

JK Cement Works, Muddapur

A Unit of JK Cement Ltd. CIN: L17229UP1994PLC017199

Morks: P.O. Muddapur - 587 122 Distt. Bagalkot (Karnataka) India

😂 +91 - 8350-289954, 289607

www.jkcement.com

No. JK-MIU/EC-COM/2025-26/93/24-

Date - 26-05-2025

To

The Deputy Director,
Ministry of Environment, Forest and Climate Change (MoEFCC)
Govt. of India, Indira Paryavaran Bhavan,
New Delhi- 110 003

Sub: Half Yearly Environmental Clearance Compliance report for the period from October-2024 to March-2025 (2<sup>nd</sup> Half) for Muddapur Limestone Mine of M/s JK Cement Ltd at Village- Muddapur, Taluka- Mudhol, District- Bagalkot (Karnataka).

Ref: EC. No. J-11015/383/2006-1A. II (M), dtd.21-01-2008.

Dear Sir,

With reference to aforesaid subject and reference matter, we are hereby submitting the enclosed pointwise environmental clearance compliance report for the period **October-2024 to March-2025 (2**<sup>nd</sup> **Half)** of **Muddapur Limestone Mine** of M/s JK Cement Ltd (Limestone production of 2 MTPA) at Village-Muddapur, Taluka-Mudhol, District-Bagalkot, Karnataka.

This for your kind perusal and acknowledge the receipt

Thanking you

Yours faithfully

For Muddapur Limestone

(Unit: JK Cement Ltd)

Prabhat Singh Parihar

(Unit Head)

**Enclosures: As above** 

Corporate Office

Prism Tower 5th Floor, Ninaniya Estate Gwal Pahari,
 Gurugram - 122102, Haryana, INDIA

**\\$** +0124-6919000

admin.prismt@jkcement.com



BUILD SAFE

Manufacturing Units at:

Nimbahera, Mangrol, Gotan (Rajasthan) | Muddapur (Karnataka) Jharli (Haryana) | Katni, Panna (M.P.) | Aligarh, Hamirpur (U.P.) Balasinor (Gujarat) | Fujairah







#### CC:

- 1- The Addl. Principal Chief Conservator of Forest (C), Ministry of Environment & Forest, Regional Office (South Zone), Koramangala, Bangalore.
- 2- Chairman, Central Pollution Control Board, Parivesh Bhavan, East Arjun Nagar, New Delhi
- 3- Scientist 'D' & Incharge, Central Pollution Control Board, 1<sup>st</sup> & 2<sup>nd</sup> Floors, Nisarga Bhavan, A-Block, Thimmaiah, Main Road, 7<sup>th</sup>D Cross, Shivanagar, Opp. Pushpanjali Theatre, Bengaluru
- 4- Member Secretary, Karnataka Pollution Control Board, Church Street, Bangaiore
- 5- The Environmental officer, Karnataka State Pollution Control Board, Bagalkot 587102

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Sr, No	Annexure	Particular			
1	Annexure-1	EC. No. J-11015/383/2006-1A. II (M), dtd.21-01-2008. EC Compliance Status	1-7		
2	Annexure-2	AAQ Monitoring Reports	8-13		
-3	Annexure-3	Fugitive emission Monitoring Reports	14-15		
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EC to Muddapur Limestone Mine (ML area 161.87 ha., 2.0 MTPA of limestone Production) of M/s J.K. Cement Ltd., at village Muddapur, in Mudhol Taluk, Bagalkot-Dist. In Karnataka

EC Compliance Report for the period October- 2024 to March- 2025

Specific Condition:

S.N.	CONDITION	COMPLIANCE STATUS		
Α.	Specific Conditions	第二十二十二十四十四十四十四十四十四十四十四十四十四十四十四十四十四十四十四十四		
	Land use pattern of nearby village shall be studied and action plan for abatement and compensation for damage to agriculture land /common property land as applicable due to mining activity shall be submitted to the Regional office of the Ministry within six months. Annual status of implementation of the plan and expenditure thereon shall be reported to the regional office of the ministry.	Complied. It has been studied with EIA which submitted to concerned authority. Mining is being done as per IBM approved modified mining Plan so there is no damage to agriculture land /common property. Environmental expenditure is attached as <b>Annexure-6</b> .		
	Need based assessment for the nearby villages shall be conducted to study economic measures which can help in upliftment of poor section of society such as development of fodder farm, fruit orchard, vocational training etc. Year wise allocation of funds for implementation of these economic measures shall be reported to the regional office of the ministry within six months.	ces Complying. Surrounding village peoplic are sustaining their lively hood in the project. The literacy rate and better increased earning capacity of village or better medical facility, as transportation and communications.		
iii)	Recommendations of NEERI, Nagpur, as mentioned in their report on status of Environment –"Action plan" for the State of Karnataka, as be applicable to this project, shall be reported to the Regional office of the Ministry.	NEERI director, NEERI has not prepared any report on status of Environment-		
EVERVY.		area nearby mining lease, however we had submitted an application to forest department on dated 25.08.2007, Branch forest, Lokapur had inspected on 27.08.2007 and submitted a letter to zonal forest Mudhol 28.08.2007 and Zonal forest Mudhol had submitted its report to Deputy Conservator of Forest, Bagalkot Division, Bagalkot on dated 28.08.2007, detailed report as there is		

		conservation plan for wild life for site is not applicable as per above statement.
<b>v</b> )	Measures for control and preventions of soil erosion and management of silt shall be prepared and submitted to the Regional office of the ministry within six months	Complied. Soil erosion control measures have been mentioned in EIA which is already submitted to MoEF.
vi)	Water quality both for surface as well as ground water in the core zone shall be regularly monitored for contamination due to mining activity and records maintained. In case contamination is observed, measures for control and action taken shall be reported to the State Government as well as the Regional Office of the Ministry within six months.	Complying. Water quality is being monitored regularly by approved lab and no contamination has been observed. Water quality report of surface (mine pit) is attached as Annexure-5.
vii)	Water bodies shall be developed and utilized to develop Pisciculture. Fishermen cooperative society shall be established with the land losers (if any) and specially the poorer section as members of society. Initial financial assistance either in the form of shared money or other wise and managerial assistance shall be provided so that the members themselves can run the affairs of the society in due course. The project proponent shall arrange marketing tie up so that the society gets fair price of their produce and the profits are equitably shared by the members of the society as regular source of income.	Noted. During final closure of mine, mining pit will be developed as water body and to be utilized to develop Pisciculture.
viii)	Action taken report on issues raised during the public hearing shall be submitted to the Ministry and the State Governments within six months.	
ix)	Occupational health and safety measures for the workers including training on malaria eradication, HIV, health effects on exposure to mineral dust etc. shall be carried out. The company shall engage a full time doctor who is trained in occupational health surveillance. Records of the health of the workers shall be maintained.	Complying. Initial and periodical medical examinations of all mine workers are being done on a regular basis as required under Mines Rules 1955 and training on various medical aspects is being imparted. The company has engaged a fulltime doctor who is trained in Occupational health surveillance. Records are being maintained.
<b>x)</b>	Top soil/solid waste(if any ) shall be stacked properly with proper slope and adequate safe guards and shall back filled for reclamation and rehabilitation of the mined area	Complying. Topsoil is being utilized for plantation and there is no solid waste generation during the course of mining.

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belt development and
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xiv)	Green Belt Development shall be carried out considering CPCB guidelines including selection	Complying. Green Belt Development is being done with native species and in
	of plan species and in consultation with DFO. Herbs, shrubs shall also form a part of a	consultation with DFO as committed in Mining plan.
	forestation programme besides tree plantation. Plantation shall be raised in 22.0 ha around the ML area, haul roads, OB dump sites etc. the density of the trees shall be not less than 2500 plants per ha. The company shall involve local people with the help of self-help group for plantation programme.	Of duttp shall be blokfills specified and specified and specified to previous motion and specified of the control of the contr
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xv)	Details of the year wise a forestation programmed already under take as well as proposed to be taken of including rehabilitation of mined out areas shall be submitted to the Ministry within six months.	Complying, Details of the year wise a forestation programme is already submitted to MoEF and Plantation is being done as per mining plan.
xvi)	The project authority shall implement suitable conservation measures to augment ground water resource in the areas in consultation with the Regional Director, Central Ground Water Board. Status of implementation shall be reported to the regional office of the Ministry from time to time.	harvested in pit recharges ground water as water percolates down wards
xvii)	Prior permission from the competent authority shall be obtained for extraction of ground water, if any.	Complied. Prior permission taken from
xviii)	Vehicles used for transportation of ores and other mining operation shall have valid permission as prescribed under Central Motor Vehicles rules,1989 and its amendments. Transporting of ores shall be done covered with a tarpaulin or other suitable enclosures so that no dust particles /fine matters escape during the course of transportation. No overloading of ores for transportations shall be under taken.	transportation of ores and other mining operation have valid permission as prescribed under Central Motor Vehicles Rules,1989 and its amendments. It is ensured that no
xix)	Drilling and blasting (if any) shall be conducted by using dust extractors/ wet drilling.	Complying. Wet drilling operation is being practiced.

xx)	Village roads through which transportation of ores are being carried out shall be regularly maintained by the company at its own expenses.	Complying. Village roads through which transportation of ores are being carried out is being regularly maintained by the company at its own expenses.
xxi)	A final mine closure plan, along with details of corpus funds, shall be submitted to the Ministry of Environments & Forests within six months, in advance of final mine closure for approval.	
В	General Condition:	
	No change in mining technology and scope of working shall be made without prior approval of Ministry of Environment& Forests.	Noted.
ii)	No change in calendar plan including excavation, quantum of mineral, limestone and waste shall be made.	Noted:
	Four Ambient Air Quality — monitoring station shall be established in the core zone as well as in the buffer zone for RPM, SPM, SO2, NOX monitoring. Location of the stations should be decided based on the metrological data, Topographical features and Environmentally and ecologically sensitive targets and frequency of monitoring should be under taken in consultation with the State Pollution Control Board.	Complied. Four Ambient Air Quality monitoring stations have been established in core and buffer zone.
iv)	Data on Ambient Air Quality (RSPM, SPM, SO <sub>2</sub> , and NOx) should be regularly submitted to the Ministry including its Regional Office located at Bangalore and the State Pollution Control Board/Central Pollution Control Boards once in six months.	being submitted to SPCB/CPCB and MoEF, Bangalore on six monthly basis. AAQM data is attached as <b>Annexure-2.</b>
<b>y)</b>	Fugitive dust emissions from all the sources shall be controlled regularly. Water spraying arrangements on haul roads, loading and unloading and at transfer points shall be provided and properly maintained.	Complying. Water is spraying on the haul roads, loading and unloading points by tankers. Fugitive Dust
vi)	Measures shall be taken for control of noise level below 85 dBA in the work environments. Workers engaged in operations of HEMM, etc shall be provided with ear plugs/ muffs.	Being complied. HEMM maintenance is being done regularly. For workers earplugs/ muffs have been provided. Noise Level Monitoring is enclosed as Annexure-4.

Vii)	Industrial wastewater (Works shop and waste water from the mine should be properly collected, treated so as to conform to the standards prescribed under GSR 422 (E) dated 19th May, 1993 and 31st December 1993 or as amended from time to time. Oil and Grease trap shall be instilled before discharge of effluents.	mines area and no wastewater discharged from mines.  Complying. Personnel working in dusty areas have been provided with protective respiratory devices and imparted adequate training and information of Safety and Health aspects.  Complied. A separate Environmental Management cell with suitable qualified personnel has been set up, who is		
viii)	provided with protective respiratory devices and they shall also be imparted adequate training and information of Safety and Health aspects.  areas have been provided protective respiratory devices imparted adequate train information of Safety and Health informati			
ix)	A separate Environmental Management cell with suitable qualified personnel shall be set up the control of Senior Executive, who will be report directly to the head of the organization.			
X)	The project authorities shall informed to the Regional Office of the Ministry located at Bangalore regarding date of financial closures and final approval of the project by the concern authorities and the date of start of land development work.	id in the second		
xi)	The funds earmarked for Environmental Protection measures shall be kept in separate account and shall not be diverted for other purpose. Year wise expenditure shall be reported to the Ministry and its Regional office located at Bangalore.			
xii)	The project authorities shall informed to the Regional Office of the Ministry located at Bangalore regarding date of financial closures and final approval of the project by the concern authorities and the date of start of land development work.			
xiii)	The Regional Office of the Ministry, Bangalore shall monitor compliance of the stipulated conditions. The project authorities shall extend full cooperation to the officer(s) of the Regional office by furnishing the requisite data/information/monitoring reports.	og retarios to bas galasquett		

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xiv)	A copy of clearance letter will be marked to	Complied.
	concerned panchayat /local NGO, if any from	
	whom suggestion /representation has been	
	received while processing the proposal.	
xv)	State Pollution Control Board shall display a	Noted.
	copy of the clearance letter at the Regional	
	Office, District Industry Centre and collector's	
	office /Tehsildar's office for 30 days.	
xvi)	The project authorities shall advertise at least	Complied.
	in two local Newspapers widely circulated , one	
	of which shall be in the vernacular languages of	
	the localities concern within 7days of issue of	
	the clearance letter informing that the project	
	has been accorded Environmental clearance	
	and a copy of the clearance letter is available	
	with the State Pollution Control Board and also	
	at web site of the Ministry of the Environment	
	& Forests at http: www.envfor.nic.in and a	
	copy of the same shall be forwarded to the	
	Regional Office of the Ministry located at	
	Bangalore.	



Environmental laboratory, Recognized by MoEF & CC, and Certified by ISO (45001:2018)

# AIR QUALITY MONITORING DATA

1. Name of the Project M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122. 2. Name of the Client

Dist.Bagalkot (Karnataka) India

3. Sample Collected By : **Cosmo Conscious Research Laboratory** 

4. Particulars of Sample Collected: Source Emission Air Quality Monitoring

5. Sample Condition Satisfactory

6. **Analysis Start Date** 31.10.2024

7. **Anaysis Completion Date** 02.11.2024

8. Report Issue Date 04.11.2024

9. Month of Monitoring October 2024

Environmental condition at the time 10. 29.2°C

of sampling

Name of the Station/	- 보고 있는 100 전		Particulars of Sample Collected			
Date of Sample Collection	Sample Code	SO₂ (µg/m³)	NO <sub>2</sub> ( µg/m³)	PM <sub>10</sub> (µg/m³)	PM <sub>2.5</sub> (µg/m³)	
			NAAQ sto	andards 200	9	
AAQM Locations for	Muddapur Mines	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)	
AIX-Near Muddapur A	Aines Office	Gerill Tressell				
25.10.2024	435, 435, C02, 240	10	19	58	15	
AX- Petlur			120500000000000000000000000000000000000	<u> </u>		
24.10.2024	430, 430, C08, 244	20	14	52	13	
AXI-Thimmapur Villag	e		1			
24.10.2024	433, 433, C05, 237	18	11	49	23	
AXII- D-Colony, D-blo	ck quarters					
25.10.2024	436, 436, C03, 238	16	17	53	21	

Note: 1. SO2 - Sulfur Dioxide, NO2 - Nitrogen Dioxide, , PM10 - Particulate Matter (size less than 10 µm), PM2.5 - Particulate Matter (size less than 2.5 μm).

2. The above results are related only to the samples collected & tested on the particular date and time.

3. RA - Reaffirmed.

	production and the contract of	<del>,</del>	
Name of the Equipment	Eq. ID. No.	Date of Calibration	Calibration Due on
Combo Sampler	230568 to 230571	30.11.2023	29.11.2024

**ANALYZED BY:** 

(G.Dhavaleshwar) **Analyst** 

**VERIFIED BY:** 

(P.Harika)

**Technical Manager** 

**AUTHORISED SIGNATORY:** 

(M. Shashikala) Head of the Laboratory

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# AIR QUALITY MONITORING DATA

1. Name of the Project : M/s. JK Cement Works, Muddapur,

2. Name of the Client (Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

3. Sample Collected By : Cosmo Conscious Research Laboratory

4. Particulars of Sample Collected : Source Emission Air Quality Monitoring

5. Sample Condition : Satisfactory

6. Analysis Start Date : 20.11.2024

7. Anaysis Completion Date : 23.11.2024

8. Report Issue Date : 29.11.2024

8. Month of Monitoring : November 2024

9. Enviro mental condition at the time of sampling : 29.6°C

10. Unique Lab Report Number : TC14892240000000218F

Name of the Station/		Particulars of Sample Collected			
Date of Sample Collection	Lab Sample Code	\$O₂ ( µg/m³)	NO <sub>2</sub> (µg/m³)	PM <sub>10</sub> (µg/m³)	PM <sub>2.5</sub> (µg/m³)
		NAAQ sto	indards 200	9	
AAQM Locations for	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)	
AIX-Near Muddapur A	Nines Office	gramma sugas garan 14			
21.11.2024	531, 531, C20, 793	17	14	49	20
AX- Pellur	Salar and the second se	ay a series.			
20.11.2024	525, 525, C15, 789	18	16	58	1.8
AXI-Thimmapur Villag					
20.11.2024	527, 527, C13, 797	13	20	53	10
AXII- D-Colony, D-blo	ck quarters				
21.11.2024	528, 528, C17, 796	10	17	54	16

Note: 1. SO2 – Sultur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10 μm), PM2.5 – Particulate Matter (size less than 2.5 μm).

2. The above results are related only to the samples collected & tested on the particular date and time.

3. RA - Reaffirmed.

Nam	e of the Equipment	Eq. ID. No.	Date of Calibration	Calibration Due on
C	ombo Sampler	230568 to 230571	30.11.2023	29.11.2024

**ANALYZED BY:** 

(G.Dhavaleshwar) Analyst **VERIFIED BY:** 

(P.Harika)

Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) Head of the Laboratory

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Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No : TC-14892 and Certified by ISO (45001:2018)



# AIR QUALITY MONITORING DATA

1. Name of the Project : M/s. JK Cement Works, Muddapur,

2. Name of the Client : (Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

3. Sample Collected By : Cosmo Conscious Research Laboratory

4. Particulars of Sample Collected : Source Emission Air Quality Monitoring

5. Sample Condition : Satisfactory

6. Analysis Start Date : 12.12.2024

7. Anaysis Completion Date : 14.12.2024

8. Report Issue Date : 30.12.2024

8. Month of Monitoring : December 2024

9. Environmental condition at the time of sampling29.0°C

10. Unique Lab Report Number : TC14892240000000249F

Name of the Station/	Lab	Parti	culars of	Sample Co	llected
Date of Sample Collection	Sample Code	\$O₂ ( μg/m³)	NO₂ ( µg/m³)	PM <sub>10</sub> (μg/m³)	PM <sub>2.5</sub> (µg/m³)
AAQM Locations for Muddapur Mines			NAAQ sto	andards 2009	•
AAQM LOCATIONS for A	Muddapur Mines	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)
AIX-Near Muddapur Mi	ines Office				Section 2 and the section of
12.12,2024	585, 585, C29, 541	19	12	57	10
AX- Pellur					
11.12.2024	582, 582, C30, 540	21	10	54	22
AXI-Thimmapur Village					1
12.12.2024	587, 587, C32, 543	16	19	52	20
AXII- D-Colony, D-bloc	k quarters				
13.12.2024	591, 591, C35, 534	13	16	49	21

Note: 1. SO2 – Sulfur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10 μm), PM2.5 – Particulate Matter (size less than 2.5 μm).

2. The above results are related only to the samples collected & tested on the particular date and time.

3. RA - Reaffirmed.

**ANALYZED BY:** 

(G.Dhavaleshwar)

Analyst

VERIFIED BY:

(P.Harika)

Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shasbikala) Head of the Laboratory

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Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892 And Certified by ISO (45001:2018)



# AIR QUALITY MONITORING DATA

Name of the Project M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, 2. Name of the Client

Dist.Bagalkot (Karnataka) India

3. Sample Collected By **Cosmo Conscious Research Laboratory** 

4. Particulars of Sample Collected **Source Emission Air Quality Monitoring** 

5. Sample Condition Satisfactory

6. **Analysis Start Date** 08.01.2025

7. **Anaysis Completion Date** 13.01.2025

8. Report Issue Date 25.01.2025

8. Month of Monitoring January 2025

Environmental condition at the time 9. 29.0°C of sampling

10. **Unique Lab Report Number** TC14892250000000011F

Name of the Station/	Lab	Parti	culars of	Sample Co	llected
Date of Sample Collection	Sample Code	SO₂ (µg/m³)	NO <sub>2</sub> ( µg/m³)	PM <sub>10</sub> (µg/m³)	PM <sub>2.5</sub> (µg/m³)
	<u> </u>		NAAQ sto	andards 200	7
AAQM Locations for I	Muddapur Mines	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)
AIX-Near Muddapur Mi	ines Office	er gjelen de state fan de state General de state fan de state fa			- A A CHARLES
08.01.2025	669, 669, C11, 007	17	15	49	21
AX- Petlur					
07.01.2025	663, 663, C06, 066	21	12	52	17
AXI-Thimmapur Village		ministration and an arrangement of the con-			
07.01.2025	665, 665, C14, 063	10	18	56	20
AXII- D-Colony, D-bloc	k quarters		operation and op		
08.01.2025	670, 670, C07, 055	13	20	58	16

Note: 1. SO2 - Sulfur Dioxide, NO2 - Nitrogen Dioxide,, PM10 - Particulate Matter (size less than 10 μm), PM2.5 - Particulate Matter (size less than 2.5 μm).

2. The above results are related only to the samples collected & tested on the particular date and time.

3. RA - Reaffirmed.

ANALYZED BY:

**Analyst** 

**VERIFIED BY:** 

Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) **Head of the Laboratory** 

3 of 31 "SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka)

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10.

#### COSMO CONSCIOUS RESEARCH LABORATORY

Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892 And Certified by ISO (45001:2018)



# AIR QUALITY MONITORING DATA

M/s. JK Cement Works, Muddapur, Name of the Project

Name of the Client (Unit: I.K.Cement Ltd), P.O.Muddapur-587122, 2.

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory 3. Sample Collected By:

4. **Source Emission Air Quality Monitoring** Particulars of Sample Collected :

5. Satisfactory Sample Condition

6. 21.02.2025 ang o ma 🕸 **Analysis Start Date** 

7. 26.02.2025 **Anaysis Completion Date** Aston dia 3

8. 28.02.2025 Report Issue Date AVANDARA 📲

8. February 2025 Month of Monitoring viel gyra#

Environmental condition at the time 9.

of sampling Unique Lab Report Number :

Particulars of Sample Collected Name of the Station/ Lab PM2.5 Date of Sample SO<sub>2</sub> NO2 PM10 Sample Code  $(\mu g/m^3)$ Collection  $(\mu g/m^3)$  $(\mu g/m^3)$  $(\mu g/m^3)$ NAAQ standards 2009 AAQM Locations for Muddapur Mines 80 100 60  $(\mu g/m^3)$  $(\mu g/m^3)$ (µg/m³)  $(\mu g/m^3)$ **AIX-Near Muddapur Mines Office** 22 52 802, 802, C10, 127 11 14 20.02.2025 AX- Petlur 23 12 17 54 808, 808, C07, 122 21.02.2025 **AXI-Thimmapur Village** 17 11 57 10 807, 807, C05, 121 21.02.2025

END OF REPORT

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Note: 1. SO2 - Sulfur Dioxide, NO2 - Nitrogen Dioxide, , PM10 - Particulate Matter (size less than 10 μm), PM2.5 - Particulate Matter (size less than 2.5 µm).

2. The above results are related only to the samples collected & tested on the particular date and time.

809, 809, C09, 126

3. RA - Reaffirmed.

21.02.2025

ANALYZED BY:

(G.Dhavaleshwar) Analyst

**AXII- D-Colony, D-block quarters** 

**VERIFIED BY:** 

18

TC148922500000000124F

**Technical Manager** 

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AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

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Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892
And Certified by ISO (45001:2018)



# AIR QUALITY MONITORING DATA

1. Name of the Project : M/s. JK Cement Works, Muddapur,

2. Name of the Client : (Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Name of the Client Dist.Bagalkot (Karnataka) India

3. Sample Collected By : Cosmo Conscious Research Laboratory

4. Particulars of Sample Collected : Source Emission Air Quality Monitoring

5. Sample Condition Satisfactory

6. Analysis Start Date : 21.03.2025

7. Anaysis Completion Date : 22.03.2025

8. Report Issue Date : 31.03.2025

8. Month of Monitoring : March 2025

9. Environmental condition at the time : 33.2°C

of sampling

10. Unique Lab Report Number : TC148922500000000244F

Name of the Station/		Parti	culars of	Sample Co	lected
Date of Sample Collection	Lab Sample Code	SO₂ (µg/m³)	NO₂ (µg/m³)	PM10 (µg/m³)	PM <sub>2.5</sub> (µg/m³)
	AAM		NAAQ sto	andards 200	9
AAQM Locations for I	Muddapur Mines	80 (µg/m³)	80 (µg/m³)	100 (µg/m³)	60 (µg/m³)
AIX-Near Muddapur M	ines Office	4 1880)		gadynakty.	
19.03.2025	875, 875, C14, 848	21	18	60	20
AX- Pellur				7v3	ine sa
19.03.2025	876, 876, C18, 845	19	12	54	13
AXI-Thimmapur Village		e en en general gingen genie			
19.03.2025	873, 873, C13, 846	10	15	51	13
AXII- D-Colony, D-bloc	k quarters				
20.03.2025	880, 880, C22, 701	14	11	55	19

Note: 1. SO2 – Sulfur Dioxide, NO2 – Nitrogen Dioxide, , PM10 – Particulate Matter (size less than 10  $\mu$ m), PM2.5 – Particulate Matter (size less than 2.5  $\mu$ m).0

2. The above results are related only to the samples collected & tested on the particular date and time.

3. RA - Reaffirmed.

ANALYZED BY:

(G.Dhavaleshwar) Analyst VERIFIED BY:

(P.Harika)

Technical Manager

AUTHORISED SIGNATORY:

(M. Shashikala) Head of the Laboratory

3 of 22









Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No : TC-14892 and Certified by ISO (45001:2018)

#### FUGITIVE EMISSION AIR QUALITY MONITORING DATA

1. Name of the Industry M/s. JK Cement Works, Muddapur, (Unit: J.K.Cement Ltd), P.O.Muddapur-587122, 2. Address Dist.Bagalkot (Karnataka) India Sample Collected By 3. **Cosmo Conscious Research Laboratory** Particular: of Sample Collected . 4. **Fugitive Emission Air Quality Monitoring** Satisfactory align adjoins to analyse as Sample Condition 5. 19.12.2024 6. **Analysis Start Date Analysis Completion Date** 20.12.2024 7. 8. Report Issue Date 30.12.2024 Month of Monitoring 9. December 2024 Environmental condition at the time of 29.2°C sampling 11. Method adopted (Sampling & Analysis) IS 5182 (Part 4):2006

	• 0.675)	<u> </u>	orvisuu W budigo	Led) hereor	Al Velkody
Sl. No.	Date of Sample Collection	Name of the Station	Lab Sample Code	SPM (mg/m³)	IBM Standard (mg/m³)
Fugitive	Locations for Mu	ddapur Mines		2 (C 20 11 72 73 74 74 74 74 74 74 74 74 74 74 74 74 74	
1.	12.12.2024	Drilling Area	523012	0.86	1.2
2.	12.12.2024	Loading Area	523006	0.98	1.2
3.	13.12.2024	Haulage Road	523014	0.90	1.2
4.	·13.12.2024	Waste Dumping Site	523015	1.03	1.2
5.	12.12.2024	Service Road	523004	1.01	1.2
1 7-11	F6 W1 6 W		" at \$175 G"" makes a labor to the	11 AV 5 F 87 134 F 6 1 3	<del></del>

#### **END OF REPORT**

Note: 1. SPM - Suspended Particulate Matter.

2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY:

(G.Dhavaleshwar) Analyst VERIFIED BY:

(P.Harika) Spical Mana

**Technical Manager** 

**AUTHORISED SIGNATORY:** 

(M. Shashikala) Head of the Laborato





Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892 And Certified by ISO (45001:2018)

### FUGITIVE EMISSION AIR QUALITY MONITORING DATA

1.	Name of the Industry	:	M/s. JK Cement Works, Muddapur,	
2.	Address tibul (mistemail) ballo alla da commo	:	(Unit: J.K.Cement Ltd),P.O.Muddapur-587122, Dist.Bagalkot (Karnataka) India	.X • .8
3.	Sample Collected By	<b>:</b> .	Cosmo Conscious Research Laboratory	j.
4.	Particulars of Sample Collected	;	<b>Fugitive Emission Air Quality Monitoring</b>	
5.	Sample Condition	;	Satisfactory and more stayled a	
6.	Analysis Start Date	:	<b>25.03.2025</b>	0
7.	Analysis Completion Date		7 / 70 7075	. 8
8.	Report Issue Date	<b>:</b>	24.00.2025	
9.	Month of Monitoring	*	March 2025	
10.	Environmental condition at the time of		33.2°C % % % % % % % % % % % % % % % % % % %	393
лV.	sampling Adoles Hell Market	•	Method adopted (Sampleg & Arabad)	1
11.	Method adopted (Sampling & Analysis)	:	IS 5182 (Part 4) :2006	

Sl. No.	Date of Sample Collection	Name of the Station	Lab Sample Code	SPM (mg/m³)	IBM Standard (mg/m³)
Fugitiv	e Locations for Muc	dapur Mines	ree A. sessiffest I	######################################	and the supplemental to th
1.	19.03.2025	Drilling Area	514486	0.92	1.2
2.	19.03.2025	Loading Area	514485	1.01	1.2
3.	.19.03.2025	Haulage Road	514490	0.94	1.2
. 4.	20.03.2025	Waste Dumping Site	514489	1.06	1.2
5.	20.03.2025	Service Road	514480	0.86	1.2

#### **END OF REPORT**

Note: 1. SPM – Suspended Particulate Matter.

2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY

(G.Dhavaleshwar) Analyst VERIFIED RY

(P.Harika)

Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) Head of the Laboratory







Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No : TC-14892 and Certified by ISO (45001:2018)

## NOISE LEVEL MONITORING DATA

1. Name of the Client : M/s. JK Cement Works, Muddapur,

2. Address (Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

3. Sample Collected By : Cosmo Conscious Research Laboratory

4. Particulars of Sample Collected : Noise Monitoring

5. Sample Condition : Satisfactory

6. Monitoring Date : 12.12.2024

7. Month of Monitoring : December 2024

I. Muddapur Mines (Buffer Zone):

SI.		and the second process of the second			,		eq.	7
No.	Code	Sampling Location	Date -	Unit	L max.	Day	Night	L min.
1.	N1	Muddapur Mines North Boundary	12.12.2024	dB (A)	62.4	54.2	53.2	52.3
2.	N2	Muddapur Mines Office	12.12.2024	dB (A)	60.4	53.8	52.6	51.6

II. Muddapur Mines (Core Zone):

Sl.	esegga pandozon			144.34	Da	ıy
No.	Code	Sampling Location	Date	Unit	Max.	Min.
1.	N1	Muddapur Mines Drilling Time	12.12.2024	dB	69.2	64.2
<b>2.</b>	N2	Muddapur Mines Waste Dump Site	12.12.2024	dB	64.3	62.3
3.	N3	Muddapur Mines Service Road	12.12.2024	dB	68.2	59.3
4.	N4	Excavator Muddapur Mine	12.12.2024	dB	69.1	62.9

MOEF ambient Noise	Residential Area	limits dB(A) Leq	Industrial Area	limits dB(A) Leq
standards in dB(A) Leq (No.41,	Day time	Night time	Day time	Night time
Dt.11.01.2010)	3 <u>5</u> 993 10 1	45	75	70
Method Adopted	N.A.	Integrated Sour	d Lovel Meter	145.7017.34

Note: 1. The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:

(G.Dhavaleshwar) Analyst **VERIFIED BY:** 

(P.Harika)

Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala)

Head of the Laboratory





: "SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari–583103 (Karnataka)
Ph: 08392 255744, Website: <a href="https://www.isccri.com">www.isccri.com</a> email: chiefexecutive@tsccri.com





Environmental laboratory, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No: TC-14892 And Certified by ISO (45001:2018)

# NOISE LEVEL MONITORING DATA

Name of the Client M/s. JK Cement Works, Muddapur, 1.

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122, 2. Address that [adapted of ] rolling the laid;

Dist.Bagalkot (Karnataka) India

Sample Collected By 3. **Cosmo Conscious Research Laboratory** 

4. Particulars of Sample Collected **Noise Monitoring** 

5. Sample Condition Satisfactory

6. **Monitoring Date** 19.03.2025

7. Month of Monitoring March 2025

Muddapur Mines (Buffer Zone):

To Allegan	SI.	Code	Sampling Location	Date	Unit	D	ay 🗽
1	No.	coue	Samping Location	Date	OHIL SESSIVE SES	Max.	Min.
	1.	N1	Muddapur Mines North Boundary	19.03.2025	dB	61.2	53.2
	2.	N2	Muddapur Mines Office	19.03.2025	dB	60.8	51.1

Muddapur Mines (Core Zone): II.

SI.		Sampling Location	Mara	TIit	D:	ay
No.	Code	Samping Location	Date	Unit	Max.	Min.
1. 1.	N1	Muddapur Mines Drilling Time	19.03.2025	dB	65.2	62.3
2.	N2	Muddapur Mines Waste Dump Site	19.03.2025	dB	63.2	61.2
3.	N3	Muddapur Mines Service Road	19.03.2025	dB	58.0	56.2
4.	N4	Excavator Muddapur Mine	19.03.2025	dB	64.2	62.1

MOEF ambient Noise	. Residential Area l	imits dB(A) Leq	Industrial Area	limits dB(A) Leq
standards in dB(A) Leq (No.41,	Day time	Night time	Day time	Night time
Dt.11.01.2010)	55	45	75	70
Method Adopted	The state of the s	Integrated Soun	d Level Meter	Assessed and Asses

Note: 1.The above results are related only to the samples collected & tested on the particular date and time

MONITORED BY:

(G.Dhavaleshwar) **Analyst** 

**VERIFIED BY:** 

(P.Harika)

Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) **Head of the Laboratory** 

22 of 22



"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballari-583103 (Karnataka) Ph: 08392 255744, Website: www.iscari.com email: chiefexecutive@tsccrl.com





2.

## COSMO CONSCIOUS RESEARCH LABORATORY

Environmental laboratory, Recognized by MoEF & CC, and Certified by ISO (45001:2018)

# Analysis Report of Mines Pit Water

1. Name of the Industry

and a second second

Address

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date12. Method of Sampling

13. Environmental condition at the time of sampling

M/s. JK Cement Works, Muddapur, (Unit: J.K.Cement Ltd), P.O.Muddapur-

: 587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

Muddapur Mines

: Mines Pit Water-2

: JKSW5

: CCRL W 9837

30.10.2024 31.10.2024

: 31.10.2024 to 04.11.2024

: 04.11.2024

: IS:17614 (Part-I) 2021

29.2°C

SI. No	Parameters	Parameters Protocol		Results	General Standards for Inland Surface water Schedule VI (EPA-'86)	
rene La la la la la la Maria la			7.55 E	Oct.'-24	Limits	
PHYSIC	AL					
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1		
2.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	μs/cms	377	A CONTRACTOR OF THE CONTRACTOR	
3.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017, Gravimetric method	mg/L	225		
4.	рН	IS:3025 (part 11)-1983, RA-2022, Electrometric method		8.27	5.50 to 9.0	
5.	Turbidity	IS:3025 (part 10)-1984, RA-2017, Nephelometric method	NTU	0.40		
CHEM	ICAL		en en e	. i Nata		
6.	Dissolved Phosphate as PO <sub>4</sub>	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.516	5	
7.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	18.1	-	
8.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	1.10	FOLLOWING THE PROPERTY OF THE	
9.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	29.66	•	
10.	Magnesium as Mg	APHA 23 <sup>rd</sup> Edition 3500-B-Mg By calculation	mg/L	29.21	-	
11.	Total Hardness as CaCO <sub>3</sub>	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	144	-	
12.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	9.50	•	
13.	Sulphate as SO4	APHA 23 <sup>rd</sup> Edition 4500-SO4 <sup>2</sup> -E (P.NO.4-190-191) Turbidimetric method	mg/L	5.92	x 194 -	

Cont'd...







Environmental laboratory, Recognized by MoEF & CC, and Certified by ISO (45001:2018)

Sl. No	Parameters	Protocol	Unit of Measure ment	Results	General Standards for Inland Surface water Schedule-VI (EPA-'86)
14.	Fluoride as F	APHA 23rd Edition 4500-F-D.	mg/L	Oct.'-24 0.61	Limits 2
15.	Nitrate Nitrogen as NO <sub>3</sub>	(P.NO. 4-87 – 88)SPADNS Method IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	0.76	10
16.	Total Alkalinity as CaCO₃	IS:3025 (part 23)-1986, RA-2019 Indicator method	mg/L	125	
TRACE	METALS				
17.	Total Iron as Fe	APHA 23 <sup>rd</sup> Edition 3111B (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
18.	Nickel as Ni	APHA 23 <sup>rd</sup> Edition 3111B (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
19.	Manganese as Mn	APHA 23 <sup>rd</sup> Edition 3111B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	2
20.	Copper as Cu	APHA 23 <sup>rd</sup> Edition 3111B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
21.	Zinc as Zn	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
22.	Lead as Pb	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	0.10
23.	Chromium as Cr	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-18) Direct Air Acetylene Flame Method	mg/L	BDL	2

End of Report

Note: 1. RA: Reaffirmed BDL- Below detectable limit, (For frace metals <0.1, Oil & grease <4.0).

2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY:

(G.Dhavaleshwar) Analyst **VERIFIED BY:** 

(P.Harika) Technical Manager

**AUTHORISED SIGNATORY:** 

Y: (M. Shashikala) Head of the Laboratory





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Environmental laboratory, Recognized by MoEF & CC, and Certified by ISO (45001:2018)

# Analysis Report of Mines Pit Water

1. Name of the Industry

2. Address

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12... Method of Sampling

: M/s. JK Cement Works, Muddapur, (Unit: J.K.Cement Ltd), P.O.Muddapur-

: 587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Muddapur Mines

: Mines Pit Water-2

: IKSW5

: CCRL W 9837

: 30.10.2024

: 31.10.2024

: 31.10.2024 to 04.11.2024

: 04.11.2024

: IS:17614 (Part-I) 2021

Sl. No	Parameters	Protocol	Unit of Measurement	Results	General Standards for Inland Surface water Schedule- VI (EPA-'86)
				Oct.'-24	Limits
TRACE	METALS				······································
1.	Mercury as Hg	APHA 23 <sup>rd</sup> Edition 3112 B. (p.no.3-23) Dírect Air Acetylene e Flame Method	mg/L	BDL	0.01

**End of Report** 

Note: 1. BDL- Below detectable limit. (Mercury <0.001).

2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY:

(G.Dhavaleshwar) Analyst VERIFIED BY:

Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashike

Head of the Laboratory





ire centilicate



# Analysis Report of Mines Pit Water

1. Name of the Industry

2. Address

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. Unique Lab Report Number

M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-

: 587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

Muddapur Mines

Mines Pit Water-2

: IKSW5

: CCRL W 9872

22.11.2024

22.11.2024

: 23.11.2024 to 28.11.2024

29.11.2024

: IS:17614 (Part-I) 2021

: 29.4°C

: TC148922400000000223F

Sl. No	Parameters	Parameters Protocol		Results	General Standards for Inland Surface water Schedule- VI (EPA-'86)
				Nov.'-24	Limits
PHYSIC	AL				
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<b>&lt;1</b>	
2.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	μs/cms	611	<u>-</u>
3.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017, Gravimetric method	mg/L	424	
4.	pH	IS:3025 (part 11)-1983, RA-2022, Electrometric method	•	7.82	5.50 to 9.0
5.	Turbidity	IS:3025 (part 10)-1984, RA-2017, Nephelometric method	NTU	1.80	
CHEM	ICAL				
6.	Dissolved Phosphate as PO <sub>4</sub>	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.212	5
7.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	101.1	•
8.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.90	-
9.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	37.67	-
10.	Magnesium as Mg	APHA 23 <sup>rd</sup> Edition 3500-B-Mg By calculation	mg/L	40.78	-
11.	Total Hardness as CaCO <sub>3</sub> IS:3025 (part 21)-1983, RA-2019 mg/L  EDTA Titrimetric method		262		
12.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	82.47	
13.	Sulphate as 304	APHA 23 <sup>rd</sup> Edition 4500-SO4 <sup>2</sup> -E (P.NO.4-190-191) Turbidimetric method	mg/L	31.81	•

Cont'd...







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Sl. No	Parameters	Protocol	Unit of Measure ment	Results	General Standards for Inland Surface water Schedule-VI (EPA-'86) Limits
14.	Fluoride as F	APHA 23 <sup>rd</sup> Edition 4500-F <sup>-</sup> D. (P.NO. 4-87 – 88)SPADNS Method	mg/L	0.52	2
15.	Nitrate Nitrogen as NO <sub>3</sub>	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	1.16	10
16.	Total Alkalinity as CaCO <sub>3</sub>	IS:3025 (part 23)-1986, RA-2019 Indicator method	mg/L	195	
TRACE	EMETALS		- Peran	land pay our	a fa badili iliki ili
17.	Total Iron as Fe	APHA 23 <sup>rd</sup> Edition 3111B (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
18.	Nickel as Ni	APHA 23 <sup>rd</sup> Edition 3111B (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3 3 3 3 3 3 3 3 3 3 3 3 3 3 3 3
19.	Manganese as Mn	APHA 23 <sup>rd</sup> Edition 3111B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	2
20.	Copper as Cu	APHA 23 <sup>rd</sup> Edition 3111B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
21.	Zinc as Zn	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
22.	Lead as Pb	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	0.10
23.	Chromium as Cr	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-18) Direct Air Acetylene Flame Method	mg/L	BDL	2

**End of Report** 

Note: 1. RA: Reaffirmed BDL- Below detectable limit, (For frace metals <0.1, Oil & grease <4.0).

2. The above results are related only to the samples collected & tested on the particular date and time.

			W		77 T	- 17	 **	
- 2	TA1	W.	11.	R.	243.		 ,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,	

(G.Dhavaleshwar) Analyst

l s bewir

**VERIFIED BY:** 

(P.Harika) Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) d of the Laborator

**Head of the Laboratory** 





"SURVEY HOUSE", #121, 2nd Cross, Nehru Colony, Ballañ-583103 (Karnataka)
Ph: 08392 255744, Website: <a href="www.lsccrl.com">www.lsccrl.com</a> email: chiefexecutive@tsccrl.com





i mangalah mengangan keringgan ang mendalah sa meruntahan digitang dalah dalah ang ang mengalah salah ang meng Menerikan dalah mengangan mengangan dalah sebagai sebagai sebagai sebagai sebagai sebagai sebagai sebagai sebag

# Analysis Report of Mines Pit Water

1. Name of the Industry

2. Address

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur, (Unit: J.K.Cement Ltd).P.O.Muddapur-

587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Muddapur Mines

: Mines Pit Water-2

: IKSW5

: CCRL W 9872

: 22.11.2024

: 22.11.2024

: 23.11.2024 to 28.11.2024

: 29.11.2024

: IS:17614 (Part-I) 2021

Sl. No	Parameters	Protocol	Unit of Measurement	Results	General Standards for Inland Surface water Schedule- VI (EPA-'86)	
TDACE	METALS			Nov.'-24	Limits	
IRACE	PICIALS	APHA 23rd Edition 3112 B. (p.no.3-23)				
1.	Mercury as Hg	Direct Air Acetylene e Flame  Method	mg/L	BDL	0.01	

**End of Report** 

Note: 1. BDL- Below detectable limit. (Mercury <0.001).

2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY:

(G.Dhavaleshwar) Analyst **VERIFIED BY:** 

(P.Harika) Technical Manager

**AUTHORISED SIGNATORY:** 

Y: (M. Shashikala) Head of the Laboratory









Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No : TC-14892 and Certified by ISO (45001:2018)



# WATER QUALITY MONITORING DATA

(GROUND WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. Unique Lab Report Number

M/s. JK Cement Works, Muddapur,

(Unit: I.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

Cosmo Conscious Research Laboratory

: Muddapur Mines Office

: Bore well

: IKGW9

: CCRL W 9894

: 17.12.2024

: 17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

29.2°C

TC148922400000000257F

SI.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012		
No.	r at annews		ment	Dec.'24	Desirable Limits	Permissible Limits	
PHY	SICAL .			149 5-14			
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1	5	15	
2.	Temperature	IS:3025 (PART 9)-1984, RA-2023, Thermometer	2C	25.50		-	
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	μs/cms	3210	-	•	
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	1960	500	2000	
5.	pH	IS:3025 (part 11)-1983, RA-2012, Electrometric method		- 6.95		No relaxation	
6.	Turbidity (NTU)	IS:3025 (part 10)-1984, RA-2023, Nephelometric method	NTU	1.20	1	5	
7.	Total Suspended Solids	IS:3025 (part 17)-1984, RA-2022, Gravimetric Method	mg/L	2		•	
СНІ	MICAL			agadên Erre			
8.	Dissolved Oxygen	IS:3025 (part 38)-1989, RA-2019, Winkler titrimetric azide modification	mg/L	7.10		•	
9.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, , RA-2023 Three days BOD at 27°C	mg/L	<1			
10.	Chemical Oxygen Demand	APHA 24 <sup>th</sup> Edition 5220-B Open reflux method	mg/L	<1	<b>**</b>	-	
11.	Phosphorous as P	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.284	•		
12.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	114.20		-	
13.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.90			
14.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	173.88	75	200	

Conf'd...



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OHSAS 18001:2007



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7) Certificate No:TC14892

SI. No.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012		
	3.55		ment	Dec.'24		Permissible Limits	
15.	Magnesium as Mg	APHA 24th Edition 350-B-Mg By calculation	mg/L	68.32	30	100	
16.	Total Hardness as CaCO <sub>3</sub>	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	588	300	600	
17.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	635.30	250	1000	
18.	Sulphate as SO <sub>4</sub>	APHA 24 <sup>th</sup> Edition 4500-SO4 <sup>2</sup> -E Turbidimetric method	mg/L	18.09	200	400	
19.	Fluoride as F	APHA 24 <sup>th</sup> Edition 4500-F <sup>-</sup> D. SPADNS Method	mg/L	1.01	1	1.50	
20.	Nitrate Nitrogen as NO <sub>3</sub>	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	3.13	45	No relaxation	
21.	Total Alkalinity as CaCO <sub>3</sub>	IS:3025 (part 23)-1986, RA-2023 Indicator method	mg/L	395	200	600	
22.	Acidity as CaCO <sub>3</sub>	IS:3025 (part 22)-1986, RA-2019 Indicator method	mg/L	NII	Link Coeff.	•	
23.	Oil &Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	BDL	-	-	
TRAC	E METALS				<u> </u>	<u> </u>	
24.	Total Iron as Fe	APHA 24 <sup>th</sup> Edition 3111B Direct Air Acetylene Flame Method	mg/L	0.158	0.30	No relaxation	
25.	Nickel as Ni	APHA 24th Edition 3111B  Direct Air Acetylene Flame Method	mg/L	BDL	0.02	No relaxation	
26.	Manganese as	APHA 24th Edition 3111B  Direct Air Acetylene Flame Method	mg/L	BDL	0.10	0.30	
27.	Copper as Cu	APHA 24th Edition 3111B  Direct Air Acetylene Flame Method	mg/L	BDL	0.05	1.50	
28.	Zinc as Zn	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	5	15	
29.	Lead as Pb	APHA 24th Edition 3111B Direct Air Acetylene Flame Method mg/L BDL		BDL	0.01	No relaxation	
30.	Silver as Ag	APHA 24 <sup>th</sup> Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	No relaxation	
31.	Chromium as Cr	APHA 24 <sup>th</sup> Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.05	No relaxation	

END OF REPORT

Note: 1. BDL: Below detectable limit. .(Oil & Grease <4, for frace metals <0.1)

RA: Reaffirmed.

2. The above results are related only to the samples collected & tested on the particular Date and time.

ANALYZED BY:

(G.Dhavaleshwar)
Analyst

VERIFIED BY:

(P. Harika) Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) Head of the Laboratory



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DOS Inc.

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CCRL

CHSAS 18001-200

OHSAS 18001:2007



Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No : TC-14892 and Certified by ISO (45001:2018)

# WATER QUALITY MONITORING DATA

(GROUND WATER)

- 1. Name of the Project
- 2. Name of the Client
- 3. Sample collected by
- 4. Name of the Location
- 5. Particulars of sample collected
- 6. Field Sample code
- 7. Lab Sample Code
- 8. Date of sample collection
- 9. Date of sample Received
- 10. Date of sample Analyzed
- 11. Report Issue Date
- 12. Method of Sampling

- : M/s. JK Cement Works, Muddapur,
- (Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Hodogoji s wasii Bes septaki

- Dist.Bagalkot (Karnataka) India
- : Cosmo Conscious Research Laboratory
- : Muddapur Mines Office
- : Bore well
- : IKGW9
- : CCRL W 9894
- : 17.12.2024
- : 17.12.2024
- : 17.12.2024 to 26.12.2024
- : 30.12.2024
- : IS:17614 (Part-I) 2021

Sl.	Parameters	Protocol	Unit of Measure ment	Results	Drinking water specification Std. as per IS:10500:2012		
No.				Dec.'24	Desirable Limits	Permissible Limits	
TRAC	E METALS						
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	BDL	0.001	No relaxation	
MICF	OBIOLOGICAL	era receptura. Perangan kanadan dan berangan	พระสารณฑร์ ผู้สอบร		Control (1997) Representation of the consession of the control of	energi. – 4. Januaryan engantas yang asal salah salah	
2.	Total Coliform count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Shall not be detectable in any 100 ml sample		
3.	E.Coli count	APHA 24th Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Shall not be detectable in any 100 ml sample	The second of th	

#### **END OF REPORT**

Note: 1. BDL: Below detectable limit. (Mercury <0.001) RA: Reaffirmed.

2. The above results are related only to the samples collected & tested on the particular Date and time.

ANALYZED BY:

(G.Dhavaleshwar) Analyst VERIFIED RV

(P. Harika) Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) Head of the Laboratory

28 of 59



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# WATER QUALITY MONITORING DATA

(GROUND WATER)

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1.		140	me	UI	LIII	3 F.			L	
							,			

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

13. Environmental condition at the time of sampling

14. Unique Lab Report Number

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Muddapur Mines Observatory well

: Bore well

: IKGW14

: CCRL W 9895

: 17.12.2024

: 17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

: 29.2°C

TC148922400000000258F

SI. No.	Parameters	Protocol	Unit of Measure	Results	Drinking water specification Std. as per IS:10500:2012		
			ment	Dec.'24		Permissible Limits	
PHY	/SICAL /	you (III) - (Significal Laborace) to experience in			X48137974	-8 4	
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	<1	5	15	
2.	Temperature	IS:3025 (PART 9)-1984, RA-2023, Thermometer	<b>°</b> C	25.50	•		
3.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	μs/cms	3310		•	
4.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2023, Gravimetric method	mg/L	1965	500	2000	
5.	pH	IS:3025 (part 11)-1983, RA-2012, Electrometric method		6.86	6.5 to 8.5	No relaxation	
6.	Turbidity (NTU)	IS:3025 (part 10)-1984, RA-2023, Nephelometric method	NTU	0.60	1	5 .	
7.	Total Suspended Solids	IS:3025 (part 17)-1984, RA-2022, Gravimetric Method	mg/L	5		-	
CHE	MICAL						
8.	Dissolved Oxygen	IS:3025 (part 38)-1989, RA-2019, Winkler titrimetric azide modification	mg/L	7.30		_	
9.	Biochemical Oxygen Demand for 3 days at 27°C	IS:3025 (part 44)-1993, , RA-2023 Three days BOD at 27°C	mg/L	<1	-		
10.	Chemical Oxygen Demand	APHA 24th Edition 5220-B Open reflux method	mg/L	<1		<del>-</del>	
11.	Phosphorous as P	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.288			
12.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	198.40	•	_	
13,	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	0.90	<u>-</u>		
14.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	177.15	75	200	

Cont'd...



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Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No : TC-14892 and Certified by ISO (45001:2018)



Sl. No.	Parameters	Protocol	Unit of Measure ment	Results	Drinking water specification Std. as per IS:10500:2012	
				Dec.'24	Desirable Limits	Permissible Limits
15.	Magnesium as Mg	APHA 24th Edition 350-B-Mg By calculation	mg/L	80.05	30	100
16.	Total Hardness as CaCO <sub>3</sub>	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	572	300	600
17.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	599.81	250	1000
18.	Sulphate as SO <sub>4</sub>	APHA 24 <sup>th</sup> Edition 4500-SO4 <sup>2</sup> -E Turbidimetric method	mg/L	16.87	200	400
19.	Fluoride as F	APHA 24th Edition 4500-F- D. SPADNS Method	mg/L	1.16	1 1	1.50
20.	Nitrate Nitrogen as NO <sub>3</sub>	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	2.95	45	No relaxation
21.	Total Alkalinity as CaCO3	IS:3025 (part 23)-1986, RA-2023 Indicator method	mg/L	385	200	600
22.	Acidity as CaCO₃	IS:3025 (part 22)-1986, RA-2019 Indicator method	mg/L	Nil	-	
23.	Oil &Grease	IS:3025 (part 39)-1991, RA-2021 Partition Gravimetric method	mg/L	BDL		-
TRAC	E METALS			en eren Sanskabapakan arras		
24,	Total Iron as Fe	APHA 24th Edition 3111B  Direct Air Acetylene Flame Method	mg/L	BDL	0.30	No relaxation
25.	Nickel as Ni	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.02	No relaxation
26.	Manganese as	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	0.30
27.	Copper as Cu	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.05	1.50
28.	Zinc as Zn	APHA 24th Edition 3111B  Direct Air Acetylene Flame Method	mg/L	BDL	5	15
29.	Lead as Pb	APHA 24th Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.01	No relaxation
30.	Silver as Ag	APHA 24 <sup>th</sup> Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.10	No relaxation
31.	Chromium as Cr	APHA 24 <sup>th</sup> Edition 3111B Direct Air Acetylene Flame Method	mg/L	BDL	0.05	No relaxation

Note: 1. BDL: Below detectable limit. (Oil & Grease <4, for trace metals <0.1)

2. The above results are related only to the samples collected & tested on the particular Date and time.

NETT A VISIO CERTAIN PER IN

ANALYZED BY:

(G.Dhavaleshwar)

**Analyst** 

VERIFIED BY:

(P. Harika) **Technical Manager** 

**AUTHORISED SIGNATORY:** 

(M. Shashikala) **Head of the Laboratory** 

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## WATER QUALITY MONITORING DATA

(GROUND WATER)

1. Name of the Project

2. Name of the Client

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

**10.** Date of sample Analyzed

11. Report Issue Date

12. Method of Sampling

: M/s. JK Cement Works, Muddapur,

(Unit: J.K.Cement Ltd), P.O.Muddapur-587122,

silic ac eledoini

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Muddapur Mines Observatory well

: Bore well

: IKGW14

: CCRL W 9895

: 17.12.2024

: 17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

SI. No.	Parameters	Protocol	Unit of Measure ment	Results Dec.'24	Drinking water specification Std. as per IS:10500:2012	
					Desirable Limits	Permissible Limits
TRA	CE METALS		and the state of t			
1.	Mercury as Hg	APHA 24th Edition 3112 B. Direct Air Acetylene e Flame Method	mg/L	BDL	0.001	No relaxation
MIC	ROBIOLOGICAL		PAGE A CELLA			ajar-akani ji ja a
2.	Total Coliform count	APHA 24 <sup>th</sup> Edition 9222-B Membrane filter technique	CFU/100 ml	Absent	Shall not be detectable in any 100 ml sample	
3.	E.Coli count	APHA 24 <sup>th</sup> Edition 9222-B Membrane filter technique	CFU/ 100 ml	Absent	Sha'l not be detectable in any 100 ml sample	

#### END OF REPORT

Note: 1. BDL: Below detectable limit. (Mercury <0.001) RA: Reaffirmed.

2. The above results are related only to the samples collected & tested on the particular Date and time.

ANALYZED BY:

(G.Dhavaleshwar)
Analyst

VERIFIED BY: 1/20/20/20

(P. Harika) Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) Head of the Laboratory

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# Analysis Report of Mines Pit Water

Name of the Industry

2. Address

3. Sample collected by

Name of the Location

Particulars of sample collected

Field Sample code

Lab Sample Code

Date of sample collection 8.

9. Date of sample Received

Date of sample Analyzed 10.

11. Report Issue Date

12. **Method of Sampling** 

13. Environmental condition at the time of sampling

**Unique Lab Report Number** 

M/s. JK Cement Works, Muddapur, (Unit: J.K.Cement Ltd), P.O. Muddapur-

587122.

Dist.Bagalkot (Karnataka) India

**Cosmo Conscious Research Laboratory** 

**Muddapur Mines** 

Mines Pit Water-2

IKSW5

CCRL W 9899

17.12.2024

17.12.2024

17.12.2024 to 26.12.2024

30.12.2024

IS:17614 (Part-I) 2021

29.2°C

TC148922400000000263F

Sl. No	Parameters	Protocol	Unit of Measure ment	Results	General Standards for Inland Surface water Schedule- VI (EPA-'86)
				Dec.'-24	Limits
PHYSIC	AL				Andrew State (State State Stat
1.	Colour	IS: 3025 (PART 4)- 1984, RA-2021, Platinum cobalt Method	Hazen units	4	
2.	Conductivity	IS:3025 (PART 14)-1984, RA-2019, Electrometric method	μs/cms	685	•
3.	Total Dissolved Solids	IS:3025 (part 16)-1984, RA-2017, Gravimetric method	mg/L	482	• 7
4.	рН	IS:3025 (part 11)-1983, RA-2022, Electrometric method	•	7.74	5.50 to 9.0
5.	Turbidity	IS:3025 (part 10)-1984, RA-2017, Nephelometric method	NTU	3.40	•
CHEM	ICAL				
6.	Dissolved Phosphate as	IS:3025 (part 31)-1988, RA-2021 Stannous chloride method	mg/L	0.204	5
7.	Sodium as Na	IS:3025 (part 45)-1993, RA-2019 Flame Emissionphotometric method	mg/L	121.4	
8.	Potassium as K	IS:3025 (part 17)-1984, , RA-2019 Flame Emissionphotometric method	mg/L	1.10	*
9.	Calcium as Ca	IS:3025 (part 40)-1991, RA-2019 EDTA Titrimetric method	mg/L	54.50	-
10.	Magnesium as Mg	APHA 23 <sup>rd</sup> Edition 3500-B-Mg By calculation	mg/L	27.66	
11.	Total Hardness as CaCO <sub>3</sub>	IS:3025 (part 21)-1983, RA-2019 EDTA Titrimetric method	mg/L	250	-
12.	Chloride as Cl	IS:3025 (part 32)-1988, RA-2019 Argentometric Method	mg/L	96.96	
13.	Sulphate as SO <sub>4</sub>	APHA 23 <sup>rd</sup> Edition 4500-SO4 <sup>2</sup> -E (P.NO.4-190-191) Turbidimetric method	mg/L	14.05	•

Cont'd...



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Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017)



vide certificate No: TC-14892 and Certified by ISO (45001:2018)

Sl. No	Parameters	Protocol	Unit of Measure ment	Results	General Standards for Inland Surface water Schedule-VI (EPA-'86)
		APHA 23rd Edition 4500-F-D.	·····	Dec.'-24	Limits
14.	Fluoride as F	(P.NO. 4-87 – 88)SPADNS Method	mg/L	0.66	2
15.	Nitrate Nitrogen as NO <sub>3</sub>	IS:3025 (part 34)-1988, RA-2019 Chromotropic acid method	mg/L	0.738	10
16.	Total Alkalinity as CaCO3	IS:3025 (part 23)-1986, RA-2019 Indicator method	mg/L	165	
TRACI	E METALS .		- 2000	sata Lawaran.	
17.	Total Iron as Fe	APHA 23 <sup>rd</sup> Edition 3111B (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
18.	Nickel as Ni	APHA 23rd Edition 3111B (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
19.	Manganese as Mn	APHA 23 <sup>rd</sup> Edition 3111B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	2
20.	Copper as Cu	APHA 23 <sup>rd</sup> Edition 3111B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
21.	Zinc as Zn	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	3
22.	Lead as Pb	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-19) Direct Air Acetylene Flame Method	mg/L	BDL	0.10
23.	Chromium as Cr	APHA 23 <sup>rd</sup> Edition 3111 B. (p.no.3-18) Direct Air Acetylene Flame Method	mg/L	BDL	2

**End of Report** 

Note: 1. RA: Reaffirmed BDL-Below detectable limit, (For trace metals <0.1, Oil & grease <4.0). 2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY:

(G.Dhavaleshwar) Analyst

**VERIFIED BY:** 

(P.Harika) Technical Manager

**AUTHORISED SIGNATORY:** 

(M. Shashikala) Head of the Laboratory









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Environmental laboratory, Recognized by MoEF & CC, Accredited by NABL (ISO/IEC: 17025:2017) vide certificate No : TC-14892 and Certified by ISO (45001:2018)

# Analysis Report of Mines Pit Water

1. Name of the Industry

2. Address

3. Sample collected by

4. Name of the Location

5. Particulars of sample collected

6. Field Sample code

7. Lab Sample Code

8. Date of sample collection

9. Date of sample Received

10. Date of sample Analyzed

11. Report Issue Date

.12. Method of Sampling

: M/s. JK Cement Works, Muddapur, (Unit: J.K.Cement Ltd), P.O.Muddapur-

: 587122,

Dist.Bagalkot (Karnataka) India

: Cosmo Conscious Research Laboratory

: Muddapur Mines

: Mines Pit Water-2

: JKSW5

: CCRL W 9899

: 17.12.2024

: 17.12.2024

: 17.12.2024 to 26.12.2024

: 30.12.2024

: IS:17614 (Part-I) 2021

Sl. No	Parameters	Protocol	Unit of Measurement	Results	General Standards for Inland Surface water Schedule- VI (EPA-'86)
TRACE	METALS			Dec.'-24	Limits
1.		APHA 23 <sup>rd</sup> Edition 3112 B. (p.no.3-23) Direct Air Acetylene e Flame Method	mg/L	BDL	0.01

**End of Report** 

Note: 1. BDL- Below detectable limit. (Mercury < 0.001).

2. The above results are related only to the samples collected & tested on the particular date and time.

ANALYZED BY:

(G.Dhavaleshwar) Analyst **VERIFIED BY:** 

(P.Harika) Technical Manager

**AUTHORISED SIGNATORY:** 

(M.Shashikala)

Head of the Laboratory



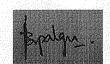
DQS Inc.

OHSAS 18001:2007

#### M/s. J K Cement Works Muddapur

# Environmental Expenditure for Muddapur Limestone Mine-2343(A) Oct 2024 to Mar 2025

Sl.	Particulars Particulars	Cost (In Rs.)	Remarks
No.			
1	Pollution Control	29,50,000/-	Water tankers for haul road
			dust suppression etc.,
2	Pollution Monitoring	2,00,000/-	
3	Occupational Health & Safety	0	
4	Green belt	70,000/-	Maintenance/ upkeep of Plantation, Gardener Salary etc.,
5	Reclamation	0	
6	Others	1,40,000/-	JCB expenses
	Total	33,60,000/-	Rupees Thirty three lakhs sixty thousand only



Mines Manager

Muddapur Limestone Mine

	Details of CSR Expenditure for 2024-25					
Sr.No	Focus area	Particulars Particulars	Amount (Rs)			
i	Health	Support for Health care, Training and Medical Aid	1,96,500.00			
2	Education	Education aid and Support for Schools	49,57,563.00			
3	Rural Transformation	Rural Development & Other Welfare Activities	31,15,969.20			
4	Other	Miscellaneous Activities	6,71,100.00			
		Grand Total	89,41,132.20			