2340 A+C	142	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)	2.3	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	38.4	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	40.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.56	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	51.2	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-B	10.2	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	0.19	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

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.
- 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

Authorized Signatory
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/009

TEST REPORT ISSUE DATE: 09.09.2023

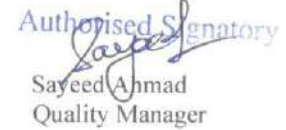
**TEST REPORT (SURFACE WATER)
(PART A – BIOLOGICAL)****TEST RESULTS**

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
25.	Total Coliform Count	APHA 9221 B	390	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	170.0	MPN/100 ml	-

Page 2 of 2

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 3 days from the date of issue of test certificate unless otherwise specified.
3. Any discrepancy in test result should be reported within 3 Days.
4. 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

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

Name and Address of Customer	: M/s JAYKAYCEM (CENTRAL) LIMITED, VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ, DISTT. - PANNA, 488441 (M.P)
Location of Sample	: MIRHASAN RIVER NEAR AMANGANJ
Sample Description	: SURFACE WATER
Date & Time of Sampling	: 28.08.2023 2:15 PM
Sample Collected by	: VGL STAFF
Weather Condition	: CLEAR
Laboratory Sample Receiving Date	: 31.08.2023
Duration of Sample Analysis	: 31.08.2023 TO 09.09.2023
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+	7.24	-	6.5 - 8.5
2.	Colour	APHA 2120-B	20.0	Hazen	300
3.	Turbidity	APHA 2130-A+B	1.6	NTU	-
4.	Total Dissolved Solids, (TDS)	APHA 2540-C	408	mg/L	1500
5.	Total Suspended Solid as TSS	APHA (2540-D)	20.2	mg/L	100
6.	Alkalinity	APHA 2320-A+B	148	mg/L	-
7.	Total Hardness	APHA 2340 A+C	172	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)	2.2	mg/L	3
10.	Chemical Oxygen Demand as COD	APHA (5220-B)	32.4	mg/L	250
11.	Chloride, (Cl)	APHA 4500:(Cl)-B	54.0	mg/L	600
12.	Fluoride, (F)	APHA 4500:(F)-D	0.42	mg/L	1.5
13.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	52.2	mg/L	400
14.	Phenolic Compound, (C ₆ H ₅ 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 ₃)	APHA 4500:(NO ₃)-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	0.22	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

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.
- 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

D. K. Yadav
Authorized Signatory
Lab In-charge

**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	330	MPN/100 ml	500
26.	Faecal Coliform	APHA 9221 E	100.0	MPN/100 ml	-

Page 2 of 2

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 3days from the date of issue of test certificate unless otherwise specified.
3. 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

Authorized Signatory

Sayeed Ahmad
Quality Manager

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

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, 488441 (M.P)
Location of Sample : BERMA RIVER NEAR GAISABAD VILLAGE
Sample Description : SURFACE WATER
Date & Time of Sampling : 28.08.2023 2:15 PM
Sample Collected by : VGL STAFF
Weather Condition : CLEAR
Laboratory Sample Receiving Date : 31.08.2023
Duration of Sample Analysis : 31.08.2023 TO 09.09.2023
Method of Sampling : APHA 1060B & 9060A

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
27.	pH	APHA 4500-H+	7.46	-	6.5 - 8.5
28.	Colour	APHA 2120-B	20.0	Hazen	300
29.	Turbidity	APHA 2130-A+B	1.4	NTU	-
30.	Total Dissolved Solids, (TDS)	APHA 2540-C	472	mg/L	1500
31.	Total Suspended Solid as TSS	APHA (2540-D)	42.3	mg/L	100
32.	Alkalinity	APHA 2320-A+B	168	mg/L	-
33.	Total Hardness	APHA 2340 A+C	174	mg/L	-
34.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.9	mg/L	4 (MIN)
35.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.4	mg/L	3
36.	Chemical Oxygen Demand as COD	APHA (5220-B)	36.4	mg/L	250
37.	Chloride, (Cl)	APHA 4500:(Cl)-B	40.4	mg/L	600
38.	Fluoride, (F)	APHA 4500:(F)-D	0.57	mg/L	1.5
39.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	51.2	mg/L	400
40.	Phenolic Compound, (C ₆ H ₅ OH)	APHA 5530-C	<0.01	mg/L	Not Specified
41.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
42.	Nitrate, (NO ₃)	APHA 4500:(NO ₃)-B	8.2	mg/L	50
43.	Arsenic, (As)	APHA 3120B	<0.01	mg/L	0.2
44.	Copper, (Cu)	APHA 3120B	<0.01	mg/L	Not Specified
45.	Iron, (Fe)	APHA-3120B	0.21	mg/L	Not Specified
46.	Zinc, (Zn)	APHA-3120B	<0.05	mg/L	Not Specified
47.	Cadmium, (Cd)	APHA 3120B	<0.01	mg/L	Not Specified
48.	Chromium, (Cr ⁺⁶)	APHA 3500:(Cr)-B	<0.01	mg/L	Not Specified
49.	Lead, (Pb)	APHA-3120B	<0.01	mg/L	0.1
50.	Mercury (Hg)	APHA-3112A+B	<0.01	mg/L	-

Page 1 of 2

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.
- 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

Authorized Signatory
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/011

TEST REPORT ISSUE DATE: 09.09.2023

**TEST REPORT (SURFACE WATER)
(PART A – BIOLOGICAL)****TEST RESULTS**

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
51.	Total Coliform Count	APHA 9221 B	370	MPN/100 ml	500
52.	Faecal Coliform	APHA 9221 E	130.0	MPN/100 ml	-

Page 2 of 2

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.
- 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


Authorized Signatory

Sayeed Ahmad
Quality Manager

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

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, 488441 (M.P.)
Location of Sample : POND NEAR PAGRA VILLAGE
Sample Description : SURFACE WATER
Date & Time of Sampling : 30.08.2023 2:15 PM
Sample Collected by : VGL STAFF
Weather Condition : CLEAR
Laboratory Sample Receiving Date : 31.08.2023
Duration of Sample Analysis : 31.08.2023 TO 09.09.2023
Method of Sampling : APHA 1060B & 9060A

TEST RESULTS

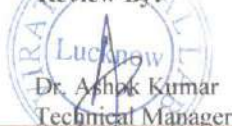
Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
53.	pH	APHA 4500-H+	7.73	-	6.5 - 8.5
54.	Colour	APHA 2120-B	70.0	Hazen	300
55.	Turbidity	APHA 2130-A+B	1.8	NTU	-
56.	Total Dissolved Solids, (TDS)	APHA 2540-C	472	mg/L	1500
57.	Total Suspended Solid as TSS	APHA (2540-D)	18.6	mg/L	100
58.	Alkalinity	APHA 2320-A+B	170	mg/L	-
59.	Total Hardness	APHA 2340 A+C	148	mg/L	-
60.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	6.2	mg/L	4 (MIN)
61.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.3	mg/L	3
62.	Chemical Oxygen Demand as COD	APHA (5220-B)	36.5	mg/L	250
63.	Chloride, (Cl)	APHA 4500:(Cl)-B	57.2	mg/L	600
64.	Fluoride, (F)	APHA 4500:(F)-D	0.42	mg/L	1.5
65.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	62.5	mg/L	400
66.	Phenolic Compound, (C ₆ H ₅ OH)	APHA 5530-C	<0.01	mg/L	Not Specified
67.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
68.	Nitrate, (NO ₃)	APHA 4500:(NO ₃)-B	10.2	mg/L	50
69.	Arsenic, (As)	APHA 3120B	<0.01	mg/L	0.2
70.	Copper, (Cu)	APHA 3120B	<0.01	mg/L	Not Specified
71.	Iron, (Fe)	APHA-3120B	0.20	mg/L	Not Specified
72.	Zinc, (Zn)	APHA-3120B	<0.05	mg/L	Not Specified
73.	Cadmium, (Cd)	APHA 3120B	<0.01	mg/L	Not Specified
74.	Chromium, (Cr ⁺⁶)	APHA 3500:(Cr)-B	<0.01	mg/L	Not Specified
75.	Lead, (Pb)	APHA-3120B	<0.01	mg/L	0.1
76.	Mercury (Hg)	APHA-3112A+B	<0.01	mg/L	-

Page 1 of 2

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.
- 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
D. K. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/012

TEST REPORT ISSUE DATE: 09.09.2023

**TEST REPORT (SURFACE WATER)
(PART A – BIOLOGICAL)**

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
77.	Total Coliform Count	APHA 9221 B	410	MPN/100 ml	500
78.	Faecal Coliform	APHA 9221 E	220.0	MPN/100 ml	-

Page 2 of 2

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.
- 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


Authorized Signatory

Sayeed Ahmad
Quality Manager

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

Name and Address of Customer : M/s JAYKAYCEM (CENTRAL) LIMITED,
VILLAGE-HARDUWAKEN, TEHSIL- AMANGANJ,
DISTT. - PANNA, 48841 (M.P.)

Location of Sample : POND PURAINA VILLAGE

Sample Description : SURFACE WATER

Date & Time of Sampling : 30.08.2023 2:15 PM

Sample Collected by : VGL STAFF

Weather Condition : CLEAR

Laboratory Sample Receiving Date : 31.08.2023

Duration of Sample Analysis : 31.08.2023 TO 09.09.2023

Method of Sampling : APHA 1060B & 9060A

TEST RESULTS

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
79.	pH	APHA 4500-H+	7.52	-	6.5 - 8.5
80.	Colour	APHA 2120-B	40.0	Hazen	300
81.	Turbidity	APHA 2130-A+B	1.8	NTU	-
82.	Total Dissolved Solids, (TDS)	APHA 2540-C	385	mg/L	1500
83.	Total Suspended Solid as TSS	APHA (2540-D)	42.1	mg/L	100
84.	Alkalinity	APHA 2320-A+B	180	mg/L	-
85.	Total Hardness	APHA 2340 A+C	152	mg/L	-
86.	Dissolved Oxygen (DO)	APHA 4500:(O)-C	5.7	mg/L	4 (MIN)
87.	Biological Oxygen Demand (BOD 3days 27°C)	IS: 3025 (Part-44)	2.6	mg/L	3
88.	Chemical Oxygen Demand as COD	APHA (5220-B)	34.2	mg/L	250
89.	Chloride, (Cl)	APHA 4500:(Cl)-B	46.0	mg/L	600
90.	Fluoride, (F)	APHA 4500:(F)-D	0.82	mg/L	1.5
91.	Sulphate, (SO ₄)	APHA 4500:(SO ₄)-E	52.6	mg/L	400
92.	Phenolic Compound, (C ₆ H ₅ OH)	APHA 5530-C	<0.01	mg/L	Not Specified
93.	Oil & Grease, (O & G)	APHA 5520-D	< 2.0	mg/L	Not Specified
94.	Nitrate, (NO ₃)	APHA 4500:(NO ₃)-B	10.2	mg/L	50
95.	Arsenic, (As)	APHA 3120B	<0.01	mg/L	0.2
96.	Copper, (Cu)	APHA 3120B	<0.01	mg/L	Not Specified
97.	Iron, (Fe)	APHA-3120B	0.23	mg/L	Not Specified
98.	Zinc, (Zn)	APHA-3120B	<0.05	mg/L	Not Specified
99.	Cadmium, (Cd)	APHA 3120B	<0.01	mg/L	Not Specified
100.	Chromium, (Cr ⁺⁶)	APHA 3500:(Cr)-B	<0.01	mg/L	Not Specified
101.	Lead, (Pb)	APHA-3120B	<0.01	mg/L	0.1
102.	Mercury (Hg)	APHA-3112A+B	<0.01	mg/L	-

Page 1 of 2

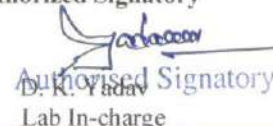
Note:

- 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.
- 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


Dr. R. Yadav
Lab In-charge

TEST REPORT CODE: VGL/W/23/08/31/013

TEST REPORT ISSUE DATE: 09.09.2023

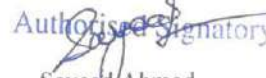
**TEST REPORT (SURFACE WATER)
(PART A – BIOLOGICAL)****TEST RESULTS**

Sr. No.	Parameters	Test Method	Result	Unit	Specification/Limit (As per IS:2296, Class C)
103.	Total Coliform Count	APHA 9221 B	380	MPN/100 ml	500
104.	Faecal Coliform	APHA 9221 E	140.0	MPN/100 ml	-

Page 2 of 2

Note:





13. 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.
14. The sample will be destroyed after 3days from the date of issue of test certificate unless otherwise specified.
15. Any discrepancy in test result should be reported within 3Days.
16. 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

KAKRA PANNA LIMESTONE MINE, JAYKAYCEM (CENTRAL) LTD., PANNA (M.P.)**(A unit of JK Cement Ltd.)****NOISE MONITORING REPORT**

Sr. No.	Location Name	Permissible Limits	Apr-23		May-23		Jun-23		Jul-23		Aug-23		Sep-23	
			Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq	Day (dB) Leq	Night (dB) Leq
1	Kakra Mine Lease area	Ambient Noise	45.71	32.1	42.87	30.16	41.95	33.92	42.48	34.65	44.32	33.85	43.12	32.49
2	Purena Village	Day time - 75 dB (A)	49.64	36.6	46.58	33.89	42.48	34.29	44.38	32.45	45.93	35.26	44.32	33.56
3	Kamata Village	Night time - 70 dB (A)	46.59	32.2	40.12	30.47	43.12	32.49	44.23	33.21	45.21	34.21	42.95	34.28
4	Pagra Village	Work Zone Noise	47.13	31.74	41.24	34.78	44.32	33.56	41.49	30.54	45.98	31.48	45.65	33.21
5	Sotipura Village	Work Zone - 85 dB (A)	46.12	33.13	45.48	32.94	44.32	33.56	41.49	30.54	45.98	31.48	45.65	33.21

Awareness on Plastic Waste Campaign in nearby villages of Koni Mine dated 28.09.2023

Sr. No.	Village Name	Photos	
1	Boda village	 <p>Boda, Madhya Pradesh, India 8WFO+64, Boda, Madhya Pradesh 488442, India Lat: 24.323312° Long: 79.937729° 28/09/23 12:15 PM GMT +05:30</p>	 <p>Boda, Madhya Pradesh, India 8WFO+PQ7, Boda, Madhya Pradesh 488442, India Lat: 24.32402° Long: 79.938652° 28/09/23 12:26 PM GMT +05:30</p>
2	Koni village	 <p>Simra Khurd, Madhya Pradesh, India Unnamed Road, Simra Khurd, Madhya Pradesh 488441, India Lat: 24.338616° Long: 79.909704° 28/09/23 01:20 PM GMT +05:30</p>	 <p>Banbhai, Madhya Pradesh, India 8WH2+F55, Banbhai, Madhya Pradesh 488442, India Lat: 24.330601° Long: 79.900205° 28/09/23 12:05 PM GMT +05:30</p>

3	Maharajganj village	
4	Guda village	

5	Pagra Village	
6	Semariya Tehsil	

7

Tighara village

