SIX MONTHLY COMPLIANCE REPORT OF ENVIRONMENT CLEARANCE (EC)

FOR

TALABIRA OPENCAST COAL MINE PROJECT

At

Village Khinda, Tehsil Rengali, District Sambalpur, Odisha

Submitted to:

Eastern Regional Office
Ministry of Environment, Forest & Climate Change,
Central Pollution Control Board, New Delhi &
Odisha State Pollution Control Board, Bhubaneswar



Submitted by:

Environment Management Department

Raipur Energen Limited

Adani Corporate House, Shantigram SG Highway, Ahmedabad- 382 421

October'2020 - March'2021

Talabira I Opencast Coal Mine Project Village Khinda, Tehsil Rengali, District Sambalpur, Odisha

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Talabira I Opencast Coal Mine Project Village Khinda, Tehsil Rengali, District Sambalpur, Odisha

INTRODUCTION

M/s Hindalco Industries Ltd. had obtained an Environmental Clearance (EC) for expansion of Talabira-I Opencast Coal mine Project (1.5 MTPA to 3.0 MTPA) in an area of 170.30 Ha. at village Khinda, Tehsil Rengali, District Sambalpur, Odisha vide letter No. J-11015/58/2009-IA.II (M) dated 08th November, 2011.

The Supreme Court in pursuant to its order dated 25th August, 2014 read with its order dated 24th September, 2014, and Ministry of Coal in accordance with provisions of the Coal Mines (Special Provisions) Second Ordinance, 2014 and the Coal Mines (Special Provisions) Rules 2014, the nominated authority completed the auction of the deallocated mines.

In this regards, Ministry of Coal vide Vesting Order under clause (b) of sub-rule (2) of rule 7 and sub-rule (1) of rule 13 and Order no. 104/2/2015/NA dated 23rd March, 2015 allocated Talabira-I Coal Mines to M/s GMR Chhattisgarh Energy Limited, as successful bidder.

M/s GMR Chhattisgarh Energy Limited obtained transfer of Environmental Clearance vide MoEF&CC letter no. **J-11015/58/2009-IA.II (M) dated 16.04.2015.**

The name of the company has been changed from M/s GMR Chhattisgarh Energy Limited to Raipur Energen Limited with effect from 20th August 2019 and it is to note that Raipur Energen Limited is 100% subsidiary of Adani Power Limited.

Raipur Energen Limited has also obtained EC transfer from MoEF&CC for Talabira-I Opencast Coal Mine vide letter no. **J-11015/58/2009-IA.II (M) dated 04.11.2020**

Currently, Talabira-I Opencast Coal Mine is **not operational**.

Talabira I Opencast Coal Mine Project Village Khinda, Tehsil Rengali, District Sambalpur, Odisha

Compliance Status of Environmental Clearance granted for Talabira Coal Mine Vide letter no. J-11015/58/2009-IA. II (M) dated 16th April 2015 and its subsequent transfer vide letter dated 10.06.2015 & 22.10.2020

	vide letter dated 10.06.2015 & 22.10.2020					
SI. No.	Conditions		Comp	oliance status		
A.	Specific Conditions					
(i)	Production of coal shall not exceed 3.0 MTPA.		•	nil during the period	of	
	The project proponent shall obtain prior EC for		ber'2020 to Ma		_	
	expansion in production beyond 3.0 MTPA.	SI.	Financial	Coal Production		
		No	Year	(Million Metric Tonne)		
		1.	2015-2016	0.560		
		2.	2016-2017	0.151		
		3.	2017-2018	0.270		
		4.	2019-2020	0.00		
		5.	2020-2021	0.00		
(ii)	No coal washery shall be established without	Com	olied			
()	prior EC from this MOEF.			n established at Mine site	till	
		date.	•			
(iii)	No fly ash shall be dumped into the de-coaled	Bein	g Complied			
, ,	voids without prior approval of the MOEF.	·	•	d into the de-coaled voids	till	
		date.	No fly ash wi	ill be dumped without p	rior	
		аррг	oval from MoEF	e e cc.		
(iv)	The embankment shall be stabilised with	As p	er initial EC o	dated 08/11/2011, origin	ally	
	stone pitching on the reservoir side and	issued to M/s Hindalco Industries Ltd				
	compacted and plantation using a mix of	emba	ankment relate	ed activities have alrea	ady	
	native species shall be developed. Additional	been	executed by t	the prior Mine Allottee (I	M/s	
	safety and protection measures including	Hind	alco) under the	guidance of DoWR, Odish	ha.	
	continued operation of high capacity pumps			of 1.92 Km length and 1.5		
	shall be in operation to prevent mine	_		de at the top and 3 m abo		
	inundation. Prior approval of disaster			Reservoir. The embankm		
	management plan shall be obtained.			with side-sloping on eit		
				using a mix of native spec	cies	
			veloped.	. C. L. C. L		
			•	of high capacity pump for		
				ster management plan is		
		1 '	ty also	ed to directorate of Mi	1162	
(v)	Top soil, if generated, should be properly	Com				
(٧)	stacked with proper slope at earmarked dump	1		of Mines by M/s G	MR	
	site (S) with adequate measures and shall be		-	y Limited, topsoil of 8,0		
	used for reclamation and development of		-	en spread over the exter		
	green belt and for reclamation of back filled			cilitate Bio-reclamation a		
	quarry should be used for reclamation and	1		er has been conserved		
	rehabilitation of mined out areas within a year			ump and 8,925 Cubic me		
	of generation.		=	d and properly stacked		
		1	•	mp up to 31st March 20		
					and	
				-1 /		

SI. No.	Conditions	Compliance status
		rehabilitation of mined out area will be done as per approved mine closure plan. No generation of top-soil from mine since April' 2018 as mining operations were suspended.
(vi)	The entire OB generated in the expansion project shall be back filled and reclaimed and stabilized with plantation using a mix of species found in the reserve forests in the buffer zone. Monitoring and management of the existing reclaimed dump site shall continue until the vegetation becomes self-sustaining and no dumping of OB on reclaimed dumps shall be permitted. Compliance status shall be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on yearly basis.	OB generated by prior allottee was stacked in three external dumps (Dump- 1, Dump- 2 & Dump- 3). Mine closure activities such as back filling, reclamation & stabilization with plantation will be done as per approved Mine Plan & Mine closure plan and status of compliances will be submitted to the Ministry of Environment & Forests and its Regional Office located at Bhubaneswar on yearly basis.
(vii)	Catch drains and siltation ponds of appropriate size shall be constructed to arrest silt and sediment flows from soil, OB and mineral dumps. The water so collected shall be utilized for watering the mine area, roads, green belt development etc. The drains shall be regularly de - silted and maintained properly. Garland drains (Size, Gradient & Length) and sump capacity shall be designed keeping 50% safety margin over & above the peek sudden rain fall and maximum discharge in the area adjoining the mine site. Sump capacity also provide adequate retention period to allow proper settling of silt material.	Being Complied Catch drains of average width 2.5 m and length 2.9 Km had been constructed and maintained along the toe of OB dumps. Water is collected in mine sump which is being utilized for water spraying in mine area, roads, green belt development etc. The drains are cleaned before every monsoon and maintained properly. Garland drains & sump capacity are designed by taking factor of safety 2.0 to deal with the sudden rain fall. There are no adjoining mines.
(viii)	Dimension of the retaining wall at the toe of the dumps and OB benches within the mine to check the run-off and siltation shall be based on the rain fall data.	Retaining wall at the toe of the dumps and OB benches within the mine to check the run-off and siltation is done by prior allottee. Maintenance & periodic repair of retaining wall has been undertaken by Raipur Energen Limited (Erstwhile, GMR Chhattisgarh Energy Limited).
(ix)	Mist type water sprinkling system shall be provided to check fugitive emissions from conveyor system, haulage roads, transfer points etc. Water sprinkling (Fixed & Mist type, mobile) shall be regularly carried out along the main haul roads.	There is no conveyor system in Talabira-1 mine. Mine operations are temporarily suspended/ hold. During mine operation, mist type mobile tankers are used for water sprinkling along haul roads, stock yards, transfer points etc.
(x)	No blasting shall be carried out.	Complied No blasting practice is adopted in mine.

SI. No.	Conditions	Compliance status
(xi)	A feasibility plan for transportation of coal to	Feasibility plan for transport of coal to railway
	the railway siding by closed overhead	siding by closed overhead conveyor has been
	conveyors shall be prepared and furnished to	submitted by M/s REL after taking over the mine
	the MOEF within 6 months.	in April2015.
(xii)	Area brought under afforestation shall not be	37940 No's of additional saplings were planted
	less than 137.905 Ha which includes	by REL in addition to Green belt area developed.
	reclaimed external OB dump area (45 Ha),	Total 33.79 Ha within mining lease area is
	backfilled area (60 Ha), along ML boundary,	covered with plantation. Back filling,
	green belt (28.905 Ha) and top soil dump area	Reclamation & plantation work will be carried
	(6.0 Ha) by using a mix of species found in the	out as per approved mine plan & mine closure
	natural forests in the buffer zone in	plan after exhaustion of coal in mine.
	consultation with the local DFO / Agricultural	
	department. The density of the trees shall be	
	around 2500 plants per Ha.	
(xiii)	A progressive mine closure plan shall be	Back filling in de-coaled void, reclamation &
	implemented and OB generated during the	plantation work will be carried out as per
	balance life of the mine shall be concurrently	approved mine plan & mine closure plan.
	back filled and the area reclaimed with a mix	Revised Mining plan and mine closure plan
	of native species and at the end of mine life	submitted in October'2016 was not approved.
	the balance area 24.4 Ha of de-coaled void	The existing mine plan & mine closure plan is
	shall also be reclaimed with the OB and the	already expired on 31.03.2018.
	entire worked out area shall be back filled up	As on date, company is not authorized to take
	to ground level. There shall be no water bod	any activity related to mining in mine, without
	created at the post – mining stage.	approved mining plans from Ministry of Coal for
(, i,)	A consequence of a consequence for its situation	Talabira-1 mine.
(xiv)	A conservation plan comprising for in-situ and	Complied.
	ex-situ conservation of schedule I and II, Fauna found within the core & buffer zone	Conservation plan including plan for habitat
	shall be implemented in consultation with the	restoration at post mining stage has been prepared which is duly approved by Chief Wildlife
	State Govt. for the balance life of the project	Warden (CWLW). Approved amount of Rs.257
	and include a plan for habitat restoration at	Lacs has been deposited with PCCF, Orissa for
	the post mining stage and which also includes	implementation of above conservation plan.
	a plan for development of 150 Ha of grass	Conservation plan and status of implementation
	lands for the elephants visiting the area. The	were submitted to RO MOEFC, Bhubaneswar and
	activities there under along with status of	also uploaded on our website.
	implementation (including expenditure) shall	https://adanipower.com/Downloads
	be regularly reported as part of the	Approved plan, Approval letter of conservation
	compliance reports furnished to MOEF RO,	plan, payment letter for implementation of
	Bhubaneswar and also uploaded on the	conservation plan, Screenshot of the web link
	company website.	was submitted with previous compliance report.
(xv)	Regular monitoring of ground water level on	A NABL accredited testing agency has been
	the quality shall be carried out by establishing	appointed for monthly monitoring of the ground
	a network of existing wells and construction	water. It is being collected from the existing
	of new piezometers. The monitoring for	wells at the nearby villages and also from
	quantity shall be done four times in a year pre-	piezometer installed in front of site office of
	monsoon (May), monsoon (August), Post-	Talabira-1 mine.
	Monson (November) and winter (January)	
L	, , , , , , , , , , , , , , , , , , , ,	

SI. No.	Conditions	Compliance status
	seasons and for quality in May. Monitoring of	Analysis of ground water is being done by NABL
	heavy metals including mercury shall be	certified lab and report is being submitted on
	carried out and data furnished as part of the	half yearly basis to the office.
	compliance report. Data, thus collected shall	Environmental monitoring report for the period
	be submitted to the Ministry of Environment &	of Oct'20 to Mar'21 is enclosed as Annexure I
	Forests and to the central Pollution Control	Six monthly compliance report including
	board quarterly and regularly uploaded on the	environmental monitoring report has been
	company website.	uploaded on the company website.
		https://adanipower.com/Downloads
(xvi)	The extent of use of water in the mining	Only stagnated water in the sump of mine is
	operations shall be reduced by recycling and	being used for mining operations and plantation.
	reuse. The company shall put up artificial	Water is contained in the pits within ML, which
	ground water recharge measures for	facilitates recharging the ground water. Hirakud
	augmentation of water resource if the water	reservoir backwater is adjacent to the mine.
	table shows a declining trend. The project	Hence, ground Water table varies according to
	authorities shall meet water requirement of	the level of Hirakud reservoir back water. REL is
	nearby village(s) in case the village wells go	supplying water to nearby villages by 6 no's of
	dry due to dewatering of mine. Mine water to be discharged into the Hirakud reservoir shall	water tankers throughout the year. Water from mine is not being discharged to Hirakud
	_	
	be treated to prescribed standards before discharge.	Reservoir.
(xvii)	Besides carrying out regular periodic health	Being Complied
(XVII)	check-up of their workers, 10% of the workers	Periodic health check- up including occupational
	identified from workforce engaged in active	disease and hearing impairment was done as per
	mining operations shall be subjected to health	Rule 29 (b) of Mining Rules, 1955. There was no
	check-up for occupational diseases and	occupational disease and hearing impairment to
	hearing impairment, if any through any	any workers.
	local/regional health institutions and the	, , , , , , , , , , , , , , , , , , ,
	results reported to the this ministry and to	
	DGMS.	
(xviii)	For monitoring land use pattern and for post	The land use analysis based on satellite imagery
,	mining land use, time series of land use maps,	for core zone of the mine including the land use
	based on satellite imagery (on a scale of	of 10 km buffer zone has been done for 2015 and
	1:5000) of the core zone and buffer zone, from	2018 and the same has already been submitted.
	the start of the project, until the end of the	,
	mine life shall be prepared once in three years	
	(for any one particular season which is	
	consistent in the time series), and the report	
	submitted to MOEF and its regional office at	
	Bhubaneswar.	
(xix)	A detailed Final Mine Closure Plan along with	All the provisions of mine closure plan will be
	details of corpus fund submitted to the	implemented after the approval of mine plan and
	Ministry of Environment & Forest which shall	mine closure plan as previous plan is expired on
	be implemented from 2017-18. The time period	1 st April'2018.
	for reclamation shall be completed within a	
	year of completion of project. The plan for	
	habitat restoration plan for a minimum period	

SI. No.	Conditions	Compliance status
	of five years (under the MMDR Act) shall be under taken after completion of reclamation in consultation with and a joint inspection carried with the state forest department.	
(xx)	CSR would be implemented in 8 villages – Talabira, Nua Khinda, Purana Khinda, Lapanga, Bhudiapalli, Matul Camp, Behara Munda and Mundapara. Budgetary provisions at @ Rs. 10 per tonne of Coal should be made for CSR activities. The socio-economic development of the villages shall be monitored over the life of the project using UNDP. Human development indices and reported as part of the report submitted to MOEF RO, Bhubaneswar.	Compliance assured, Budgetary provision of @ Rs 10/ Ton of coal was kept. Mine operations are temporarily suspended since 1st April' 2018. Preliminary report on socio-economic development of the villages has been Prepared and submitted with previous compliance report. Socio economic development assessment in the area every three years after the approval of revised mining plan will be implemented.
В.	General Conditions	
(i)	No change in mining technology and scope of working shall be made without prior approval of the Ministry of Environment and Forest.	Complied There is no change in mining technology in mines.
(ii)	No change in the calendar plan including excavation, quantum of mineral coal and waste shall be made.	Complied Adhered to the mine plan.
(iii)	Four ambient air quality monitoring stations shall be established in the core zone as well as in the buffer zone for monitoring PM10, PM 2.5, SO2, NOx and heavy metals such as Hg, Pb, Cr, As etc. Location of the stations shall be decided based on Meteorological data, topographical features and environmentally and ecologically sensitive targets in consultation with the state pollution control board.	Being Complied Five numbers Ambient air quality monitoring stations are established in core zone as well as in the buffer zone for monitoring PM ₁₀ , PM _{2.5} , SO2, NOx and heavy metals such as Hg, Pb, Cr by external agency (Approved by MOEF /NABL Accredited) and report is being submitted to MOEFC, Bhubaneswar on quarterly basis. Recent Environmental Report is uploaded in company website. https://adanipower.com/Downloads
(iv)	Data on ambient air quality (PM10, PM 2.5, SO2, NOx and heavy metals such as Hg, Pb, Cr, As etc.) shall be regularly submitted to the ministry including its regional office at Bhubaneswar and to the State Pollution Control Board and Central pollution Control Board once in Six Months.	Being Complied Data on ambient air quality (PM10, PM 2.5, SO2, NOx and heavy metals such as Hg, Pb, Cr, As etc.) is being monitored on quarterly basis by external agency (Approved by MoEFCC / NABL) engaged for this purpose and reports are being submitted to the concerned authorities. Recent Environmental Report is uploaded in company website. https://adanipower.com/Downloads

SI. No.	Conditions	Compliance status
(v)	Fugitive dust emissions quality (PM10, PM 2.5 and heavy metals such as Hg, Pb, Cr, As etc.) from all the sources shall be controlled regularly monitored and data recorded properly. Water spraying arrangement on haul road, wagon loading and dump trucks (Loading & un loading) points shall be provided and properly maintained.	Being Complied Fugitive dust emissions quality (PM10, PM 2.5 and heavy metals such as Hg, Pb, Cr, As etc.) from all the sources are being monitored by external agency (Approved by MOEFC / NABL) and reports are being submitted. During mine operation, water spraying arrangement on haul road, wagon loading and dump trucks (Loading & un-loading) points were provided and maintained. Recent Environmental Report is uploaded in company website. https://adanipower.com/Downloads
(vi)	Adequate measures shall be taken for control of noise levels below 85 dBA in the work environment. Workers engaged in blasting and drilling operations, operation of HEMM, etc. shall be provided with ear plugs/muffs.	Noise within ML is well below the stipulated norms. Ear plugs/muffs are also provided to HEMM operators. No drilling & blasting is practiced in mine.
(vii)	Industrial waste water (workshop and waste water from the mine) shall be properly collected, treated so as to confirm to the standards prescribed under GSR 422 (E) dated 19 th May 1993 and 31 st December 1993 or as amended from time to time before discharge. Oil and grease trap shall be installed before discharge of workshop effluents.	Grease and Oil Trap has been provided in the workshop to treat the waste water. The treated water is being stored and reused for water spraying and cleaning of vehicles in the wash bay.
(viii)	Vehicular emissions shall be kept under control and regularly monitored.	Being Complied During the mine operation, regular maintenance of vehicles was being done to control the vehicular emissions.
(ix)	Environmental laboratory shall be established with adequate number and type of pollution monitoring and analysis equipment in consultation with the State Pollution Control Board.	Environmental monitoring and analysis is being carried out by external agency approved by MOEF/ NABL Accredited Environment Monitoring Report is uploaded in company website. https://adanipower.com/Downloads
(x)	Personnel working in dusty areas shall wear protective respiratory devices and they shall also be provided with adequate training and information on safety and health aspects. Occupational health surveillance programme of worker shall be undertaken periodically to observe any contractions due to exposure to dust and to take corrective measures, if needed. A separate environmental management cell with suitable qualified personnel shall be set up under the control of	Being Complied Dust masks were issued to all employees working in dusty environment. Initial & refresher training was imparted to contractual employees as per Mines Vocational Rules 1966, Periodical Medical Examination of 140 no's of employees were conducted to observe any contractions due to exposure to dust.

SI. No.	Conditions	Compliance status
	senior executive, who will report directly to	
	the Head of the company.	
(xi)	The funds earmarked for environmental	Being Complied
	protection measures shall be kept in separate	REL has earmarked a separate budget for
	account and shall not be diverted to other	environmental protection measures.
	purpose. Year-wise expenditure shall be	Mine operations are temporarily suspended
	reported to this Ministry and its Regional	since 1 st April' 2018.
	Office at Bhubaneswar.	
(xii)	A copy of the environmental clearance shall be	This EC was originally issued to M/s Hindalco in
	marked to concerned Panchayat / local NGO, if	2011 and in 2015 the EC was transferred to M/s
	any, from whom any	REL (Formerly GMR Chhattisgarh Energy Ltd).
	suggestion/representation has been received	Copy of the Environmental Clearance (EC) and
	while processing the proposal.	Public Notice Advertisements in Newspapers
		related to EC have been displayed in Panchayat
7		Office, Khinda and Sambalpur.
(xiii)	Sate Pollution Control Board shall display a	Complied
	copy of clearance letter at the Regional Office,	
	District Industry Centre and Collectors Office/	
(:)	Tehsil Office for 30 days.	
(xiv)	The project authorities shall advertise at least	Advertisements have been published in two local
	in two local newspapers widely circulated	newspapers of Odisha state namely Samay
	around the projects, one of which shall be in	(Dt.01.10.2016, Odia newspaper) and in Dainik
	the vernacular language of the locality concerned within seven days of the clearance	Jagaran (Dt.01.10.2016, Hindi newspaper).
	letter informing that the project has been	Data on monitoring of environmental quality (Air, water & noise) and status of compliance have
	accorded environmental clearance and a copy	been uploaded in the company's website.
	of clearance letter is available with State	https://adanipower.com/Downloads
	Pollution Control Board and may also been	Ticcps.//adampower.com/Downloads
	seen at the website of the Ministry of	
	Environment & Forrest at http://envfor.nic.in .	
	The compliance status including data on	
	monitoring of environmental quality (air, water	
	and noise) shall also be uploaded by the	
	project authorities in their website and also at	
	their main gate of project premises and office	
	so as to bring the same in the public domain.	
(3)	The Ministry or any other competent authority	Noted and agreed
(2)	may stipulate any further condition for	
	environmental protection.	
(4)	Failure to comply with any of the conditions	Noted
` ' /	mentioned above may result in withdrawal of	
	this clearance and attract the provisions of	
	the Environment (Protection) Act, 1986.	
(5)	The above conditions will be enforced inter-	Noted and agreed
(2)	alia, under the provisions of the Water	
	(Prevention & Control of Pollution) Act, 1974,	
	the Air (Prevention & Control of Pollution) Act,	
	and the forest control of thousand Act,	

SI. No.	Conditions	Compliance status
	1981, the Environment (Protection) Act, 1986	
	and the Public Liability Insurance Act, 1991	
	along with their amendments and Rules. The	
	proponent shall ensure to undertake and	
	provide for costs incurred for taking up	
	remedial measures in case of soil	
	contamination, contamination of groundwater	
	and surface water and occupation and other	
	diseases due to the mining operations.	
EC Transfe	erred / Amendment dated 16.04.2015	
(i)	(i) Any change in scope of work will attract	Noted and agreed
	the provisions of Environment Protection	
	Act	
	(EPA), 1986 and Environmental Impact	
	Assessment Notification, 2006 in	
	conjunction with the subsequent	
	amendments / circular.	
(ii)	All conditions stipulated in the EC Letter no.	Noted & compliance assured
	J-11015/58/2009-IA.II (M) dated 08th	
	November,2011 shall remain unchanged	
(iii)	The successful bidder shall be liable, if any,	As per the para no (3) of Section 14 of The Coal
	for any act of violation of the EPA 1986/ EIA	Mines (Special Provisions) Act, 2015,
	Notification 2006 / subsequent	"Every liability of any prior allottee in
	amendments and circulars which it has	relation to a Schedule I coal mine in respect
	inherited during the transfer.	of any period prior to the vesting order or
	-	allotment order, shall be the liability of such
		prior allottee and shall be enforceable
		against it and not against the successful
<i>(</i> ,)		Government".
(iv)	Successful bidder shall be liable for	Noted & compliance assured
	compliance of all court directions, if any.	







Test Report

Sample Number:

VEL/RELM/AA/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310003/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

. 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C) **Surrounding Activity**

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration Parameter Required

Rest Shalter 1.5 K.M. in SE From The mine

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/17

Calibrated

Clear Sky

24/10/2020 To 25/10/2020

11.30 TO 11.30 Hrs. Min. 19° Max 31°

Human & Vehicular Activity

Regulatory Requirment

IS:5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	72.07	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2001, RA. 2017	38.66	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	18.26	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.22	µg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988,Method No.807:1988	BDL(DL 1.0)	µg/m³	

*BDL-Below Detection Limt **DL Detection Limit

***End of Report**

(Checked By)

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www.vardan.co.in





Test Report

Sample Number: VEL/RELM/AA/01

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310003/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

: 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code **Instrument Calibration Status**

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Rest Shalter 1.5 K.M. in SE From The mine

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/17

Calibrated

Clear Sky

24/10/2020 To 25/10/2020

11.30 TO 11.30 Hrs.

Min. 19° Max 31°

Human & Vehicular Activity

Regulatory Requirment

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	5.577

*BDL-Below Detection Limt **DL Detection Limit

End of Report

(Checked By)

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Test Report

Sample Number: VEL/RELM/AA/02

Name & Address of the Party : M/s Rai

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310004/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

. 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

: R & R Colony, 3.2 KM In NE From The Mines

Sample Collected by

: VEL Team : RDS/FPS

Sampling Equipment used Instrument Code

. KDS/IFS

Instrument Calibration Status

VEL/JAI/RDS/FPS/18Calibrated

Latitude

. ...

Longitude

: ---

Meteorological condition during monitoring

: Clear Sky

Date of Monitoring

24/10/2020 To 25/10/2020

Time of Monitoring

11.30 TO 11.30 Hrs.

Ambient Temperature (°C)

Min. 18° Max 31°

Surrounding Activity Scope of Monitoring

Human & Vehicular Activity
Regulatory Requirment

Sampling & Analysis Protocol

IS :5182

Sampling Duration

24 Hrs.

Parameter Required

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	71.62	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2001, RA. 2017	32.15	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	21.15	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	12.09	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988,Method No.807:1988	BDL(DL 1.0)	µg/m³	-

BDL- Below Detection Limit **DL Detection Limit

End of Report

(Checked By)

JAIPUR (Approved By)

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MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/RELM/AA/02

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310004/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

: 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C) **Surrounding Activity**

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration **Parameter Required**

R & R Colony, 3.2 KM In NE From The Mines

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/18

Calibrated

Clear Sky

24/10/2020 To 25/10/2020

11.30 TO 11.30 Hrs.

Min. 18° Max 31°

Human & Vehicular Activity

Regulatory Requirment

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	-

BDL- Below Detection Limit **DL Detection Limit

End of Report

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MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/RELM/AA/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310005/A

Format No

. 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

. 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration Parameter Required

Vill.-Khinda,3 KM In SE From The Mine

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/19

Calibrated

Clear Sky

24/10/2020 To 25/10/2020

12.45 TO 12.45 Hrs.

Min. 19° Max 31°

Human & Vehicular Activity

Regulatory Requirment

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	69.95	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2001, RA. 2017	41.81	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	18.24	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	12.14	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	μg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	μg/m³	

*BDL-Below Detection Limit, **DL-Detection Limit

End of Report

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Test Report

Sample Number: VEL/RELM/AA/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310005/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring
Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Vill.-Khinda,3 KM In SE From The Mine

VEL Team

RDS/FPS

: VEL/JAI/RDS/FPS/19

Calibrated

Calibrat

....

: Clear Sky

: 24/10/2020 To 25/10/2020

12.45 TO 12.45 Hrs.

Min. 19° Max 31°

Human & Vehicular Activity

Regulatory Requirment

IS :5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	μg/m³	

*BDL-Below Detection Limit, **DL-Detection Limit

End of Report

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Test Report

Sample Number: VEL/RELM/AA/04

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: VEL/A/2010310006/A Report No.

7.8 F-01 **Format No**

Party Reference No : NIL

Report Date : 10/11/2020

: 31/10/2020-10/11/2020 **Period of Analysis Receipt Date** . 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location Weight Bridge 0.5 KM In South From The Mines

Sample Collected by **VEL Team** Sampling Equipment used RDS/FPS

Instrument Code VEL/JAI/RDS/FPS/17

Instrument Calibration Status Calibrated

Latitude Longitude

Meteorological condition during monitoring

Clear Sky

Date of Monitoring Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

25/10/2020 To 26/10/2020

10.00 TO 10.00 Hrs.

Min. 18° Max 31°

Human, Vehicular & Mining Activity

Regulatory Requirment

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	62.21	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2001, RA. 2017	24.61	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	18.04	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	8.80	μg/m³	80

***End of Report**

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Test Report

Sample Number:

VEL/RELM/AA/05

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310007/A

Format No

: 7.8 F-01

Party Reference No

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Near Petrol Pump

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/18

Calibrated

Clear Sky

25/10/2020 To 26/10/2020

11.30 TO 11.30 Hrs.

Min. 18° Max 31°

Human, Vehicular Activity

Regulatory Requirment

IS:5182

24 Hrs:

Parameter Required As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	70.30	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2001, RA. 2017	40.32	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	20.37	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	11.75	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	μg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	μg/m³	

BDL- Below Detection Limit ** DL Detection Limit

***End of Report**

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Test Report

Sample Number: \

VEL/RELM/AA/05

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310007/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis Receipt Date : 31/10/2020-10/11/2020 : 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C) Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

BIENT AIR

Near Petrol Pump

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/18

Calibrated

Clear Sky

lane /

25/10/2020 To 26/10/2020

11.30 TO 11.30 Hrs.

Min. 18° Max 31°

Human, Vehicular Activity

Regulatory Requirment

IS :5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and	BDL (*DL1.0	μg/m³	-
		analysis,3rd ed.,1988, Method No.317	ng/m³)		

BDL- Below Detection Limit ** DL Detection Limit

End of Report

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Test Report

Sample Number: VEL/RELM/AA/06

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310008/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

: 31/10/2020

Sample Description

AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

mstrument code

Instrument Calibration Status

Latitude

Longitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C) Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

: Near Petrol Pump

VEL Team

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/19

Calibrated

. .

: Clear Sky

: 25/10/2020 To 26/10/2020

12.39 TO 12.40 Hrs.

Min. 18° Max 31°

Human, Vehicular Activity

Regulatory Requirment

IS:5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	59.34	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2001, RA. 2017	36.41	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	15.19	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.43	µg/m³	80

End of Report

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Test Report

Sample Number: VEL/RELM/AA/07

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

· VEL/A/2010310009/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

. 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C) **Surrounding Activity**

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

A1 Downwind point of Talabira -1 Mine Area

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/17

Calibrated

Clear Sky

26/10/2020 To 27/10/2020

10.40 TO 10.40 Hrs.

Min. 19° Max 31°

Human, Vehicular & Mining Activity

Regulatory Requirment

IS:5182

24 Hrs.

Parameter Required As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Volatile Organic Compound (as BTX)	IS:5182 (P-11) :2006, RA 2017	BDL (*DL1.0 µg/m³)	µg/m³	49
2	Polycyclic Aromatic Hydrocarbon (as PAH)	IS:5182 (P-12):2004	*BDL(**DL-5.0ng/ m³)	ng/m³	**

*BDL-Below Detection Limit, **DL-Detection Limit

End of Report

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Test Report

Sample Number:

VEL/RELM/AA/08

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2010310010/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

: 31/10/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol **Sampling Duration**

Parameter Required

In front of the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/FPS/18

Calibrated

Clear Sky

26/10/2020 To 27/10/2020

11.00 TO 11.00 Hrs.

Min. 19° Max 31°

Human, Vehicular & Mining Activity

Regulatory Requirment

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	67.02	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2001, RA. 2017	33.93	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	18.24	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.04	μg/m³	80

*BDL-Below Detection Limit, **DL-Detection Limit

End of Report

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Test Report

Sample Number: Name & Address of the Party

VEL/REL/AN/01

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No. **Format No**

: VEL/N/2010310001/A

· 7.8 F-01

Party Reference No

: NIL

Report Date Receipt Date : 10/11/2020

. 31/10/2020

Sampling Duration

: 24 Hrs.

Sample Collected by

: VEL Team

Instrument

: Calibrated

Calibration Status

Sample Description

: Ambient Noise

Scope of Monitoring

: Regulatory Requirment

Protocol Used

: IS 9989: IS 9876

Instrument Used

General Information

Sampling Location

In Front Of Mine Office

Instrument Code

VEL/JAI/SLM/03

Meteorological condition during monitoring

Clear Sky

Date of Monitoring

24/10/2020 To 25/10/2020

Time of Monitoring

06.00 TO 06.00 Hrs.

Ambient Temperature (°C)

Min. 19° Max 31°

Human, Vehicular & Mining Activity

Surrounding Activity Parameter Required

As Per Work Order

S.No. Test Parameters	Test Parameters	Protocol Hamiltonia	Test Result dB(A)	
	THE RESERVE TO THE PARTY OF THE		Day Time	Night Time
1	Leq	IS 9989 - 1981	58.32	47.52

Category of Zones	Leq	in dB(A)
	Day	Night
Industrial	n zuelan na 75 zuelan kundan	70
Commercial	65	55
Residential	55	45
Silence Zone	50	40

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

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

End of Report

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AN/02

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Sample Description

: Ambient Noise

: IS 9989: IS 9876

Scope of Monitoring

: Regulatory Requirment

Protocol Used Instrument Used

Instrument Code

Meteorological condition during monitoring

Ambient Temperature (°C)

Parameter Required

Report No.

VEL/N/2010310002/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Receipt Date

: 31/10/2020

Sampling Duration

: 24 Hrs. : VEL Team

Sample Collected by Instrument

: Calibrated

Calibration Status

General Information

Sampling Location

Date of Monitoring Time of Monitoring

Surrounding Activity

VEL/JAI/SLM/03 Clear Sky

25/10/2020 To 26/10/2020

06.00 TO 06.00 Hrs.

Near Petrol Pump

Min. 18° Max 31° **Human & Vehicular Activity**

As Per Work Order

S.No.	Test Parameters	meters Protocol	Test Result dB(A)		
	In U.S Verel in Enterplan	A English Control of English	Day Time	Night Time	
1	Leq	IS 9989 - 1981	55.88	43.65	

Category of Zones	Leq in dB(A)			
category of Zones	Day	Night		
Industrial	75 mrau de Virrelini	70		
Commercial	11 165 11 Variant 6 min 1	55		
Residential	55	45		
Silence Zone	50	40		

- 1. Day Time is from 6,00 AM to 10.00 PM.
- 2: Night Time is reckoned between 10.00 PM to 6.00 AM
- 3. SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, ludspeaker and bursting of crackers is banned in these zones.

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

End of Report

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AN/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Sample Description

Ambient Noise

Scope of Monitoring

: Regulatory Requirment

Protocol Used

: IS 9989: IS 9876

Instrument Used

Meteorological condition during monitoring

Date of Monitoring

Ambient Temperature (°C)

Report No.

: VEL/N/2010310003/A

Format No

7.8 F-01

Party Reference No

: NIL

Report Date **Receipt Date** : 10/11/2020 . 31/10/2020

Sampling Duration

: 24 Hrs.

Sample Collected by

: VEL Team

Instrument **Calibration Status** Calibrated

General Information

Sampling Location Instrument Code

Time of Monitoring

Surrounding Activity Parameter Required

Near Weight Bridge

VEL/JAI/SLM/03

Clear Sky

26/10/2020 To 27/10/2020

06.00 TO 06.00 Hrs. Min. 19° Max 31°

Human & Vehicular Activity

As Per Work Order

S.No. Test Parameters		t Parameters Protocol		sult dB(A)
	English Valley Valley English	Can bearing and m. F.	Day Time	Night Time
1	Leq	IS 9989 - 1981	58.23	42.38

Category of Zones	Leq in dB(A)			
	Day	Night		
Industrial	75 minutes Vandari	employees 70 m kewinmana		
Commercial	65	55		
Residential	55	45		
Silence Zone	50	40		

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

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

(Checked By)

End of Report

Page No. 1/1

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

VEL/RELM/GW/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/W/2010310004/A

Format No

Party Reference No : NIL

Report Date

: 10/11/2020

. 7.8 F-01

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

: 31/10/2020

Sampling Date

: 27/10/2020

Sampling Quantity

2 Ltr. + 250 ml

Sampling Type

: Grab

Sample Collected by

Sample Description

: VEL Team

Preservation

: Suitable Preservation

: R & R Colony (Open Well)

: GROUND WATER

Sampling and Analysis

: IS 10500 -2012

Protocol

Location

S.No.	Parameters	eters Protocols	Results	Units	IS:10500-2012	
		Suprime Part of the Carl			Acceptable Limits	Permissible Limits
1	рН	IS 3025 (P-11): 1983 Reaff. 2017	7.48	2440	6.5 to 8.5	No Relaxation
2	Total Dissolved Solids	IS 3025 (P-16): 1984 Reaff 2017	229.00	mg/l	500	2000
3	Total Alkalinity (as CaCO3)	IS: 3025 (Part 23): 1986, Reaff. 2019	121.20	mg/l	200	600
4	Total Hardness (as CaCO3)	IS: 3025 (Part 21): 2009, Reaff. 2019	150.48	mg/l	200	600
5	Nitrate (as NO3)	IS: 3025 (Part 34): 1988, Reaff. 2019	2.61	mg/l	45	No Relaxation
6	Chloride (as CI)	IS: 3025 (Part 32): 1988, Reaff. 2019	40.80	mg/l	250	1000
7	Sulphate (as SO4)	IS: 3025 (Part 24): 1986, Reaff. 2019 Turbidity Method	11.99	mg/l	200	400
8	Calcium (as Ca)	IS: 3025 (Part 40): 1991 Reaff. 2019	58.73	mg/l	75	200
9	Magnesium (as Mg)	IS: 3025 (Part 46): 1994, Reaff. 2009 (EDTA method)	*BDL(**DL- 2 mg/i)	mg/l	30	100
10	Fluorides (as F)	APHA 23rd Edition 2017, 4500 FD	0.22	mg/l	1.0	1.5
11	Total Iron (as Fe)	IS 3025(P-53): 2003 Reaffirm 2019	*BDL(*DL- 0.1mg/l)	mg/l	0.3	No Relaxation
12	Arsenic (as As)	APHA (23rd edition-2017), 3114 C	*BDL(**DL-0.005 mg/l)	mg/l	0.01	0.05
13	Mercury (as Hg)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.005 mg/l)	mg/l	0.001	No Relaxation
14	Lead (as Pb)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.05 mg/l)	mg/l	0.01	No Relaxation
15	Cadmium (as Cd)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.002 mg/l)	mg/l	0.003	No Relaxation
16	Chromium (as Cr)	APHA 23rd Edition Year 2017 Method No. 3113 B	*BDL(**DL-0.02 mg/l)	mg/l	0.05	No Relaxation
17	Copper (as Cu)	APHA 23rd Edition Year 2017 Method No. 3111B	*BDL(**DL-0.02 mg/l)	mg/l	0.05	1.5
18	Zinc (as Zn)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.20 mg/l)	mg/l	5.0	15
19	Selenium (as Se)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.05 mg/l)	mg/l	ON EN	No Relaxation

Note: Terms & conditions refer on backside of test report.

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Ph: 0141-2983404, 9810355569, 9953147268 E-mail: jaipur@vardanenvironet.com







MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:	VEL/RELM/GW/01	Report No.	: VEL/W/2010310004/A

S.No.	Parameters Protocols Results	Units	IS:10500-2012			
	Tourself by the conve		net alah kerd		Acceptable Limits	Permissible Limits
20	Turbidity	IS 3025 (Part 10): 1984, Ref: 2017, (Nephelometeric Method)	*BDL(**DL 1.0 NTU)	NTU	1	5
21	Aluminium	IS 3025 (Part-55): 2003, Reaff. 2019	*BDL(**DL-0.03 mg/l)	mg/l	0.03	0.2
22	Menganese (as Mn)	IS: 3025 (Part 46): 1994, Reaff. 2019 (EDTA method)	*BDL(**DL-0.05 mg/l)	mg/l	0.1	0.3
23	Boron (as B)	APHA 23rd Edition Year 2017 Method No. 4500B	*BDL(**DL-0.2 mg/l)	mg/l	0.5	1.0
24	Phenolic Compound	APHA 23rd Edition 2017, 5530C	*BDL(**DL-0.1 mg/l)	mg/l	0.001	0.002
25	Free Residual Chlorine	IS: 3025 (Part 26): 1986 RA 2019	*BDL(**DL-0.2 mg/l)	mg/l	0.2	70 1th V

*BDL-Below Detection Limit, **DL-Detection Limit.

***End of Report**

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Page No. 2/2

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Test Report

Sample Number:

VEL/RELM/GW/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 10/11/2020

Period of Analysis

: 31/10/2020-10/11/2020

Receipt Date

: 31/10/2020

Sampling Date

: 27/10/2020

Sampling Quantity

: 2 Ltr. + 250 ml.

Sampling Type

: Grab

Location Sample Collected by

Sample Description

: R & R Colony (Open Well) : VEL Team

Preservation

: Suitable Preservation

: GROUND WATER

Sampling and Analysis

: IS 10500 -2012

rotoc	Ol				10.40	E00 2042
S.No.	Parameters	Protocols	Results	Units	IS:10500-2012	
		To the English of March		m en i	Acceptable Limits	Permissible Limits
1	Total Coliform (By MPN Method)	IS:1622	Absent	MPN/10 0 ml	Shall not be Detectable in any 100 ml sample	NA
2	E-Coli	IS:1622	Absent	per 100 ml	Absent/100 ml	Absent/100 ml
3	Cyanide (as CN)	APHA 23rd Edition 2017, 4500CN D	*BDL(**DL-0.05 mg/l)	mg/l	0.05	No Relaxation
4	Colour	IS 3025: 1983 (P-4) RA 2017	*BDL(**DL 1.0 Hazen)	Hazen Unit	5	15
5	Odour	IS 3025 (P-5): RA. 2018	Agreeable	Qualitat ive	Agreeable	Agreeable
6	Taste	IS 3025(P-8):1984 RA. 2017	Agreeable	Qualitat ive	Agreeable	Agreeable
7	Anionic Surface Active Agent	APHA 23rd Edition 2017, 5540C	*BDL(**DL-0.05 mg/l)	mg/l	0.2	1.0

^{*}BDL-Below Detection Limit, **DL-Detection Limit.

End of Report

(Checked By)



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Test Report

Sample Number:

VEL/RELM/WW/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Sample Description

: Waste Water

Location

: STP Outlet : VEL Team

Sample Collected by Parameter Required

: As Per Work Order

Sampling and Analysis

: IS 3025

Protocol

Report No.

: VEL/WW/2010310001/A

Format No

7.8 F-01

Party Reference No

: NIL

Report Date

: 09/11/2020

Period of Analysis

: 31/10/2020-09/11/2020

Receipt Date

: 31/10/2020

Sampling Date

: 27/10/2020

Sampling Quantity

: 2 Ltr.

Sampling Type

: Grab

Packing Status

: Temp. Sealed

S.No.	Test Parameters	Test Method	Result	Unit	Prescribed Limit
	Transfer Sant 1	Emiral, a Vanilar siral al Van			
1	На	IS 3025 (P-11): 1983 RA2017	7.49		5.5 - 9.0
2	Total Suspended Solids	IS: 3025 (Part 17): 1984, RA2017	20.0	mg/l	100.0
3	Oil & Grease	IS 3025(P-39):1991 RA 2019	0.8	mg/l	10.0
4	BOD (3 days @ 27°C)	IS: 3025 (Part-44): 1993, RA: 2019	14.4	mg/l	30.0
5	COD	IS: 3025 (Part 58): 2006 RA: 2017	61.8	mg/l	250.0

End of Report

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Test Report

Sample Number:

VEL/RELM/S/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Sample Description

Location

: Village- Khinda

Sample Collected by

: VEL Team

Parameter Required

Sampling and Analysis

: SOIL

: As Per Work Order

: IS 2720, APHA & USDA

Report No.

: VEL/S0/2010310001/A

Format No

7.8 F-01 NIL

Party Reference No

Report Date

: 09/11/2020

Period of Analysis

Receipt Date

: 31/10/2020-09/11/2020

: 31/10/2020

Sampling Date

: 27/10/2020

Sampling Quantity

: 2 Kg.

Sampling Type

: Composite

Packing Status

: Temp. Sealed

P	ro	to	col

S.No.	Parameters	Test Method	Results	Units
	- Variable Indiana - Indiana	The state of the s		
1	pH (at 25°C)	IS : 2720 (P- 26): 1987,RA: 2016	7.63	
2	Electrical Conductivity	IS 14767: 2000 RA:2016	0.176	mS/cm
3	Bulk density	USDA:1954 (Page-96) RA: 2014	1.28	gm/cc
4	Chloride	USDA:1954 Method 13 (Page-98) RA: 2010	96.6	mg/kg
5	Calcium (as Ca)	Lab SOP no. VEL/STP/01: 2018	146.02	mg/kg
6	Sodium (as Na)	USDA:1954 Method 10A (Page-96) RA: 2010	154.03	mg/kg
7	Potassium (as K)	Lab SOP no. VEL/STP/01: 2018	112.33	kg/hec,
8	Organic Matter	IS 2720 (P-22) 1972 RA:2015	0.78	%
9	Magnesium (as Mg)	Lab SOP no. VEL/STP/01: 2018	108.74	mg/kg
10	Available Nitrogen (as N)	IS : 14684,1999 RA: 2015	152.0	kg. /hec.
11	Available Phosphorus	Lab SOP no. VEL/STP/01: 2018	40.2	kg. Hiệc

(Checked By)

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Test Report

Sample Number:

VEL/RELM/S/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Sample Description

: SOIL

Location

: Village- Khinda

Sample Collected by

: VEL Team

Parameter Required

: As Per Work Order

Sampling and Analysis Protocol

: IS 2720, APHA & USDA

Report No.

: VEL/S0/2010310001/B

Format No

· 7.8 F-01

Party Reference No

: NIL

Report Date

: 09/11/2020

Period of Analysis

: 31/10/2020-09/11/2020

Receipt Date

: 31/10/2020

Sampling Date

: 27/10/2020

Sampling Quantity

: 2 Kg.

Sampling Type

: Composite

Packing Status

: Temp. Sealed

S.No.	Parameters	Test Method	Results	Units
		STATE OF THE STATE		
1	Colour	USDA:1954-Reaffirmed,2010	Grey	-
2	Water holding capacity	USDA:1954-Reaffirmed,2010	46.54	%
3	Soil Texture	IS:2720 (P-4) RA:2006	Silty Clay	NENI

***End of Report*

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

Party Reference No

: NIL

Reporting Date

: 30/11/2020

Period of Analysis

: 27/11/2020-30/11/2020

Receipt Date

Sample Description

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

: VEL/JAI/FPS/RDS/18

Clear Sky

21/11/2020 To 22/11/2020

10.21 to 10.01 Hrs.

Min. 16° Max. 29°

Human, Vehicular & Other Activities Emviro Lab Vandan Lovino Lab Vandan I

As Per Work Order As Envirol as Vandan Envirol as Vandan Envirol as

S.No.	Parameters EnviroLab Vardam of ab Vardam EnviroLab Vard EnviroLab Vardam EnviroLab	nviroLab VaTest Method roLab Varil in EnviroLab Vardan EnviroLab V Tardan EnviroLab Vardan EnviroL	Results	rd Units of b Vardan I olab Vard	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	72.21	μg/m³	INTERIOR VALO
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	37.61	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	18.61	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.12	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	μg/m³	ale Vandan fin
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	July (6.0 Can p
The	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988,Method No.807:1988	BDL(DL 1.0)	μg/m³	witotat Vard

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Test Report

Sample Number: VEL/REL/AA/01

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Party Reference No : NIL

Reporting Date

Period of Analysis : 27/11/2020-30/11/2020

Clear Sky OLab Varday Enviro Lab Varday Enviro

Receipt Date 27/11/2020

Sample Description

General Information

Sampling Location Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude dan Envirollab Vardan

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C) Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

dan Envirol Sampling Duration rollab Vandan Envirolab 124 Hrs.n Envirolab Vandan Envirolab Vandan Envirolab Vandan En

Parameter Required

VEL/JAI/FPS/RDS/18

21/11/2020 To 22/11/2020

10.21 to 10.01 Hrs. Min. 16° Max. 29° and an Employed all

Human, Vehicular & Other Activities

IS :5182 dan EnviroLab Vardan EnviroLab Vardan EnviroLab Vardan

As Per Work Order 1999 Environ als Vandan Environ als Vandan Environ.

S.No.	Parameters Envirol ab Vardan Louis Vardan Envirol Lab Vardan Envirol Lab Vard	nviroLab V Test MethodiroLab Vard in EnviroLab Vardan EnviroLab V	Results	ard Units of b Vardan E	Limit as per CPCB
	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	ng/m³	nviroLab Var Lab Vardan E

Vardan Envirolab ***End of Report*** all Vardan Envirolab Vardan Envirolab Vardan Em



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Test Report

Sample Number: VEL/REL/AA/02

Name & Address of the Party : M/s Raipur Energen Limited

MoEF & CC Recognized | ISO 9001 | ISO 45001

Village: Raikheda, Block-Tilda Dist Raipur -493225

(CG)Talabira Mines

Report No.

Party Reference No

Reporting Date

30/11/2020

Period of Analysis

Receipt Date

Sample Description

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Scope of Monitoring

Sampling & Analysis Protocol IS:5182 dan Envirol Sampling Duration o Lab Vardan Envirolata 124 Hrsn Envirolata Vardan Luvirolata Vardan Envirolata Vardan En

Parameter Required As Per Work Order

R & R Colony 3 2 KM in NE from The mine

Longitude dan EnviroLab Vardan Inwire Cala Vardan EnviroLab Vardan EnviroLab Vardan EnviroLab Vardan L

10 40 to 10 12 Hrs

Min 16° Max 29°

Surrounding Activity Human Vehicular & Other Activities

S.No.	Parameters EnviroLab Vardan I	Test Method	Results	Units	Limit as per CPCB
020	EUNIOLAD VALGARI EUNIOLAD	cardan Euvirocan Vardan Erwingu	alo varioan Enviro	esstado Varen	an Eurifolab v
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	73.36	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	34.26	µg/m³	Envir 60 ali viii
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.82	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	11.83	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	µg/m³	ale Varian En
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	wiroLale Varn.
L7 _{IV}	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988,Method No.807:1988	BDL(DL 1.0)	µg/m³	oviroläh Vand ab Vardso En





Test Report

Sample Number: VEL/REL/AA/02

Name & Address of the Party

: M/s Raipur Energen Limited

Format No : 7.8 F-01

Village: Raikheda, Block-Tilda Dist. Raipur -493225 (CG)Talabira Mines

Party Reference No : NIL

Reporting Date

: 30/11/2020

Period of Analysis : 27/11/2020-30/11/2020

Report No.

Receipt Date : 27/11/2020

Sample Description : AMBIENT AIR

ot ollab Vardan Euvirollab Vardan Envirollab Vordan Envirollab Vardan Envirollab Vardan

General Information

Sampling Location

Instrument Calibration Status

wirotab Valatitudenvirolab Vardan Envirotab Vardan Envirolab Vardan Envirolab Vardan Envirolab Vardan Envirola

Longitude dan Envirotab Vandan Envirot

Meteorological condition during monitoring

Date of Monitoring Lawred Lab Van dam finding

Time of Monitoring Total Variant Envirol A

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Variday Enviro Lab Var. 1.2 R & R Colony, 3.2 KM in NE from The mine widou Enviro Lab Vanday Enviro La

Sample Collected by Vardan Lawrence Vardan EnviroLab Team

RDS/FPS

ilroLah Vardan Engito VEL/JAI/FPS/RDS/17 pLah Vardan EnviroLah Vardan EnviroLah Vardan

Calibrated InviroLab Vardan EnviroLab Vardan EnviroLab Vardan En

ab Vardan EnviroLab Vardan EnviroLab Vardan EnviroLab Vardan I

Clear Sky Empirol ab Vandam Envirol ab Vardan Envirol ab Vardan Em

22/11/2020 To 23/11/2020 Wardan Enviro Lab Vardan Enviro Lab Vardan ab Vardan EnviroLab Vardan EnviroLab Vardan En

10.40 to 10.12 Hrs.

Min. 16° Max. 29° may an variable Envirol ab Vardan Envirol ab Vardan I

andam Envirol ab Vardam Human, Vehicular & Other Activities rollab Vardam Enviro Regulatory Requirement Vardan EnviroLab Vardan EnviroLab Vardan Env

an Envirolah Vardan EnviroLah Vardan EnviroLah Vardar

IS:5182

24 Hrs. Jep Lab Varelan Enviro Lab Vardan Enviro Lab Vardan Enviro La

Parameter Required ______ by various Enviro: As Per Work Order to Lab Vandan Envirol ab Vandan Envirol Lab Vandan I

S.No.	Parameters	Test Method Free Lab	Results	Units	Limit as per
ndar	EnviroLab Vardan EnviroLa	b Vardan EnviroLab Vardan EnviroLab	Lab Vardan Env Vardan Envirol	ab Vardan	Envirolati Va
11	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	ng/m³	n Envirotab

make variable English ***End of Report***



Note: Terms & conditions refer on backside of test report.

Vandam I niviroL≡ti Varda Page No. 1/1







Test Report

Sample Number:

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist, Raipur -493225

(CG)Talabira Mines

Format No

Party Reference No

Reporting Date

30/11/2020

Period of Analysis Receipt Date

Sample Description

General Information

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude Lange Francisco de Vardan

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol In Control of IS:5182 day Emerot als Vanday Emerot als Varday Emerot als Varday

nviral Sampling Duration (10) als Vardan Enviro Late 24 Hrs. 19 Enviro Lab Vardan En

Sampling Location Village - Khinda, 3 KM in SE from the mine

10 22 to 10 12 Hrs.

Human, Vehicular & Other Activities

Parameter Required Manual Visit Challes May As Per Work Order Challes Walles Visit Challes Control of Environce

S.No.	Parameters EnviroLab Vardan Lab Vardan EnviroLab Vard EnviroLab Vardan EnviroLab	EnviroLab VTest Method inplate Vard an EnviroLab Vardan EnviroLab V Vardan EnviroLab Vardan Enviro	an EResults	ard Units wi in Vardan t real ob Vari	Limit as per CPCB
11	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	69.45	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	41.28	μg/m³	60 -4. 1
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	17.38	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	11.76	µg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	µg/m³	bviro _{1:0} z viird Lab Vardan En
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	otals 6.0 rdm r ovinoLals Vand
716	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed: 1988,Method No.807:1988	BDL(DL 1.0)	μg/m³	an Espital als i Invirol als Vand Lab Vandon Esp

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Test Report

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Party Reference No : NIL

Reporting Date

Period of Analysis : 27/11/2020-30/11/2020

Receipt Date : 27/11/2020

Sample Description

General Information

Sample Collected by

Sampling Equipment used

Instrument Code

Latitude

Longitude dan Employal als Wardlah

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C) Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

nviral Sampling Duration of Ab Vardan Envirol at: \24 Hrs. Envirol ab Vardan Envirol ab Vardan Envirol ab Vardan En

Parameter Required

Sampling Location State Control of Sampling Location Sampling Samp

Vardan EnviroLab Team

22/11/2020 To 23/11/2020

10.22 to 10.12 Hrs.

: Min. 16° Max. 29°

Human, Vehicular & Other Activities

non is IS:5182 dan EnviroLah Vardan EnviroLah Vardan EnviroLah Vardan

S.No.	Parameters Criving Lab Vardan I otab Vardan Enviro Lab Vard Inviro Lab Vardan Enviro Lab	nviroLab V. Test Method (OLab) Vard ur EnviroLab Vardan EnviroLab V ardan EnviroLab Vardan EnviroL	Results V	Units Varidan I	Limit as per CPCB
art En	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	ng/m³	ab Vardan En

^{*}BDL-Below Detection Limit, **DL-Detection Limit

End of Report



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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/04

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

JEL/A/20112700**0**4/.

Format No

/ 81--

Party Reference No

NIL.

Reporting Date

30/11/2020

Period of Analysis

27/11/2020-30/11/2020

Receipt Date 27/11/202

Sample Description

AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol
Sampling Duration

Parameter Required

Village - Babu Khinda, 3 KM in NE from the mine

Vardan EnviroLab Team

RDS/FPS

VEL/JAI/FPS/RDS/19

Calibrated

Clear Sky

22/11/2020 T- 22/11/20

11 20 to 11 11 Hrs

Min 16° Max 29°

Human Vehicular & Other Activities

Populatory Poquirement

an Enviro IS:5182 dan Enviro Lab Vardan Enviro Lab Vardan Enviro Lab

24 Hrs

As Per Work Order

S.No.	Parameters EnviroLab Vardan	eviroLab V Test Method Olab Vard en EnviroLab Vardan Envirolab V Vardan EnviroLab Vardan Envirol	Results	Units	Limit as per CPCB
1.	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	58.58	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	35.73	μg/m³	1 1 1 1 60 A 1 1 V
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	15.05	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.49	μg/m³	80

^{*}BDL-Below Detection Limit, **DL-Detection Limit

***End of Report

(Checked By)



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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/05

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

Party Reference No

Reporting Date

Period of Analysis Receipt Date

Sample Description

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol IS:5182

Sampling Duration

Parameter Required

Weight Bridge 0.5 KM in South from the mine

Vardan EnviroLab Team

23/11/2020 To 24/11/2020

10 05 to 09 25 Hrs.

Min 17° Max 29°

Human, Vehicular & Other Activities

S No.	Parameters	Invirol al. V Test Method DLab Vard	Results	ud Units vin h Vardan E pol al Vard	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	64.10	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	26.61	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	20.33	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	8.89	µg/m³	11 Tan 80







Test Report

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Party Reference No

Reporting Date

Period of Analysis

Receipt Date

Sample Description

General Information

Sampling Location Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude Ann Environ als Vandaya Envir

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required William Environment As Per Work Order

Near Petrol Pump

Vardan EnviroLab Team

09 45 to 09 42 Hrs

Min 17° Max 29°

Human, Vehicular & Other Activities

IS :5182

S.No.	Parameters Envirol ab Vardan rol ab Vardan Envirol ab Vard Envirol ab Vardan Envirol ab	nvirolab /Test Method Follab Vard an Envirolab /ardan Envirolab / Vardan Envirolab /ardan Envirol	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	72.66	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	38.61	μg/m³	THU 60 HIV
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	20.33	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.05	µg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	µg/m³	Lab Vandari I
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	nviroLah Van
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988,Method No.807:1988	BDL(DL 1.0)	µg/m³	Luviretăb Var Luviretăb Var Lab Varden L

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/06

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

eport No. : VEL/A/2011270006/E

Format No : 7.8 F-01

Party Reference No : NIL

Reporting Date : 30/11/2020

Period of Analysis : 27/11/2020-30/11/2020

Receipt Date • 27/11/2020

Sample Description : AMBIENT AIR

General Information

Sampling Location : Near Petrol Pump
Sample Collected by : Vardan EnviroLab

Sample Collected by : Vardan EnviroLab Team

Sampling Equipment used RDS/FPS

nstrument Code VEL/JAI/FPS/RDS/

Instrument Calibration Status : Calibrate

Latitude ; --

Longitude

Meteorological condition during monitoring

Clear S

Date of Monitoring : 23/11/2020 To 24/11/2020

Time of Monitoring 09.45 to 09.42 Hrs.

Ambient Temperature (°C) Min. 17° Max. 29° Min. 17° Min. 17° Max. 29° Min. 17° Max. 29° Min. 17° Min. 17° Max. 29° Min. 17° Min.

Scope of Monitoring : Regulator

Sampling & Analysis Protocol : IS :5182
Sampling Duration : 24 Hrs.

Parameter Required As Per Work Orde

S.No.	Parameters Tryinglab Varian I	Test Method rollab Vard	Results	ord Units with Vardan E	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and	BDL (*DL1.0	ng/m³	nviroLab Var
	vinetali Vantou Euviral ab Va	analysis,3rd ed.,1988, Method No.317	ng/m³)	than karana	LED VIII DAN EI

^{*}BDL-Below Detection Limit, **DL-Detection Limit

Variation Environment ***End of Report***

(Checked By)



Page No. 1/1







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Name & Address of the Party | : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Format No

Party Reference No

Reporting Date

Period of Analysis

Sample Description

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring Clear Sky Cle

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required California and Ca

Min. 18° Max 31° and a second a

Human, Vehicular & Plant Activities

24 Hrsm EnviroLab Vardan EnviroLab Vardan EnviroLab Vardan En

S.No.	Parameters EnviroLab Varian Lab Varian LawroLab Varian Lab Varian LawroLab Varian	Twitolah V Test Method i ol al Vint an Envirolah Vardan Envirolah V Vardan Envirolah Vardan Envirolah	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	68 79	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	31.20	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.54	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.70	μg/m³	Att E 1 80

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/07

Name & Address of the Party : M/s Raipur Energen Limited

village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

JEL/A/2011270008/B

ormat No

7.8 F-UT

Party Reference No

2011110000

Reporting Date

27/11/2020-30/11/2020

Period of Analysis Receipt Date

27/11/2020

Sample Description

AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)
Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

A1 Downwind point of Talabira mine Area

Vardan EnviroLab Team

PDSMOC

VEL/IAIA/OC/01/PDS/17

Calibrated

Calibrated

6 Varda

Clear Sky

21/11/2020 To 22/11/2020

09 43 to 09 38 Hrs

Min 17° Max 29°

Human, Vehicular & Plant Activities

Regulatory Requirement

; IS:5182

24 Hrs

As Par Mark Orde

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
rala rala an E	Volatile Organic Compound (as BTX)	IS:5182 (P-11) :2006, RA 2017	BDL (*DL1.0 µg/m³)	µg/m³	AviroLau var Lau Vardan E
	Polycyclic Aromatic Hydrocarbon (as PAH)	IS:5182 (P-12):2004	*BDL(**DL-5.0ng/ m³)	ng/m³	oLab Vardar iveroLab Var

^{*} BDL- Below Detection Limit DL Detection Limit

End of Report

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AN/01 : M/s Raipur Energen Limited Format No Village: Raikheda, Block-Tilda Dist. Raipur -493225 Party Reference No (CG)Talabira Mines Reporting Date : 30/11/2020 Receipt Date 27/11/2020 Sampling Duration 24 Hrs. Sample Description : Ambient Noise Scope of Monitoring : Regulatory Requirement Sample Collected by Vardan EnviroLab Team Calibrated Protocol Used : IS 9989: IS 9876 Calibration Status

Instrument Used : SLM

General Information Sampling Location In front of the mine office Instrument Code Employee an English VEL/JAI/SLM/03 Meteorological condition during monitoring Clear Sky Date of Monitoring 23/11/2020 To 24/11

Time of Monitoring : 06 00 to 06 00 Hrs Ambient Temperature (°C) Manual Envirol at Minc 18° Max 31° at Vandar Envirol at Van

Surrounding Activity : Human Vehicular & Plant Activities Parameter Required

S No.	Test Parameters an Environ all Va	rdan Envir Protocol rdan Enviro	Lab Vardan En Test Result dB(A) EnviroLa		
er tenv	rotals Vardan Envirotals Vard Envirol ab Vardan Envirotals	un EnviroLab Vardan EnviroLab V Vardan EnviroLab Vardan EnviroL	Day Time	Night Time	
1111	Leg ab Vardan EnviroCab Vard	IS 9989 - 1981	ab Varda 60.27 viroLab V	49.16 - 10 Vars	

Category of Zones	tan Environ ab Vardan Environ ab Vardan Leq in d	B(A)
EnviroLab Vandan EnviroLah V	Vandan InviroLati Vardan DaynoLati Vardan Inv	vii ot ab V. Night I nvirot ab Varo
Industrial	Lab War Lan ErrytroLab War 75 plyst ab Warrian Wardan From the Warrian 75 plyst ab Warrian From the Warrian	70
Commercial The Laboratory	u Envirolah Verdan Enviro65ab Vardan Enviro La	b Vardan (55 mg) ab Vardan Er
Residential	ie vanda ii Cayn blaib Vanda 55 ayn blaib Vanda ii 1	45
Silence Zone	Vardan Truingt ab Vardan 150 trotab Vardun Im	vitoLala V= 40 = TraviroLala Vard

1 Day Time is from 6 00 AM to 10 00 PM

2 Night Time is reckoned between 10 00 PM to 6 00 AM

3 SilenceZone is defined as an area up to 100m around premises of Hospitals. Educational Institutions and Courts. Use of vehicle horn ludspeaker and bursting of crackers is banned in these zones

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

corresponding standards shall apply

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Sample Number

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist, Raipur -493225

(CG)Talabira Mines

Sample Description : Ambient Noise : Regulatory Requirement Scope of Monitoring

Protocol Used : IS 9989: IS 9876

General Information

Van dan Enviro dal Van Near Petrol Pumpli Var dan Enviro dal Van dan Enviro dab 1 Sampling Location Instrument Code

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Format No Party Reference No

Reporting Date : 30/11/2020 Receipt Date

Sampling Duration

Sample Collected by Vardan EnviroLab Team

Instrument Calibrated

Min 16° Max 29°

Calibration Status

Parameter Required	As Per Work Order	Lab Vardam EnviroLab	Vardan Envirotab Van	
S.No. Test Parameters	Protocol	Test Result dB(A)		
nviro lab Vardan EnviroLab Varda n EmiroLab Vardan EnviroLab Va	n EnviroLab Vardan EnviroLab r lan EnviroLab Vardan Envirol	Day Time 15 Var	Night Time	
1 1 LeqLab Vardan EnviroLab Va	IS 9989 - 1981	57 67	43.37	

VEL/JAI/SLM/03

22/11/2020 To 23/11/2020

1 06 00 to 06 00 Hrs

Human, Vehicular & Plant Activities

Category of Zones	Vard in EnviroLab Vardan EnviroLab (Leqin) dB(A) roLab Vardan EnviroLab		
Category of Zones	Day Day	Protab Vard Night virolab Vardan	
Industrial Total Variant Environ	Lab Vardan EmiroLab Var75 n EmiroLab Va	rian EnviroLan Varian EnviroLan	
Commercial	Vardam Envirotab Vardam 65 urotab Vardar	Emvirol ab V.55 a) EnviroLab Vari	
Residential And Mark Mark Mark Mark Mark Mark Mark Mark	th Vardan EnwiroLab Vard, 55 meiroLab Vard	45 Hollan Vardan En	
Silence Zone	dan EnviroLab Vardan Envi ₅₀ Lab Vardan En	roLab Varda 40 nviroLab Vardan	

1 Day Time is from 6.00 AM to 10.00 PM

2 Night Time is reckoned between 10.00 PM to 6.00 AM

3 SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn ludspeaker and bursting of crackers is banned in these zones.

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







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Near Weight Bridge

Min 16° Max 31°

Sample Number: Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist, Raipur -493225

(CG)Talabira Mines

Sample Description **Ambient Noise**

Scope of Monitoring : Regulatory Requirement Protocol Used

General Information

Sampling Location Instrument Code

Meteorological condition during monitoring Clear Sky

Date of Monitoring 21/11/2020 To 22/11/2020 Time of Monitoring 06 00 to 06 00 Hrs

Ambient Temperature (°C)

Surrounding Activity Company of the English Human, Vehicular & Plant Activities

Format No Party Reference No

Reporting Date Receipt Date

Sampling Duration Sample Collected by Vardan EnviroLab Team

Instrument Calibrated

No.	Test Parameters	Protocol	Test R	esult dB(A)
Env	ab Vardan EnviroLab Vardan iroLab Vardan EnviroLab Vard EnviroLab Vardan EnviroLab	EnviroLab Vardan EnviroLab V lan EnviroLab Vardan EnviroL Kardan EnviroLab Vardan EnviroL	Day Time	Night Time
1100	Leg ab Varday EngiroLab Vari	IS 9989 - 1981	58.27	43.49

Category of Zones	ab Vardan Envirol ab Vardan Envirol ab Veq ir	n dB(A)
LavitoLab Vardam EnviroLab	Day	Night
Industrial HoLab Vardan Enviro	Lab Var Inn EnviroLab Van 75n EnviroLab Van	lan EnviroLa70/ardan EnviroLab
Commercial	m Environ Lab Vardan Familio 65	EnviroLati Varia
Residential Apple English	ib Vardan EnviroLab Varda55EnviroLab Varda	n EnviroLab 45 dan EnviroLab Va
Silence Zone	dan EnviroLab Vardun Envi ₅₀ Lab Vardan Envi	roLah Vandar ₄₀ ayıroLah Vardan I

- 1 Day Time is from 6 00 AM to 10 00 PM. In Vandam Lawrence at Vandam Lawrence at Vandam Lawrence at
- 2 Night Time is reckoned between 10.00 PM, to 6.00 AM, and all the standard transfer that the standard transfer to the standard transfer transfer to the standard transfer transfer
- 3 SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn ludspeaker and bursting of crackers is banned in these zones.

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

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TC-6652

Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/GW/01

Name & Address of the Party M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225 (CG)Talabira Mines

Sample Description : GROUND WATER

Location : R & R Colony (Open Well)

Party Reference No PNIL

Reporting Date : 03/12/2020

Period of Analysis : 27/11/2020-03/12/2020

Receipt Date

27/11/2020

Sampling Date 23/11/2020

Sampling Quantity 12 Ltr

Sample Collected by Sampling Type : Grab

Preservation : Suitable Preservation

irotah Vardan Envirotah Vandan Envirotah Vandan Envirotah Vardan Enviro Sampling and Analysis : 1S 10500 -2012

S.No.	Parameters	Variation Protocols	Results	Units	IS:10	500-2012
	wireLab Vardan Envirol ab Vardan EnviroLab Va	ab Vardan Envirol ab Vardan E dan Envirol ab Vardan Envirol	oudrotab Vandari ati Vurdan Lovic	Environment	Acceptable Limits	Permissible Limits
1	pH	IS 3025 (P-11): 1983 Reaff. 2017	7.49	NA	6.5 to 8.5	No Relaxation
2	Total Dissolved Solids	ValS 3025 (P-16): 1984 Reaff 2017	244.00	mg/l	500	2000
3	Total Alkalinity (as CaCO3)	IS: 3025 (Part 23): 1986, Reaff. 2019	125.24	mg/l	200	600
4	Total Hardness (as CaCO3)	IS: 3025 (Part 21): 2009, Reaff. 2019	150.48	mg/l	200	600
5	Nitrate (as NO3)	IS: 3025 (Part 34): 1988, Reaff. 2019	3.32	mg/l	14 Va45 am E	No Relaxation
6	Chloride (as CI)	IS: 3025 (Part 32): 1988, Reaff. 2019	48.92	mg/l	250	1000
o7.al	Sulphate (as SO4)	IS: 3025 (Part 24): 1986, Reaff. 2019 Turbidity Method	y Var 12.84 mili	mg/l	200	400
8	Calcium (as Ca)	IS: 3025 (Part 40): 1991 Reaff. 2019	55.55	mg/l	75	200
9	Magnesium (as Mg)	IS: 3025 (Part 46): 1994, Reaff. 2009 (EDTA method)	2.89	mg/l	30	100
10	Fluorides (as F)	APHA 23rd Edition 2017, 4500 FD	0.22	mg/l	1.0	1.5
11	Total Iron (as Fe)	IS 3025(P-53): 2003 Reaffirm 2019	*BDL(*DL- 0.1mg/l)	mg/l	0.3	No Relaxation
12	Arsenic (as As)	APHA (23rd edition-2017), 3114 C	*BDL(**DL-0.005 mg/l)	mg/l	0.01	0.05
13	Mercury (as Hg)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.0005 mg/l)	mg/l	0.001	No Relaxation
14	Lead (as Pb)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.005 mg/l)	mg/l	0.01	No Relaxation
15	Cadmium (as Cd)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.002 mg/l)	mg/l	0.003	No Relaxation
16	Chromium (as Cr)	APHA 23rd Edition Year 2017 Method No. 3113 B	*BDL(**DL-0.02 mg/l)	mg/l	0.05	No Relaxation
17	Copper (as Cu)	APHA 23rd Edition Year 2017 Method No. 3111B	*BDL(**DL-0.02mg/	mg/l	0.05	1.5
18	Zinc (as Zn)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.20 mg/l)	mg/l	5.0	15
19	Selenium (as Se)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.005 mg/l)	mg/l	0.01	No Relaxation

Note: Terms & conditions refer on backside of test report.

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Ph: 0141-2983404, 9810355569, 9953147268 E-mail: jaipur@vardanenvironet.co







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

S No.	Parameters	Protocols	Results	Units	IS:10500-2012	
Env oLut	noLab Vardan Environ. Vardun EnviroLab Gu	da Vardau Emelrokato Vardan Env dan Envirolah Vandan Envirokat Dan Parisa da Vandan Envirokat		nizitot. Lab 940 Osomer	Acceptable Limits	Permissible Limits
20	Turbidity	IS 3025 (Part 10): 1984, Ref: 2017, (Nephelometeric Method)	*BDL(**DL-1.0 NTU)	NTU	ralm1 mai. Lvardan E	ww.clabyVa
21	Aluminium	IS 3025 (Part-55): 2003, Reaff. 2019	*BDL(**DL-0.03 mg/l)	mg/l	0.03	0.2
22	Menganese (as Mn)	IS: 3025 (Part 46): 1994, Reaff. 2019 (EDTA method)	*BDL(**DL-0.05 mg/l)	mg/l	0.1 rd.m	0.3
23	Boron (as B)	APHA 23rd Edition Year 2017 Method No. 4500B	*BDL(**DL-0.2 mg/l)	mg/l	0.5	1,0
24	Phenolic Compound	APHA 23rd Edition 2017, 5530C	*BDL(**DL-0.1 mg/l)	mg/l	0.001 in	0.002
25	Free Residual Chlorine	IS: 3025 (Part 26): 1986 Reaff, 2019	*BDL(**DL-0.2 mg/l)	mg/l	0.2	virglab Var ivirglab Var in EnviroLal

^{*}BDL-Below Detection Limit,**DL-Detection Limit

wiroLab Yardam EnviroLab Vardan EnviroLab Varda ***End of Report*** Edua EnviroLab Vardan EnviroLab ab Virdam EnviroLab Vardam EnviroLab Vardam EnviroLab Vardam EnviroLab Vardam

tan Envirotab Vardan Envirotab Verdan Envirotab Verdan Envirotab Verdan Envir

uci otab Vardan Envirutah Vardan Envirotah Vardau Envirotah Vardau Envirotah Vardan Enviro

ır dan Envirot ab Vandan Envirot ab Vandan Envirot ab Vandan Envirot ab Vandan E Vardar Checked By), vardan EnviroLab Vardar EnviroLab Vardar EnviroLab Vardar EnviroLab Vardar EnviroLab Vardar

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alah yandan Emilin ah Vandan Ensam ah Vandan Ensam ah Kandan Ensam ah Kandan Luwusi Page No. 2/2 Marala pelist Enchot ale Vas dan Chiefed, ab Vacilian Enviros Lab Vandam Chiefeo Lab Vandam Enviros ab Vandam Enviros Lab Vandam i

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Name & Address of the Party : M/s Raipur Energen Limited

Sample Collected by Vardan EnviroLab Team

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Party Reference No

Reporting Date 03/12/2020

27/11/2020-03/12/2020 Period of Analysis

Receipt Date

Sampling Date 23/11/2020

Sampling Quantity 2 Ltr English Value En

Suitable Preservation

R & R Colony (Open Well)

GROUND WATER

Sampling and Analysis IS 10500 -2012 Environ at Varidan Invito Lab

S.No.	Parameters	Circles Vardan Em Protocols and an Em Prot. Results in 1	Protocols Results Results		dan/Enviro	0500-2012
an E drot	nyiroLab Vardan EnviroL ab Vardan Envirol nb Var	b Vardan Envirol ab Vardan I Ian Envirol ab Vardan Envirol	nvisoLab Vərdə ab Vərdən Envi	a Empire Tol.ph V	Acceptable Limits	Permissible Limits
Env oLal an E	Total Coliform (By MPN Method)	ab Vardam (S:1622, Lab Vardam Vardam Envirol ab Vardam Envirola n Envirolab Vardam Envirola b Vardam Envirolab Vardam E	Absent	MPN/10 0 ml	Shall not be Detectable in any 100 ml sample	an En NA Lab nviroLab Var Lab Vardan E EnviroLab V
2	E-Coli	/ardan EnvilS:1622 Jah Vardan Enviro Lab Vardan	Absent	per 100 ml	Absent/100 ml	Absent/100 mł
3	Cyanide (as CN)	APHA 23rd Edition 2017, 4500CN D	*BDL(**DL-0.05 mg/l)	mg/l	0.05	No Relaxation
4	Colour EmiroLab Var	IS 3025: 1983 (P-4) Reaff. 2017	*BDL(**DL-1 Hazen)	Hazen	ardai5 Envii Ib Vandan E	ot ab 15 dan nvitotab Var
5	Odour English Sh	IS 3025 (P-5):2018	Agreeable	Qualitat ive	Agreeable	Agreeable
6	Taste Als Van Ham Prock of	IS 3025(P-8):1984 Reaff, 2017	Agreeable	Qualitat ive	Agrecable	Agreeable
7	Anionic Surface Active Agent	APHA 23rd Edition 2017, 5540C	*BDL(**DL-0 05 mg/l)	ıng/l	0.2	1.0

End of Report



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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Vardan EnviroLab Team

Party Reference No

Reporting Date : 02/12/2020

Period of Analysis 27/11/2020-02/12/2020

Receipt Date

Sampling Date : 23/11/2020

Sampling Quantity : 2 Ltr | 12 Ltr | 12 Ltr | 13 Ltr | 14 Ltr | 15 Ltr | 15

Sampling and Analysis : IS 3025

: Waste Water STP Outlet

Sample Description

Sample Collected by

Parameter Required

Packing Status : Temp Sealed : Temp Sealed

S.No.	Test Parameters	Test Method	Result	Unit	Prescribed Limit
oLai an E deol	Vardan EnviroLab Vardan I tviroLab Vardan EnviroLab V ab Vardan EnviroLab Vardan	ngiroLab Vardan EnviroLab Vardan Grdan EnviroLab Vardan EnviroLab LuviroLab Vardan EnviroLab Vard	EnviroLab var Vardan Enviro an EnviroLab V	dan Enviro Lub Vardar Ardan Envi	ab Vardan En EnviroLab Va
E117	pH all: Viu dan EnviroLalı Viir	En IS 3025 (P-11): 1983 RA2017	7.52	b Yardan E	5.5 - 9.0
2	Total Suspended Solids	IS: 3025 (Part 17): 1984, RA2017	21.9	mg/l	100.0
937	Oil & Grease Whot als Vandan 6	IS 3025(P-39):1991 RA 2019	Envir 0.8 als Var	mg/l	10.0
4	BOD (3 days @ 27°C)	IS: 3025 (Part-44): 1993, RA: 2019	14.4	mg/l	30.0
5	COD Is Varidan Envirol ub Var	IS: 3025 (Part 58): 2006 RA: 2017	60.8	mg/l	250.0

Envirotab Vardan Envirotab Vardan Envirotab Vardan Envi







Test Report

Sample Number: VEL/REL/AA/01

Report No.

: VEL/A/2012220001/A

Name & Address of the Party : M/s Raipur Energen Limited

Format No

: 7.8 F-01

Village: Raikheda, Block-Tilda Dist. Raipur -493225

Party Reference No : NIL

: 25/12/2020

(CG)Talabira Mines

Period of Analysis : 22/12/2020-25/12/2020

Receipt Date

Report Date

: 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

: Rest Shelter 1.5 KM in SE From the Mine

Sample Collected by

VEL Team

Sampling Equipment used

RDS/FPS

Instrument Code

VEL/JAI/RDS/31/FPS/25

Instrument Calibration Status

Calibrated

Latitude

Longitude

Meteorological condition during monitoring

: Clear Sky

Date of Monitoring

19/12/2020 To 20/12/2020

Time of Monitoring

: 09.40 to 09.40 Hrs.

Ambient Temperature (°C)

: Min 12 Max 26

Surrounding Activity

Human, Vehicular & Plant Activity

Scope of Monitoring

Regulatory Requirement

Sampling & Analysis Protocol Sampling Duration

IS:5182 24 Hrs.

Parameter Required

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	72.32	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	37.74	μg/m³	60
	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	20.87	μg/m³	80
	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.05	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No.807:1988	BDL(DL 1.0)	µg/m³	-

End of Report

Page No. 1/1

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Test Report

Sample Number: VEL/REL/AA/01

Report No.

: VEL/A/2012220001/B

Name & Address of the Party : M/s Raipur Energen Limited

Format No

: 7.8 F-01

Village: Raikheda, Block-Tilda Dist. Raipur -493225

Party Reference No ; NIL

(CG)Talabira Mines

Report Date

: 25/12/2020

Period of Analysis : 22/12/2020-25/12/2020

Receipt Date

: 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

: Rest Shelter 1.5 KM in SE From the Mine

Sample Collected by

VEL Team

Sampling Equipment used

RDS/FPS

Instrument Code

: VEL/JAI/RDS/31/FPS/25

Instrument Calibration Status

Calibrated

Latitude

Longitude

Meteorological condition during monitoring

Clear Sky

Date of Monitoring Time of Monitoring 19/12/2020 To 20/12/2020 09.40 to 09.40 Hrs.

Ambient Temperature (°C)

Min 12 Max 26

Surrounding Activity

Human, Vehicular & Plant Activity

Scope of Monitoring

Regulatory Requirement

Sampling & Analysis Protocol

IS:5182

Sampling Duration

24 Hrs.

Parameter Required

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	μg/m³	-

End of Report



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Test Report

Sample Number: VEL/REL/AA/02

Name & Address of the Party : M/s Raipur Energen Limited

Village Raikheda, Block-Tilda Dist, Raipur -493225

(CG)Talabira Mines

Report No.

: VELIA/2012220002/A

: 78F-01 Format No

Party Reference No : NIL

Report Date

: 25/12/2020

Period of Analysis : 22/12/2020-25/12/2020

Receipt Date

: R&R Colony 3 2 KM in NE From the mine

: 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by : VEL Team Sampling Equipment used : RDS/FPS

Instrument Code : VEL/JAI/RDS/32/FPS/26

Instrument Calibration Status : Calibrated

Latitude Longitude : -

Meteorological condition during monitoring

: Clear Sky Date of Monitoring : 19/12/2020 To 20/12/2020

Time of Monitoring : 10 10 to 10.10 Hrs Ambient Temperature (°C) : Min 12 Max 26

Surrounding Activity : Human, Vehicular & Plant Activity

Scope of Monitoring : Regulatory Requirement

Sampling & Analysis Protocol : IS:5182 Sampling Duration : 24 Hrs.

Parameter Required : As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	71.63	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	32.68	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	21.78	hg/w,	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	11.51	hg/w,	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	hg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	hg/w,	-

"End of Report"

(Checked By)

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Test Report

Sample Number :

VEL/REL/AA/02

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2012220002/B

Format No

7.8 F-01

Party Reference No : NIL

Report Date

: 25/12/2020

: 22/12/2020

Receipt Date

Period of Analysis : 22/12/2020-25/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration Parameter Required

: R&R Colony 3.2 KM in NE From the mine

: VEL Team

: RDS/FPS

: VEL/JAI/RDS/32/FPS/26

: Calibrated

: --

: Clear Sky

: 19/12/2020 To 20/12/2020

: 10.10 to 10.10 Hrs.

Min 12 Max 26

Human, Vehicular & Plant Activity

Regulatory Requirement IS 5182

: 24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	-

"End of Report"

Page No. 1/1

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Test Report

Sample Number: VEL/REL/AA/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2012220003/A

Format No

: 7.8 F-01

Party Reference No : NIL

Report Date Period of Analysis : 25/12/2020

: 22/12/2020-25/12/2020

Receipt Date

: 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration Parameter Required

Village - Khinda 3 KM In SE From the mine

VEL Team RDS/FPS

VEL/JAI/RDS/33/FPS/27

Calibrated

Clear Sky

19/12/2020 To 20/12/2020

10.40 to 10.40 Hrs.

Min 12 Max 26

Human, Vehicular & Plant Activity

Regulatory Requirement IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	69.69	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	42.48	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.05	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	12.75	µg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807: 1988	BDL(DL 1.0)	μg/m³	-

BDL- Below Detection Limit DL Detection Limit

End of Report

Ph: 0141-2983404, 9810355569, 9953147268 E-mail: jaipur@vardanenvironet.com

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1





Test Report

Sample Number:

VEL/REL/AA/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2012220003/B

Format No

: 7.8 F-01

Party Reference No : NIL

Report Date

: 25/12/2020

Period of Analysis

: 22/12/2020-25/12/2020

Receipt Date

: 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

: Village - Khinda 3 KM In SE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/33/FPS/27

Calibrated

: Clear Sky

: 19/12/2020 To 20/12/2020 : 10.40 to 10.40 Hrs.

Min 12 Max 26

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182 24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	-

BDL- Below Detection Limit DL Detection Limit

End of Report





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Test Report

Sample Number: VEL/REL/AA/04

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2012220004/A

Format No

: 7.8 F-01

Party Reference No : NIL

Report Date

: 25/12/2020

Period of Analysis Receipt Date

Village - Babu Khinda 3 KM in NE From the mine

: 22/12/2020-25/12/2020 : 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

VEL Team

RDS/FPS

Instrument Code

VEL/JAI/RDS/34/FPS/28

Instrument Calibration Status

Calibrated

Latitude

Longitude

Meteorological condition during monitoring

: Clear Sky

Date of Monitoring

: 19/12/2020 To 20/12/2020

Time of Monitoring

11.15 to 11.15 Hrs.

Ambient Temperature (°C)

Min 12 Max 26

Surrounding Activity

Human, Vehicular & Plant Activity

Scope of Monitoring

Regulatory Requirement

Sampling & Analysis Protocol Sampling Duration

IS:5182 24 Hrs

Parameter Required

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	62.50	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	24.17	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.51	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	8.63	μg/m³	80

***End of Report**

(Checked By)

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Test Report

Sample Number: VEL/REL/AA/04

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2012220005/A

: 7.8 F-01 Format No

Party Reference No : NIL

: 25/12/2020 Report Date

Period of Analysis : 22/12/2020-25/12/2020 Receipt Date : 22/12/2020

Sample Description : AMBIENT AIR

General Information

Sampling Location Village - Babu Khinda 3 KM in NE From the mine

Sample Collected by **VEL Team** Sampling Equipment used RDS/FPS

Instrument Code VEL/JAI/RDS/34/FPS/28

Instrument Calibration Status Calibrated

Latitude Longitude

Meteorological condition during monitoring Clear Sky

Date of Monitoring : 19/12/2020 To 20/12/2020 Time of Monitoring : 11.15 to 11.15 Hrs.

Ambient Temperature (°C) : Min 12 Max 26 **Surrounding Activity**

Human, Vehicular & Plant Activity Scope of Monitoring Regulatory Requirement

Sampling & Analysis Protocol IS:5182 Sampling Duration 24 Hrs.

Parameter Required : As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	72.58	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	37.35	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	20.65	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.28	hg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	µg/m³	-

BDL-Below Detection Limit DL Detection Limit

End of Report

(Checked By)

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Page No. 1/1

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Test Report

Sample Number: VEL/RELIAA/04

Name & Address of the Party ... Mis Rapur Energen Limited

(CGIT atabies Mines

Village Rahheda Block-Tida Dot Rayur -495225

Report No.

VEL/A/2012220005/6

Format No

Party Reference No : Nil.

Report Date

25/12/2020

7.8 F-01

Period of Analysis : 22/12/2020-25/12/2020

Receipt Date

22/12/2020

Sample Description

AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitustie

Longitude

Meteorological condition during monitoring

Clarity of Womboring

films of Worthoring Ambient Temperature (°C)

Surmounding Activity

Scape of Monitoring

Sampling & Analysis Protocal Sampling Duration

Parameter Required

Village - Salso Khinda 5 KM in NE From the mine

VEL Team

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Californial

Clear Dky

19/12/2020 1x 20/12/2020

11.12 to 11.12 this Mir. 12 Mer. 20

: Human Vehicular & Plant Activity

Tengulatory Requirement

60 E140 DE STOR

. As Per Work Order

S.No.	Parameters	Test Method	Forecite	Units	CPCB
,	Marcury (Hg)	Methods of air sampling and analysis 3nd ed. 1988. Method No 317	BIDL ("DL1.6 ng/m")	tig/m²	-

SCIL dielow Detection Land Ct. Detection Land

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Test Report

Sample Number : VEL/REL/AA/06

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2012220006/A

Format No

: 7.8 F-01

Party Reference No : NIL

Report Date

: 25/12/2020

Period of Analysis

: 22/12/2020-25/12/2020

Receipt Date

: 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Near Petrol Pump

VEL Team

RDS/FPS

VEL/JAI/RDS/32/FPS/26

Calibrated

:

Clear Sky

: 20/12/2020 To 21/12/2020

09.40 to 09.40 Hrs.

Min 11 Max 25

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	59.82	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	35.42	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	16.33	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.46	µg/m³	80

***End of Report**

Ph: 0141-2983404, 9810355569, 9953147268 E-mail: jaipur@vardanenvironet.com

(Checked By)



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Note: Terms & conditions refer on backside of test report.

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Test Report

Sample Number: VEL/REL/AA/07

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No. : VEL/A/2012220007/A

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

Report Date : 25/12/2020

Period of Analysis : 22/12/2020-25/12/2020

Receipt Date : 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location : In Front of The Mine Office

Sample Collected by : VEL Team
Sampling Equipment used : RDS/FPS

Instrument Code : VEL/JAI/RDS/33/FPS/27

Instrument Calibration Status : Calibrated

Latitude : Longitude : :

Meteorological condition during monitoring : Clear Sky

Date of Monitoring : 20/12/2020 To 21/12/2020
Time of Monitoring : 10.12 to 10.12 Hrs.

Time of Monitoring : 10.12 to 10.12 h

Ambient Temperature (°C) : Min 11 Max 25

Surrounding Activity : Human, Vehicular & Plant Activity

Scope of Monitoring : Regulatory Requirement
Sampling & Analysis Protocol : IS:5182

Sampling & Analysis Protocol : 15.5102
Sampling Duration : 24 Hrs.

Parameter Required : As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	69.84	µg/m³	100
	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	32.50	µg/m³	60
	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	17.69	μg/m³	80
	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.46	μg/m³	80

End of Report





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Test Report

Sample Number: VEL/REL/AA/08

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2012220008/B

Format No

7.8 F-01

Party Reference No : NIL

Report Date

: 25/12/2020

Period of Analysis : 22/12/2020-25/12/2020

Receipt Date

: 22/12/2020

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

: A1 Down Wind Point of Talabira mine Area

: VEL Team

: RDS/VOC

: VEL/JAI/RDS/34/VOC/01

: Calibrated

: Clear Sky

: 20/12/2020 To 21/12/2020

: 11.20 to 11.20 Hrs.

: Min 11 Max 25

: Human, Vehicular & Plant Activity

: Regulatory Requirement

: IS:5182 : 24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Volatile Organic Compound (as BTX)	IS:5182 (P-11) :2006, RA 2017	BDL (*DL1.0 µg/m³)	µg/m³	-
2522	Polycyclic Aromatic Hydrocarbon (as PAH)	IS:5182 (P-12):2004	*BDL(**DL-5.0ng/ m³)	ng/m³	-

^{*}BDL-Below Detection Limit, **DL-Detection Limit

End of Report





Page No. 1/1

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Test Report

Sample Number: VEL/REL/AN/01

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: Regulatory Requirement

: Ambient Noise

Report No.

VEL/N/2012220001/A

Format No

7.8 F-01

Party Reference No

: NIL

Report Date

: 25/12/2020

Receipt Date

: 22/12/2020

Sampling Duration

Calibration Status

: 24 Hrs.

Sample Collected by : VEL Team

Instrument

: Calibrated

Protocol Used Instrument Used

Sample Description

Scope of Monitoring

: IS 9989; IS 9876 : SLM

General Information

Sampling Location

Instrument Code

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Parameter Required

: In Front of mine Office : VEL/JAI/SLM/08

: Clear Sky

19/12/2020 To 20/12/2020 06.00 to 06.00 Hrs.

: Min 11 Max 25

Human, Vehicular & Plant Activity

: As Per Work Order

S.No.	Test Parameters	Protocol	Test Res	ult dB (A)
		(a) (b)	Day Time	Night Time
1	Leq	IS: 9989-1981, IS 9876: 1981	59.46	48.36

Category of Zones	Leq i	n dB(A)
Obligary of Editor	Day	Night
Industrial	75	70
Commercial	65	55
Residential	55	45
Silence Zone	50	40

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

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

End of Report

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Test Report

Sample Number : VEL/REL/AN/02

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: Regulatory Requirement

: Ambient Noise

Report No. Format No

: VEL/N/2012220002/A

Party Reference No

7.8 F-01

Report Date

: NIL : 25/12/2020

Receipt Date

: 22/12/2020

Sampling Duration

: 24 Hrs.

Sample Collected by : VEL Team

Instrument Calibration Status : Calibrated

Protocol Used Instrument Used

Sample Description

Scope of Monitoring

: IS 9989; IS 9876

General Information

Sampling Location

Instrument Code

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

: Near Petrol Pump

VEL/JAI/SLM/09

Clear Sky

19/12/2020 To 20/12/2020

06.00 to 06.00 Hrs. Min 11 Max 25

Human, Vehicular & Plant Activity

Parameter Required As Per Work Order

S.No.	Test Parameters	Protocol	Test Result dB (A)	
74			Day Time	Night Time
1	Leq	IS: 9989-1981, IS 9876: 1981	56.91	45.54

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

^{1.} Day Time is from 6.00 AM to 10.00 PM.

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

End of Report

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Note: Terms & conditions refer on backside of test report.

Ph: 0141-2983404, 9810355569, 9953147268 E-mail: jaipur@vardanenvironet.com

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

^{3.} SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, ludspeaker and bursting of crackers is banned in these zones.







Test Report

Sample Number: VEL/REL/AN/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Format No

: VEL/N/2012220003/A

Party Reference No

: 7.8 F-01 : NIL

Report Date

Report No.

: 25/12/2020

Receipt Date

: 22/12/2020

Sampling Duration Sample Collected by : VEL Team

: 24 Hrs.

Instrument

: Calibrated

Sample Description Scope of Monitoring

: Ambient Noise

: Regulatory Requirement

Protocol Used

: IS 9989; IS 9876

Calibration Status

Instrument Used : SLM

> **General Information** Sampling Location

Instrument Code

Near Weight Bridge VEL/JAI/SLM/10

Meteorological condition during monitoring

Clear Sky

Date of Monitoring

19/12/2020 To 20/12/2020

Time of Monitoring

06.00 to 06.00 Hrs. Min 12 Max 28

Ambient Temperature (°C) **Surrounding Activity**

Human, Vehicular & Plant Activity

Parameter Required

As Per Work Order

S.No.	Test Parameters	Protocol	Test Res	ult dB (A)
	a de a franchista Varda a Varia de emokale en	En in di Ligaria di Caratta ten di Ligaria di Caratta	Day Time	Night Time
1	Leq	IS: 9989-1981, IS 9876: 1981	54.66	44.23

Outros of Topos	Leq i	n dB(A)
Category of Zones	Day	Night
Industrial	75	70
Commercial	65	55
Residential	55	45
Silence Zone	50	40

1. Day Time is from 6.00 AM to 10.00 PM.

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

3. SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, ludspeaker and bursting of crackers is banned in these zones.

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

End of Report

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Test Report

Sample Number: VEL/GW/01

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/W/2012220001/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 25/12/2020

Period of Analysis

Sampling Quantity

Sampling Type

: 22/12/2020-25/12/2020

Receipt Date

: 22/12/2020 : 21/12/2020

: 2 Ltr.

: Grab

: GROUND WATER Sampling Date

Sample Description Location

: R&R Colony (Open Well)

: VEL Team

Sample Collected by Preservation

: Suitable Preservation

Sampling and Analysis

: IS 10500 -2012

Protocol

S.No.	Parameters	Protocols	Results	Units	IS:10)500-2012
	and professional desired.	1 - 1 V 1 V 1 V 1 V 1 V 1 V 1 V 1 V 1 V	n V - C i Cin ()	lar l	Acceptable Limits	Permissible Limits
1	pH	IS 3025 (P-11): 1983 Reaff. 2017	7.56	-	6.5 to 8.5	No Relaxation
2	Total Dissolved Solids	IS 3025 (P-16): 1984 Reaff 2017	268.00	mg/l	500	2000
3	Total Alkalinity (as CaCO3)	IS: 3025 (Part 23): 1986, Reaff. 2019	141.90	mg/l	200	600
4	Total Hardness (as CaCO3)	IS: 3025 (Part 21): 2009, Reaff. 2019	185.40	mg/l	200	600
5	Nitrate (as NO3)	IS: 3025 (Part 34): 1988, Reaff. 2019	3.80	mg/l	45	No Relaxation
6	Chloride (as CI)	IS: 3025 (Part 32): 1988, Reaff. 2019	61.26	mg/l	250	1000
7	Sulphate (as SO4)	IS: 3025 (Part 24): 1986, Reaff. 2019 Turbidity Method	13.18	mg/l	200	400
8	Calcium (as Ca)	IS: 3025 (Part 40): 1991 Reaff. 2019	66.05	mg/l	75	200
9	Magnesium (as Mg)	IS: 3025 (Part 46): 1994, Reaff. 2009 (EDTA method)	5.01	mg/l	30	100
10	Fluorides (as F)	APHA 23rd Edition 2017, 4500 FD	0.23	mg/l	1.0	1.5
11	Phenolic Compound (as C6H5OH)	APHA 23rd Edition 2017, 5530C	*BDL(**DL-0.1 mg/l)	mg/l	0.001	0.002
12	Total Iron (as Fe)	IS 3025(P-53): 2003 Reaffirm 2019	*BDL(*DL- 0.1mg/l)	mg/l	0.3	No Relaxation
13	Arsenic (as As)	APHA (23rd edition-2017), 3114 C	*BDL(**DL-0.005 mg/l)	mg/l	0.01	0.05
14	Mercury (as Hg)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.0005 mg/l)	mg/l	0.001	No Relaxation
15	Lead (as Pb)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.005 mg/l)	mg/l	0.01	No Relaxation
16	Cadmium (as Cd)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.002 mg/l)	mg/l	0.003	No Relaxation
17	Chromium (as Cr)	APHA 23rd Edition Year 2017 Method No. 3113 B	*BDL(**DL-0.02 mg/l)	mg/l	0.05	No Relaxation
18	Copper (as Cu)	APHA 23rd Edition Year 2017 Method No. 3111B	*BDL(**DL-0.02 mg/l)	mg/l	0.05	1.5
19	Zinc (as Zn)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.20 mg/l)	mg/l	5.0	DAN ENVIR

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Note: Terms & conditions refer on backside of test report.

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Test Report

Sample Number :	VEL/GW/01	Report No.	: VEL/W/2012220001/A

S.No.	Parameters	Protocols	Results	Units	IS:10500-2012	
	The state of the s				Acceptable Limits	Permissible Limits
20	Selenium (as Se)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.005 mg/l)	mg/l	0.01	No Relaxation
21	Turbidity	IS 3025 (Part 10): 1984, Ref: 2017, (Nephelometeric Method)	*BDL(**DL 1.0 NTU)	NTU	1	5
22	Aluminium	IS 3025 (Part-55): 2003, Reaff. 2019	*BDL(**DL-0.03 mg/l)	mg/l	0.03	0.2
23	Manganese (as Mn)	IS: 3025 (Part 46): 1994, Reaff. 2019 (EDTA method)	*BDL(**DL-0.05 mg/l)	mg/l	0.1	0.3
24	Boron (as B)	APHA 23rd Edition Year 2017 Method No. 4500B	*BDL(**DL-0.2 mg/l)	mg/l	0.5	1.0
25	Free Residual Chlorine	IS: 3025 (Part 26): 1986 RA 2019	*BDL(**DL-0.2 mg/l)	mg/l	0.2	1

*BDL-Below Detection Limit, **DL-Detection Limit.

End of Report

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Test Report

Sample Number : VEL/GW/01

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/W/2012220001/B

: 7.8 F-01 Format No

Party Reference No ; NIL

Report Date

: 25/12/2020

Period of Analysis

: 22/12/2020-25/12/2020

Receipt Date

: 22/12/2020

: 21/12/2020

Sampling Date Sampling Quantity

: 2 Ltr.

Sampling Type

: Grab

Sample Description Location Sample Collected by

: R&R Colony (Open Well) : VEL Team

Preservation

: Suitable Preservation

: GROUND WATER

Sampling and Analysis

: IS 10500 -2012

S.No.	Parameters	Protocols	Results	Units	IS:10500-2012	
	is not a surface to the			11 11	Acceptable Limits	Permissible Limits
1	Total Coliform (By MPN Method)	IS:1622	Absent	MPN/10 0 ml	Shall not be Detectable in any 100 ml sample	NA
2	E-Coli	IS:1622	Absent	per 100 ml	Absent/100 ml	Absent/100 ml
3	Cyanide (as CN)	APHA 23rd Edition 2017, 4500CN D	*BDL(**DL-0.05 mg/l)	mg/l	0.05	No Relaxation
4	Colour	IS 3025: 1983 (P-4) RA 2017	*BDL(**DL 1.0 Hazen)	Hazen Unit	5	15
5	Odour	IS 3025 (P-5): RA. 2018	Agreeable	Qualitat ive	Agreeable	Agreeable
6	Taste	IS 3025(P-8):1984 RA. 2017	Agreeable	Qualitat Ive	Agreeable	Agreeable
7	Anionic Surface Active Agent	APHA 23rd Edition 2017, 5540C	*BDL(**DL-0.05 mg/l)	mg/l	0.2	1.0

^{*}BDL-Below Detection Limit, **DL-Detection Limit.

End of Report



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Test Report

Sample Number :

Sample Description

Sample Collected by

Parameter Required

VEL/WW/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: Waste Water

: As Per Work Order

: STP Outlet

: VEL Team

Report No.

: VEL/WW/2012220001/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 26/12/2020

Period of Analysis

: 22/12/2020-26/12/2020

Receipt Date

: 22/12/2020

Sampling Date

22/12/2020

Sampling Quantity

: 21/12/2020

Sampling Qu

2 Ltr. Grab

Sampling Type

· Olab

Sampling and Analysis Protocol

Location

: IS 3025

Packing Status

: Temp. Sealed

S.No.	Test Parameters	Test Method	Result	Unit	Prescribed Limit
		ar var vera daziri.			
1	рН	IS 3025 (P-11): 1983 RA2017	7.62		5.5 - 9.0
2	Total Suspended Solids	IS: 3025 (Part 17): 1984, RA2017	26.00	mg/l	100.0
3	Oil & Grease	IS 3025(P-39):1991 RA 2019	0.7	mg/l	10.0
4	BOD (3 days @ 27°C)	IS: 3025 (Part-44): 1993, RA: 2019	15.60	mg/l	30.0
5	COD	IS: 3025 (Part 58): 2006 RA: 2017	70.90	mg/l	250.0

End of Report





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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

Party Reference No

Report Date

: 30/01/2021

Period of Analysis

: 27/01/2021-30/01/202

Receipt Date

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

VEL Team

RDS/FPS

VEL/JAI/RDS/07/

Clear Sky

20/01/2021 To 21/01/20

10.00 to 10.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activi

Regulatory Requirement

IS:5182

24 Hrs. As Per Work Order

S.No.	Parameters Environtable Vanday	The state of the s	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	72.18	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	39.36	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	20.46	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.27	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	µg/m³	ali Vartum En
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	olat 6.0 lant
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	μg/m³	aurenvirolah aurofilih Viro

*BDL- Below Detection Limit,**DL-Detection

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/01

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

VEL/A/2101270009/B

Format No

Party Reference No

: NIL

Report Date

: 30/01/2021

Period of Analysis

: 27/01/2021-30/01/202

Receipt Date

27/01/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C) **Surrounding Activity**

Scope of Monitoring

Sampling & Analysis Protocol **Sampling Duration**

Parameter Required

VEL Team

RDS/FPS

VEL/JAI/RDS/07/I

Calibrated

Clear Sky

20/01/2021 To 21/01/202

10.00 to 10.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activi

Regulatory Requirement

IS:5182

24 Hrs.

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1 1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	μg/m³	Invirolati Vir

^{*}BDL- Below Detection Limit, **DL-Detection Limit

RAJ KUMAR YADAV





Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/02

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

VEL/A/2101270010/B

Format No

· 7.8 F-01

Party Reference No

Report Date : 30/01/2021

Period of Analysis

: 27/01/2021-30/01/202

Receipt Date

Sample Description

General Information

Sample Collected by

Sampling Location

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

: AMBIENT AIR

VEL Team

RDS/FPS

VEL/JAI/RDS/35/

Calibrated

Clear Sky

20/01/2021 To 21/01/2021

11.00 to 11.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

S.No.	Parameters	Envirolation Vest Method	Results	Units	Limit as per
TOTAL	Environably to due beyond ab	Vardin Envirolati Vardin Envirol	all transfers I to	ib Vandan t enceb Vaci	THE ENVIRONMENT
roLa	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	aviroladi vara Lab Vardan C

^{*}BDL- Below Detection Limit, **DL-Detection Limit

Checked By)

(Authorized Signatory)

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/02

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No. : VEL/A/2101270010/A

Format No : 7.8 F

Receipt Date

Party Reference No : NIL

Report Date : 30/01/2021

Period of Analysis : 27/01/2021-30/01/202

Sample Description

AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

R&R Colony 3.2 KM in NE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/35/FPS/25

0-10----

Calibrated

• -

Clear Sky

20/01/2021 To 21/01/202

11.00 to 11.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirem

: IS:5182

: 24 Hrs.

: As Per Work Order

S.No.	Parameters Envirol ab Vardan rollab Vardan Envirol ab Vard Envirol ab Vardan Envirolab	Test Method (glab Vargor)	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	73.65	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	34.82	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.88	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.48	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	μg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988,Method No.807:1988	BDL(DL 1.0)	μg/m³	manotada ya

*BDL- Below Detection Limit, **DL-Detection Limit

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Note: Terms & conditions refer on backside of test report.

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Format No

Report No.

Party Reference No

Report Date Period of Analysis

: 27/01/2021-30/01/20

Receipt Date

· 27/01/2021

Sample Description

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

VEL Team

RDS/FPS

VEL/JAI/RDS/3

Calibrated

Clear Sky

20/01/2021 To 21/01/20

12.00 to 12.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Act

S.No.	Parameters Envirolab Vardan Indiah Vardan Envirolah Vardan Envirolah Vardan Envirolah	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	69.46	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	43.13	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.06	µg/m³	80
411	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	11.80	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	ALATI 6.0
7 Line	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988,Method No.807:1988	BDL(DL 1.0)	μg/m³	netration va





Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/03

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

: 7.8 F-01

: 30/01/2021

Party Reference No

; NIL

Report Date

Period of Analysis

; 27/01/2021-30/01/202

Receipt Date

27/01/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C **Surrounding Activity**

Scope of Monitoring

Sampling & Analysis Protoco

Sampling Duration

Parameter Required

VEL Team

RDS/FPS

VEL/JAI/RDS/36/

Calibrated

Clear Sky

20/01/2021 To 21/01/202 12.00 to 12.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

IS:5182

S.No.	Parameters EnviroLab Vandau round van dan EnviroLab Van EnviroLab Van	Test Method	Results	Units	Limit as per CPCB
roLal	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	μg/m³	Lab. Varitin Fig.

*BDL- Below Detection Limit, **DL-Detection Limit

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/04

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: VEL/A/2101270012/A

Format No

7.8 F-01

Party Reference No

o : NIL

Report Date

; 30/01/2021

Period of Analysis

: 27/01/2021-30/01/202

Receipt Date

Report No.

27/01/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

instrument Campration Statt

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring
Time of Monitoring

Ambient Temperature (°C

Surrounding Activity

Scope of Monitoring
Sampling & Analysis Protocol

Sampling Duration

Parameter Required

STALL MANAGEMENT OF ANY PROPERTY AND PROPERTY OF THE PARTY OF THE PART

VEL Team

RDS/FPS

VEL/JAI/RDS/37/FPS/27

Calibrated

A-MAN CHI

Clear Sky

20/01/2021 To 21/01/2021

13.30 to 13.30 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	64.96	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	26.33	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.27	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.37	μg/m³	80

DINESH PALSANIYA

End of Report

RAJ KUMAR YADAV

G M (Authorized Signator) N

TECHNICAL MANAGER

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

Party Reference No

Report Date

: 30/01/2021

Period of Analysis

: 27/01/2021-30/01/202

Receipt Date

· 27/01/2021

Sample Description

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Stat

Latitude

Longitude

Meteorological condition durin

Date of Monitoring

Time of Monitoring

Ambient Temperature (

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

VEL Team

RDS/FPS

VEL/JAI/RDS/07/F

Calibrated

Clear Sky

21/01/2021 To 22/01/20

10.30 to 10.30 Hrs

Min 9 Max 20

Human, Vehicular & Plant Activity

IS:5182

S.No.	Parameters Environal Various	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	69.98	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	40.97	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	21.13	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.21	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	μg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No.807:1988	BDL(DL 1.0)	μg/m³	nyfrotab va

RAJ KUMAR YADAV

G MAUTHORIZED Signatory

(Checked By)





Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/04

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

Party Reference No

: 30/01/2021

Report Date Period of Analysis

: 27/01/2021-30/01/2021

Receipt Date

27/01/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during

Date of Monitoring

Time of Monitoring Ambient Temperature (°C

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

VEL Team

RDS/FPS

VEL/JAI/RDS/07/I

Calibrated

Clear Sky

21/01/2021 To 22/01/202

10.30 to 10.30 Hrs.

Min 9 Max 20

Human, Vehicular & Plant Activi

IS:5182

As Per Work Order

S.No.	Parameters Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	hā/w _s	ab Vardan Er

*BDL- Below Detection Limit, **DL-Detection Limit







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

: 7.8 F-01

Party Reference No

; NIL

Report Date

: 30/01/2021

Period of Analysis

: 27/01/2021-30/01/202

Receipt Date

27/01/2021

Sample Description

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

VEL Team

RDS/FPS

VEL/JAI/RDS/3

Calibrated

21/01/2021 To 22/01/2021

11.00 to 11.00 Hrs.

Min 9 Max 20

Human, Vehicular & Plant Activity

S.No.	Parameters I will all all and the control of the co	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	56.45	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	37.25	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	16.50	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.40	μg/m³	80

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Note: Terms & conditions refer on backside of test report.

Ph: 0141-2983404, 9810355569, 9953147268







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AA/07

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2101270015/A

Format No

7.8 F-01

Party Reference No

; NIL

Report Date

: 30/01/2021

Period of Analysis

: 27/01/2021-30/01/2021

Receipt Date

27/01/2021

Sample Description

AMBIENT AIR

General Information

Sampling Location

Al-Ai-u custion no

Sample Collected by Sampling Equipment used

: RDS/FPS

VEL Team

Instrument Code

VEL/JAI/RDS/36/FPS/2

Instrument Calibration Status

Calibrated

Latitude

: --

Longitude

HIT IS I

Meteorological condition during monitoring

: Clear Sky

Date of Monitoring

21/01/2021 To 22/01/202

Time of Monitoring

12.00 to 12.00 Hrs.

Ambient Temperature (°C

: Min 9 Max 20

Surrounding Activity

Human, Vehicular & Plant Activity

Scope of Monitoring

Regulatory Requirement

Sampling & Analysis Protocol

. 13.516

Sampling Duration

: 24 Hrs.

Parameter Required

: As Per Work Order

S.No.	Parameters Envirolati Vandani OLah Vandan Envirolati Van Invirolah Vandan Envirolati	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	68.88	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	31.31	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.61 V	μg/m³	80 0
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.78	μg/m³	80

End of Report

DINESH PALSANIYA

(Checked By)

TECHNICAL MANAGER

RAJ KUMAR YADAV

(Authorized Signatory)
M LAB OPERATION

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1





Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

Party Reference No

Report Date

: 30/01/2021

Period of Analysis

: 27/01/2021-30/01/202

Receipt Date

Sample Description

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration

Latitude

Longitude

Meteorological condition during

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration Parameter Required

VEL Team

RDS/VOC

VEL/JAI/RDS/37/

21/01/2021 To 22/01/202

13.00 to 13.00 Hrs.

Min 9 Max 20

Human, Vehicular & Plant Activity

Regulatory Requirement

S.No.	Parameters LuviroLab Vardan re Lab Vardan EnviroLab Vard LaviroLab Vardan RuviroLab	Test Method	Results	Units	Limit as per CPCB
101	Volatile Organic Compound (as BTX)	IS:5182 (P-11) :2006, RA 2017	*BDL(**DL-5.0ng/ m³)	μg/m³	nvice) ab vard Lab Vardan Er
	Polycyclic Aromatic Hydrocarbon (as PAH)	IS:5182 (P-12):2004	*BDL(**DL-5.0ng/ m³)	ng/m³	rat ab Vardan nvirot ab Vard

*BDL- Below Detection Limit, **DL-Detection Limit







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AN/01

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Ambient Noise Scope of Monitoring Regulatory Requirement

Protocol Used

Instrument Used

Sample Description

General Informatio Sampling Location

Instrument Code

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (

Surrounding Activity Parameter Required Report No.

Format No

Party Reference No

Report Date 30/01/2021 **Receipt Date** 27/01/2021

: 24 Hrs. Sampling Duration Sample Collected by : VEL Team Instrument

Calibration Status

In Front of mine Office

VEL/JAI/SLM/06

Clear Sky

20/01/2021 To 21/01/20

06.00 to 06.00 Hrs

Min 10 Max 20

Human, Vehicular & Plant Activity

As Per Work Order

S.No.	Fest Parameters Protocol	Test Result dB(A)		
Liwi Liwi	ıb Vardın EnviroLab Vardan i ot ili Yardın EnviroLab Vard	nyirol ab Validae Prefict ab in Envirol ab Varian Levirol	Day Time	Night Time
E1(v)	Legap Vandam Engliso Lab Work	IS 9989 - 1981	61.21	49.52

Category of Zones	a LyviroLitrygriling EgyiroLatev Led	q in dB(A)
Equipotate Variable Equipolation Variable	Day	Night
Industrial Mail Van Industrial III Was	an Emilyat ata Vara 75 1 ayılını (ata Va	ed in Environation 70 and an Terripola
Commercial	65	55
Residential	L VERNAUMENTE VERNEUE 55 HUIRALE IN VERN	les EnviroLidy 145 dan EnviroLab
Silence Zone	50	40 40

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

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







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AN/02

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Sample Description

: Ambient Noise

Scope of Monitoring

: Regulatory Requirement

Protocol Used

: IS 9989: IS 9876

Instrument Used

General Information

Instrument Code

Ambient Temperature (°

Report No.

Format No

Party Reference No

Report Date

30/01/2021

Receipt Date

27/01/2021

Sampling Duration Sample Collected by : VEL Team

: 24 Hrs.

Instrument

Calibrated

Calibration Status

Sampling Location

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Surrounding Activity

Parameter Required

Near Petrol Pump

VEL/JAI/SLM/08

Clear Sky 20/01/2021 To 21/01/202

06.00 to 06.00 Hrs Min 10 Max 20

Human, Vehicular & Plant Activity

As Per Work Order

S.No.	Test Parameters Protocol		Test Result dB(A)		
Env	ale Vierdan Envirolati sunding mbab Vordan Mastret ut Arus	Dring Lab Vandan Coviro Cab Sar Coviro Cabab Vandan Coviro Cab	Day Time	Night Time	
1	Leq ali Var Han Tandino. Il was	IS 9989 - 1981	58.32	46.15	

Category of Zones	Leq in dB(A)			
EnviroLab Vardoo tugged de Vardo	Day	Night		
Industrial Industrial Industrial	an ini Laviral sh Varr75 i Envire Cab V	ur er Unwind el 70 meliar Chwiretab		
Commercial	65	55		
Residential	III U IIIII EI Ale Vanda 55 Indinenale Van	do Luvie-Lab 45 dan EnvireLab 9		
Silence Zone	50	40		

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

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







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number: VEL/REL/AN/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: Ambient Noise

Scope of Monitoring

Sample Description

: Regulatory Requirement

Protocol Used

Instrument Used

Instrument Code

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (

Surrounding Activity

Parameter Required

Report No.

Format No Party Reference No

. 7.8 F-01

Report Date

: 30/01/2021

Receipt Date Sampling Duration 27/01/2021 : 24 Hrs.

Sample Collected by

: VEL Team

Instrument

Calibrated

Calibration Status

General Information

Sampling Location

Clear Sky

20/01/2021 To 21/01/2

Near Weight Bridge

VEL/JAI/SLM/09

06.00 to 06.00 Hrs

Min 10 Max 20

Human, Vehicular & Plant Activity

As Per Work Order

S.No.	Test Parameters	Protocol	Test Res	ult dB(A)
virot ab Vardan Uru Lenv oblidi Vardan	ah Vardan üpviret ah Vardan ratuh Vardan inviret ah Vard	rol ab Varifair Envirol of Pardan Rivelrol ab	Day Time	Night Time
1	Leg ab Vardan Emilionali yar	IS 9989 - 1981	56.24	45.31

Category of Zones	Leaving Vivides Lines Leaving Leaving	q in dB(A)
Trying ah Vandan Envirol ah Vanda	Day	Night
Industrial in a land Wandlin Towns and Market	ar lan Luwiw Lub Par 750 LuwraLati V.	u lan Luwiyati 70 malin tawajen y
Commercial	65	55
Residential	II Trouggain Viral-55Energes Leby Van	de Enviros de 45 dan Envirostati
Silence Zone	50	40

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

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







Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: GROUND WATER

Party Reference No : NIL

Format No

: 7.8 F-01

Report No.

Report Date

: 30/01/2021

Period of Analysis

: 27/01/2021-30/01/2021

Receipt Date

: 27/01/2021

Sampling Date

: 22/01/2021

Sampling Quantity

: 2 Ltr.

Sampling Type

Sample Description Location Sample Collected by

: R&R Colony (Open Well)

: VEL Team

Preservation

: Suitable Preservation

Sampling and Analysis

: IS 10500 -2012

Protocol

S.No.	Parameters Validati Envirolati Vanda	Protocols	Results	Units	IS:10500-2012	
					Acceptable Limits	Permissible Limits
1	bH an Asigna programme	IS 3025 (P-11): 1983 Reaff. 2017	7.62	WILDLE	6.5 to 8.5	No Relaxation
2	Total Dissolved Solids	IS 3025 (P-16): 1984 Reaff 2017	283.00	mg/l	500	2000
3	Total Alkalinity (as CaCO3)	IS: 3025 (Part 23): 1986, Reaff. 2019	135.80	mg/l	200	600
4	Total Hardness (as CaCO3)	IS: 3025 (Part 21): 2009, Reaff. 2019	196.00	mg/l	200	600
5	Nitrate (as NO3)	IS: 3025 (Part 34): 1988, Reaff. 2019	3.93	mg/l	45	No Relaxation
6	Chloride (as Cl)	IS: 3025 (Part 32): 1988, Reaff. 2019	63.17	mg/l	250	1000
7	Sulphate (as SO4)	IS: 3025 (Part 24): 1986, Reaff. 2019 Turbidity Method	13.68	mg/l	200	400
8	Calcium (as Ca)	IS: 3025 (Part 40): 1991 Reaff. 2019	69.13	mg/l	75	200
9	Magnesium (as Mg)	IS: 3025 (Part 46): 1994, Reaff. 2009 (EDTA method)	5.72	mg/l	30	100
10	Fluoridos (as F)	APHA 23rd Edition 2017, 4500 FD	Val 0.22	mg/l	1.0	1.5 m
11	Phenolic Compound (as C6H5OH)	APHA 23rd Edition 2017, 5530C	*BDL(**DL-0.1 mg/l)	mg/l	0.001	0.002
12	Total Iron (as Fe)	IS 3025(P-53): 2003 Reaffirm 2019	*BDL(*DL- 0.1mg/l)	mg/l	0.3	No Relaxation
13	Arsenic (as As)	APHA (23rd edition-2017), 3114 C	*BDL(**DL-0.005 mg/l)	mg/l	0.01	0.05
14	Mercury (as Hg)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.0005 mg/l)	mg/l	0.001	No Relaxation
15	Lead (as Pb)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.005 mg/l)	mg/l	0.01	No Relaxation
16	Cadmium (as Cd)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.002 mg/l)	mg/l	0.003	No Relaxation
17	Chromium (as Cr)	APHA 23rd Edition Year 2017 Method No. 3113 B	*BDL(**DL-0.02 mg/l)	mg/l	0.05	No Relaxation
18	Copper (as Cu)	APHA 23rd Edition Year 2017 Method No. 3111B	*BDL(**DL-0.02 mg/l)	mg/l	0.05	1.5
19	ZING (254) PALSANIYA	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.20 mg/l)	mg/l	5.0	15

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number :	VEL/GW/01	Report No.	: VEL/W/2101270001/A
		TOPO: LITO:	

S.No.	Parameters	Protocols	Results	Units	IS:10500-2012	
SIATE CLL			head of the mediant of a Sent Clary II. Sent		Acceptable Limits	Permissible Limits
20	Selenium (as Se)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.005 mg/l)	mg/l	0.01	No Relaxation
21	Turbidity	IS 3025 (Part 10): 1984, Ref: 2017, (Nephelometeric Method)	*BDL(**DL 1.0 NTU)	NTU	COLLY VAN do Voredan	an Unv5 ol ale Jednostub Van
22	Aluminium	IS 3025 (Part-55): 2003, Reaff. 2019	*BDL(**DL-0.03 mg/l)	mg/l	0.03	0.2
23	Manganese (as Mn)	IS: 3025 (Part 46): 1994, Reaff. 2019 (EDTA method)	*BDL(**DL-0.05 mg/l)	mg/l	0.1	0.3
24	Boron (as B)	APHA 23rd Edition Year 2017 Method No. 4500B	*BDL(**DL-0.2 mg/l)	mg/l	0.5	1.0
25	Free Residual Chlorine	IS: 3025 (Part 26): 1986 RA 2019	*BDL(**DL-0.2 mg/l)	mg/l	0.2	estate Varylair uviculado Vary

E*BDL-Below Detection Limit, **DL-Detection Limit.

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(Checked By)

DY FECHNICAL MANAGER

RYADAV

(Approved By)

Page No. 2/2





Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Format No

7.8 F-01

Party Reference No

: NIL

Report Date Period of Analysis : 30/01/2021

: 27/01/2021-30/01/202

Receipt Date

Report No.

: 27/01/2021

Sampling Date

: 22/01/2021

Sampling Quantity Sampling Type

: 2 Ltr.

: VEL Team : Suitable Preservation

: R&R Colony (Open Well)

: GROUND WATER

Sampling and Analysis

Sample Description

Sample Collected by

Preservation

: IS 10500 -2012

Protocol

Location

S.No.	Parameters	Protocols	Results	Units	IS:10500-2012	
Je I drut	ivi plab Vardan Erivimi. ib Vardun Engralub Var	b Vardan Envirêtab Vardan E bu (ovrotab Varda) Esvirot	rylodinia Vanda uli Vayeliyi I iy	T Smylin	Acceptable Limits	Permissible Limits
rdan Liny nlal an E	Total Coliform (By MPN Method)	IS:1622	Absent	MPN/10 0 ml	Shall not be Detectable in any 100 ml sample	er finnendab er finnendab er frot at Var fab Vatstan E i Eredrutab V
2	E-Coli	IS:1622	Absent	per 100 ml	Absent/100 ml	Absent/100 ml
3 ₁₀	Cyanide (as CN)	APHA 23rd Edition 2017, 4500CN D	*BDL(**DL-0.05 mg/l)	mg/l	0.05	No Relaxation
4	Colour	IS 3025: 1983 (P-4) RA 2017	*BDL(**DL 1.0 Hazen)	Hazen Unit	5	of all Visidan
5	Odour of the Vernier Environment of the Court of the Cour	iS 3025 (P-5): RA. 2018	Agreeable	Qualitat ive	Agreeable	Agreeable
6	Taste	IS 3025(P-8):1984 RA. 2017	Agreeable	Qualitat ive	Agreeable	Agreeable
7.0	Anionic Surface Active Agent	APHA 23rd Edition 2017, 5540C	*BDL(**DL-0.05 mg/l)	mg/l	0.2	1.0

*BDL-Below Detection Limit, **DL-Detection Limit,

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Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Sample Description

: Waste Water

Location

: STP Outlet

Sample Collected by Parameter Required

: VEL Team : As Per Work Order

Sampling and Analysis

IS 3025

Protocol

Report No.

Format No

Party Reference No

NIL

Report Date

Period of Analysis

29/01/2021

Receipt Date

: 27/01/2021-29/01

Sampling Date

: 27/01/2021

Sampling Quantity

: 22/01/2021

: 2 Ltr.

Sampling Type

: Grab

Packing Status

: Temp. Sealed

S.No.	Test Parameters	Test Method	Result	Unit	Prescribed Limit
	Vardan Envirol al Vardan tylpolaib Verdan Envirol al	t i virist alı Vorulnia EnviroLab Vardio Virilgi EnviroLab Vorulan EnviroLa		dan Envir	olah Vardan ki V - Guvirolah V
110	pH(a) Vardon Environal 4	IS 3025 (P-11): 1983 RA2017	7.51	h Vinedan	5.5 - 9.0
2	Total Suspended Solids	IS: 3025 (Part 17): 1984, RA2017	22.9	mg/l	100.0
3	Oil & Grease	IS 3025(P-39):1991 RA 2019	0.5	mg/l	10.0
4	BOD (3 days @ 27°C)	IS: 3025 (Part-44): 1993, RA: 2019	13.5	mg/l	30.0
5	COD ·	IS: 3025 (Part 58): 2006 RA: 2017	60.72	mg/l	250.0

(Checked By)

RAJ KUMAR YADAV

(Authorized Signatory

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number: VEL/REL/AA/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250007/A

Format No

: 7.8 F-01

Party Reference No

Report Date

: NIL : 27/02/2021

Period of Analysis Receipt Date

: 25/02/2021-27/02/2021 : 25/02/2021

Sample Description

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

: AMBIENT AIR

Rest Shelter 1.5 KM in SE From the Mine

VEL Team

RDS/FPS

VEL/JAI/RDS/22/FPS/22

Calibrated

Clear Sky

20/02/2021 To 21/02/202

11.00 to 11.00 Hrs

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement IS:5182

24 Hrs.

Parameter Required

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	73.19	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	38.27	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	21.62	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.17	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	μg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No.807:1988	BDL(DL 1.0)	µg/m³	Environate V

BDL-Below Detection Limit, **DL-Detection Limit

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1





Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020

MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

VEL/REL/AA/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250007/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

. 25/02/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

Rest Shelter 1.5 KM in SE From the Mine

VEL Team

RDS/FPS

VEL/JAI/RDS/22/FPS/22

Calibrated

Clear Sky

20/02/2021 To 21/02/2021

11.00 to 11.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement IS:5182

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	Enviso <u>L</u> ate Vi pLab Vardan

*BDL-Below Detection Limit, **DL-Detection Limit

DINESH PALSANIYA

DY CHECKIPICAL MANAGER

***End of Report*

(Authorized Signatory) GM LAR OPERATION

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number:

VEL/REL/AA/02

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250008/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/202

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

: 25/02/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration Parameter Required

Sampling Equipment used

R&R Colony 3.2 KM in NE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/23/FPS/23

Calibrated

Clear Sky

20/02/2021 To 21/02/2021

12.00 to 12.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	75.83	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	35.44	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.00	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.08	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	µg/m³	Covino Lab V.

*BDL-Below Detection Limit, **DL-Detection Limit

End of Report***

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Ph: 0141-2983404, 9810355569, 9953147268 E-mail: jaipur@vardanenvironet.com

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Test Report

Sample Number:

VEL/REL/AA/02

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250008/B

· 7.8 F-01

Party Reference No.

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

: 25/02/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

R&R Colony 3.2 KM in NE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/23/FPS/23

Calibrated

Clear Sky

20/02/2021 To 21/02/2021

12.00 to 12.00 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0	µg/m³	Envision by

^{*}BDL-Below Detection Limit, **DL-Detection Limit

DINESH PALSANIYA

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number:

VEL/REL/AA/03

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250009/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

Village - Khinda 3 KM in SE From the mine

25/02/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration Parameter Required

VEL Team

RDS/FPS

VEL/JAI/RDS/24/FPS/24

Calibrated

Clear Sky

20/02/2021 To 21/02/2021

12.30 to 12.30 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182 24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	68.88	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	44.30	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	20.10	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	11.59	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	μg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	µg/m³	rein Entry

BDL-Below Detection Limit DL Detection Limit

End of Report*

DINESH PALSANIYA

TENERHOLDE MANAGER

G M LAB OPERATION

Page No. 1/1

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Note: Terms & conditions refer on backside of test report.





Test Report

Sample Number:

VEL/REL/AA/03

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250009/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

: 25/02/2021

Sample Description

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

: AMBIENT AIR

Village - Khinda 3 KM in SE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/24/FPS/24

Calibrated

Clear Sky

20/02/2021 To 21/02/2021

12.30 to 12.30 Hrs

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	nonote a ve

BDL-Below Detection Limit DL Detection Limit

NESH PALSANIYA

(Checked By) FECHNICAL MANAGER

(Authorized Signatory) LAB OPERATION

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number:

Name & Address of the Party

VEL/REL/AA/04

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250010/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

: 25/02/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Village Babu Khinda 3 KM in NE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/25/FPS/25

Calibrated

Clear Sky

20/02/2021 To 21/02/202

13.30 to 13.30 Hrs.

Min 10 Max 22

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	66.75	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	26.84	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.71	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.97	μg/m³	80

DINESH PALSANIYA

DY (Checked By)

(Authorized Signatory)

Page No. 1/1

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Note: Terms & conditions refer on backside of test report.







Test Report

Sample Number:

VEL/REL/AA/05

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250011/A

Format No.

- 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

: 25/02/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Village Babu Khinda 3 KM in NE From the mine VEL Team

Sample Collected by Sampling Equipment used

RDS/FPS

VEL/JAI/RDS/22/FPS/22

Instrument Code Instrument Calibration Status

Latitude

Calibrated

Longitude

Meteorological condition during monitoring

Clear Sky

Date of Monitoring

21/02/2021 To 22/02/202

Time of Monitoring

10.30 to 10.30 Hrs.

Ambient Temperature (°C

Min 11 Max 24

Surrounding Activity

Human, Vehicular & Plant Activity

Regulatory Requirement

Scope of Monitoring Sampling & Analysis Protocol

IS:5182

Sampling Duration

24 Hrs.

Parameter Required

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	70.50	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	40.76	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	22.08	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.06	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 μg/m³)	μg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	µg/m³	Eridirest do v

BDL-Below Detection Limit DL Detection Limit

DINESH PALSANIYA

End of Report

DY TENERAL MANAGER

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Note: Terms & conditions refer on backside of test report.

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Test Report

Sample Number: VEL/REL/AA/05

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250011/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

: 25/02/2021

Sample Description

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

: AMBIENT AIR

Village Babu Khinda 3 KM in NE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/22/FPS/22

Calibrated

Clear Sky

21/02/2021 To 22/02/2021

10.30 to 10.30 Hrs.

Min 11 Max 24

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	Lab verden

BDL-Below Detection Limit DL Detection Limit

RAJ KUMAR YADAV

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number :

VEL/REL/AA/06

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250012/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

9.17

: 25/02/2021-27/02/2021

Receipt Date

: 25/02/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Near Petrol Pump

VEL Team

RDS/FPS

VEL/JAI/RDS/23/FPS/23

Calibrated

Clear Sky

21/02/2021 To 22/02/2021

11.30 to 11.30 Hrs.

Min 11 Max 24

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs. As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	58.06	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	36.96	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	17.02	µg/m³	80

Sulphur Dioxide (as SO2)

Checked BYAL MANAGER

*End of Report***

IS:5182 (P-2)-2001, RA. 2017

RAJ KUMAR YADAV

µg/m³

(Authorized Signatory) LAB OPERATION

80

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number:

VEL/REL/AA/07

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250013/A

Format No.

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

. 25/02/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

In Front of the Mine Office

VEL Team

RDS/FPS

VEL/JAI/RDS/24/FPS/24

Calibrated

Clear Sky

21/02/2021 To 22/02/2021

12.30 to 12.30 Hrs.

Min 11 Max 24

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	69.42	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	32.88	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.32	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.59	μg/m³	80
1010	Sulphur bloxide (as 502)	15:5182 (P- 2)-2001, RA. 2017	9.59	μg/m³	lan

RAJ KUMAR YADAV

G M LAB (Authorized Signatory)

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1





Test Report

Sample Number:

VEL/REL/AA/08

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2102250014/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 27/02/2021

Period of Analysis

: 25/02/2021-27/02/2021

Receipt Date

: 25/02/2021

Sample Description

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

: AMBIENT AIR

A1 Down Wind Point of Talaira Mine Area

VEL Team

RDS/VOC

VEL/JAI/RDS/2/VOC/0

Calibrated

Clear Sky

21/02/2021 To 22/02/2021

13.30 to 13.30 Hrs.

Min 11 Max 24

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Volatile Organic Compound (as BTX)	IS:5182 (P-11) :2006, RA 2017	BDL (*DL1.0 μg/m³)	µg/m³	Lab Vargen
	Polycyclic Aromatic Hydrocarbon (as PAH)	IS:5182 (P-12):2004	*BDL(**DL-5.0ng/ m³)	ng/m³	roLab V arda rovimi ab Va

BDL-Below Detection Limit DL Detection Limit

***End of Report*

Page No. 1/1

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Note: Terms & conditions refer on backside of test report.





Report No.

Format No Party Reference No

Report Date Receipt Date

Instrument

Sampling Duration

Calibration Status

Sample Collected by

: VEL/N/2102250001/A

7.8 F-01

25/02/202 24 Hrs

: VEL Team

: Calibrated

: NIL



Laboratory: Plot No. 24 & 25, Narayan Vihar, B-Block, Jaipur (Rajasthan) 302020 MoEF & CC Recognized | ISO 9001 | ISO 45001

Test Report

Sample Number:

VEL/REL/AN/01

Name & Address of the Party : M/s Raipur Energen Limited

(CG)Talabira Mines

Village: Raikheda, Block-Tilda Dist. Raipur -493225

Sample Description Scope of Monitoring

Ambient Noise : Regulatory Requirement

Protocol Used

IS 9989: IS 9876

Instrument Used

General Information

Sampling Location

Instrument Code

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (

Surrounding Activity Parameter Required

In Front of the mine office

VEL/JAI/SLM/05

Clear Sky

20/02/2021 To 21/02/202

06.00 to 06.00 Hrs Min 11 Max 24

Human, Vehicular & Plant Activit

As Per Work Order

S.No.	No. Test Parameters	st Parameters Protocol	Test Result dB(A)		
	ab Vardan Envirol.ab Vardan Irolab Vardan Envirol.ab Vard	EnviroLab Vardan EnviroLab Jan EnviroLab Vardan Envirol	Day Time	Night Time	
1 1	Leq ab Vardan EnviroLab Var	IS 9989 - 1981	62.33	48.54	

Category of Zones	rdan EnviroLab Vardan EnviroLab VLeq in de	3(A) roLab Vardan EnviroLab
Category of Zones	Day	Night
Industrial Walan Mandan Envirol ab \	Var Jan EnviroLab Var 75 n EnviroLab Van Jar	n EnviroLa70/ardan EnviroLa
Commercial	65	55
Residential Lab Vandan EnviroLab Va	rdan EnviroLab Varda55EnviroLab Vardan I	EnviroLab 45 rdan EnviroLah
Silence Zone	enviroLab Vardan Envi ₅₀ ah Vardan Envi ₀	Lab Varda 40 nviroLab Varda

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

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

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Note: Terms & conditions refer on backside of test report.







Test Report

Sample Number:

VEL/REL/AN/02

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: Regulatory Requirement

Sample Description

Scope of Monitoring

Protocol Used

Instrument Used

: IS 9989: IS 9876

General Information

Sampling Location

Instrument Code

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Parameter Required

Report No.

7.8 F-01

Format No Party Reference No

Report Date Receipt Date : 02/03/202

25/02/202 : 24 Hrs.

: VEL/N/2102250002/A

Sampling Duration

Sample Collected by : VEL Team Instrument

Calibration Status

VEL/JAI/SLM/06

Clear Sky

20/02/2021 To 21/02/2021

06.00 to 06.00 Hrs

Min 11 Max 24

Human, Vehicular & Plant Activity

As Per Work Order

S.No. Test Parameters	Protocol Indian Envirol ab Vardan Envirol ab Lab Envirol ab Vardan Envirol ab	Test Result dB(A)		
viro ab Vardan Enviro ab Vardan Enviro Lab Vardan Enviro Lab Var		Vandan Day Time	Night Time	
1 Leq ab Vardan Envirol ab Var	IS 9989 - 1981	60.21	ab Vard 47.25 viro	

an EnviroLab Vardan EnviroLab Vardan Er	to EnviroLab Vardan EnviroLab Leq in dB(A) rol ab vardan EnviroLab L				
Category of Zones	ab Vardan EnvDay ab Vardan Env	rotali Vard Night virotali Vardan			
Industrial Total Vardan EnviroLab Vardan	EnviroLab Var 75 EnviroLab Var	nyhotali Va ₇₀ an Envirotab Var			
Commercial	roLab Vardan 65 ViroLab Vardan	mviroLali V 55 m EnviroLab Var			
Residential	55	45 Vardan E			
Silence Zone	ab Vardan Envi50 Lab Vardan Envi	roLab Varda 40 nviroLab Vardan			

1. Day Time is from 6.00 AM to 10.00 PM.

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

3. SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn, ludspeaker and bursting of crackers is banned in these zones

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

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Test Report

Sample Number:

VEL/REL/AN/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No Party Reference No

Report Date Receipt Date

- 25/02/202 Sampling Duration

VEL/N/2102250003/A

Sample Collected by : VEL Team

Sample Description

: Ambient Noise : Regulatory Requirement

Scope of Monitoring Protocol Used

: IS 9989: IS 9876

Instrument Used

General Information

Sampling Location

Instrument Code

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (

Surrounding Activity Parameter Required

Near Weight Bridge VEL/JAI/SLM/07

Clear Sky

20/02/2021 To 21/02/202

06.00 to 06.00 Hrs

Min 11 Max 24 Human, Vehicular & Plant Activity

As Per Work Order

S.No.	Test Parameters	Parameters Protocol Test		Result dB(A)	
viro.	lab Vardan Envirotab Vardan Irotab Vardan Envirotab Var	EnviroLab Vardan EnviroLab Can EnviroLab Vardan EnviroL	ardan Day Time ab Vard. ab Vardan Enviro Lab V	Night Time	
1	Leq ab Vardan EnviroLab Var	IS 9989 - 1981	ab vard 55.10	43.26	

Category of Zones	rd in EnviroLab Vardan EnviroLab \Leq in dB(A) iroLab Vardan EnviroLab V				
Category of Zones	Day	Night Value Night			
Industrial / iroLab Vardan EnviroLab Vard	an Envirol ab Var75 n Envirol ab Var	Jan Envirot 70 Vardan Envirot a			
Commercial	65	EnviroLab V 55 an EnviroLab Va			
Residential Lab Vardan EnviroLab Vardan	EnviroLab Vard 55 EnviroLab Vard	n Enviros ab 45 rdan Enviros ab			
Silence Zone	oLab Vardan Env 50 Lab Vardan Env	roLab Varda 40 nviroLab Varda			

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

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

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Note: Terms & conditions refer on backside of test report.







Test Report

Sample Number:

VEL/REL/GW/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/W/2102250007/A

Format No

7.8 F-01

Party Reference No

: NIL

Report Date

: 01/03/2021

Period of Analysis

: 25/02/2021-01/03/2021

Receipt Date

: 25/02/2021

Sampling Date

Sampling Quantity

: 20/02/2021

Sampling Type

: 2 Ltr. : Grab

Sample Description Location

: GROUND WATER : R&R Colony (Open Well)

Sample Collected by

: VEL Team

: Suitable Preservation

Sampling and Analysis

: IS 10500 -2012

Protocol

Preservation

S.No.	Parameters	Protocols	Results	Units	IS:10500-2012	
an E	b Vardan Envirotab Var tvirotab Vardan Enviro ab Vardan Envicot ab V	dan EnviroLab Vardan EnviroLa Lab Vardan EnviroLab Vardan I urlan EnviroLab Vardan Enviro	b Vardan Enviro InviroLab Varda Lab Vardan Env	Lab Va n Envir roLab V	Acceptable Limits	Permissible Limits
111	pH ab Vardan Envirot a	IS 3025 (P-11): 1983 Reaff. 2017	7.54 dan	nyirol	6.5 to 8.5	No Relaxation
2	Total Dissolved Solids	IS 3025 (P-16): 1984 Reaff 2017	379	mg/l	500	2000
3	Total Alkalinity (as CaCO3)	IS: 3025 (Part 23): 1986, Reaff. 2019	Var 126.1	mg/l	200	600
4	Total Hardness (as CaCO3)	IS: 3025 (Part 21): 2009, Reaff. 2019	nvirol ₁₈₄ Varda	mg/l	200	600
5	Nitrate (as NO3)	IS: 3025 (Part 34): 1988, Reaff. 2019	2.37	mg/l	45	No Relaxation
6	Chloride (as CI)	IS: 3025 (Part 32): 1988, Reaff. 2019	Envir71.8 b Var	mg/l	250	1000
7	Sulphate (as SO4)	IS: 3025 (Part 24); 1986, Reaff. 2019 Turbidity Method	14.36	mg/l	200	400
8	Calcium (as Ca)	IS: 3025 (Part 40): 1991 Reaff. 2019	64.53	mg/l	75	200
9	Magnesium (as Mg)	IS: 3025 (Part 46): 1994, Reaff. 2009 (EDTA method)	5.6	mg/l	30	100
10	Fluorides (as F)	APHA 23rd Edition 2017, 4500 FD	0.21	mg/l	1.0	1.5
1 1 1 1 1 1 1 1	Phenolic Compound (as C6H5OH)	APHA 23rd Edition 2017, 5530C	*BDL(**DL-0.001)	mg/l	0.001	0.002
12	Total Iron (as Fe)	IS 3025(P-53): 2003 Reaffirm 2019	*BDL(**DL-0.1)	mg/l	0.3	No Relaxation
13	Arsenic (as As)	APHA (23rd edition-2017), 3114 C	*BDL(**DL-0.005)	mg/l	0.01	0.05
14	Mercury (as Hg)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.0005)	mg/l	0.001	No Relaxation
15	Lead (as Pb)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.005)	mg/l	0.01 ab Vardan	No Relaxation
16	Cadmium (as Cd)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.002)	mg/l	0.003	No Relaxation
17	Chromium (as Cr)	APHA 23rd Edition Year 2017 Method No. 3113 B	*BDL(**DL-0.02)	mg/l	0.05	No Relaxation
18	Copper (as Cu)	APHA 23rd Edition Year 2017 Method No. 3111B	*BDL(**DL-0.02)	mg/l	0.05	1.5
19 2	Zinc (as Zn)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.20)	mg/l	5.0	15
20 5	Selenium (as Se) NESH PALSANIYA	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.005)	mg/l	0.01	No Relaxation

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Note: Terms & conditions refer on backside of test report.

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Test Report

Sample Number :

VEL/REL/GW/0

Report No

VEL/W/2102250007/A

				кероп но.		: VEL/VV/2102250007/A	
S.No.	Parameters	Protocols	Results	Units	IS:10500-2012		
ins	ret ab Kardan Covirota Vardan Covitotab Var	ib Vardan Envirotah Verdan Envirotat dan Envirotah Verdan Envirotat	rni sh vardag H Vardan Enviro	nvicota Jubi var	Acceptable Limits	Permissible Limits	
21	Turbidity	IS 3025 (Part 10): 1984, Ref: 2017, (Nephelometeric Method)	*BDL(**DL-1.0)	NTU	1	5	
22	Aluminium	IS 3025 (Part-55): 2003, Reaff. 2019	*BDL(**DL-0.03)	mg/l	0.03	0.2	
23	Manganese (as Mn)	IS: 3025 (Part 46): 1994, Reaff. 2019 (EDTA method)	*BDL(**DL-0.05)	mg/l	0.1	0.3	
24	Boron (as B)	APHA 23rd Edition Year 2017 Method No. 4500B	*BDL(**DL-0.2)	mg/l	0.5	1.0	
25	Free Residual Chlorine	IS: 3025 (Part 26): 1986 RA 2019	*BDL(**DL-0.2)	mg/l	0.2	1	

*BDL-Below Detection Limit **DL-Detection Lim

DINESH PALSANIYA

End of Report

RAJ KUMAR YADAV

(Authorized Signatory)

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Test Report

Sample Number:

VEL/REL/GW/01

Name & Address of the Party

M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/W/2102250007/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 01/03/2021

Period of Analysis

: 25/02/2021-01/03/2021

Receipt Date

: 25/02/2021

Sampling Date

Sampling Quantity

: 20/02/2021 : 2 Ltr.

Sampling Type

: Grab

Sample Collected by

Sample Description

: R&R Colony (Open Well) : VEL Team

Preservation

: Suitable Preservation

: GROUND WATER

Sampling and Analysis

: IS 10500 -2012

Protocol

Location

S.No.	Parameters	Protocols	Results	Units	IS:10500-2012	
an E	iviroLab Vardan EnviroL ab Vardan EnviroLab Var	b Vardan EnviroLab Vardan E dan EnviroLab Vardan Envirol	nviroLab Varda ab Vardan Env		Acceptable Limits	Permissible Limits
E1w dan Env oLal an E	Total Coliform (By MPN Method)	Vardan Env IS:1622 Vardan Env Lab Vardan Envirolab Vardan Vardan Envirolab Vardan Env In Envirolab Vardan Envirola Envirolab Vardan Envirola	Absent	MPN/10 0 ml	Shall not be Detectable in any 100 ml sample	NA mytoolab Var lab Vardan L
2	E-Coli dan EpyiroLab Var Lua Vardair EnviroLab	dan Envirol IS:1622 dan Envirol Vardan Envirol Bab Vat dan Env	Absent	per 100 ml	Absent/100 ml	Absent/100 ml
3	Cyanide (as CN)	APHA 23rd Edition 2017, 4500CN D	*BDL(**DL-0.05)	mg/l	0.05	No Relaxation
an E	Colour in Envirot ab yard	IS 3025: 1983 (P-4) RA 2017	*BDL(**DL-1.0)	Hazen Unit	5 Virginia da	Lab V 15 an E EnviroLab V
5	Odour Vargan EnviroLab	IS 3025 (P-5): RA. 2018	Agreeable	Qualitat ive	Agreeable	Agreeable
6 oLa	Taste by Vardan EnviroLab Vardan EnviroLab Vard	IS 3025(P-8):1984 RA. 2017	Agreeable	Qualitat ive	Agreeable	Agreeable
7	Anionic Surface Active Agent	APHA 23rd Edition 2017, 5540C	*BDL(**DL-0.05)	mg/l	0.2	1.0

*BDL-Below Detection Limit, **DL-Detection Limit

DINESH PALSANIYA

**End of Report*

RAJ KUMAR YADAV

(Authorized Signatory)

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number:

VEL/REL/WW/01

Name & Address of the Party

: M/s Raipur Energen Limited

(CG)Talabira Mines

Village: Raikheda, Block-Tilda Dist. Raipur -493225

Location

: Waste Water : STP Outlet

Sample Collected by

Sample Description

: VEL Team : As Per Work Order

Parameter Required Sampling and Analysis

Protocol

: IS 3025

Report No.

: VEL/WW/2102250001/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 01/03/2021

Period of Analysis Receipt Date

: 25/02/2021-01/03/2021

Sampling Date

: 25/02/2021 : 20/02/2021

Sampling Quantity

: 2 Ltr.

Sampling Type

: Grab

Packing Status

: Temp. Sealed

S.No.	Test Parameters	Test Method	Result	Unit	Prescribed Limit
	b Vardan EnviroLab Vardan nviroLab Vardan EnviroLab	EnviroLab Vardan EnviroLab Vardan Vardan EnviroLab Vardan EnviroLab		ordan Envir	oLab Vardan R en EnviroLab M
1	pH Lab Vardan EnviroLab Varda	IS 3025 (P-11): 1983 RA2017	7.28	Var dan En Jab Vardan	5.5 - 9.0
2	Total Suspended Solids	IS: 3025 (Part 17): 1984, RA2017	23.40	mg/l	100.0
3	Oil & Grease	IS 3025(P-39):1991 RA 2019	0.7	mg/l	10.0
4	BOD (3 days @ 27°C)	IS: 3025 (Part-44): 1993, RA: 2019	Va 12.60 Envi	mg/l	30.0
5	COD	IS: 3025 (Part 58): 2006 RA: 2017	40.48	mg/l	250.0

**End of Report*

DINESH PALSANIYA

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number: VEL/REL/AA/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: VEL/A/2103240001/A Report No.

- 7.8 F-01 Format No.

Party Reference No. : NIL

Report Date : 31/03/2021 : 24/03/2021-31/03/2021

Period of Analysis Receipt Date . 24/03/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

Rest Shelter 1.5 KM in SE From the Mine

VEL Team

RDS/FPS

VEL/JAI/RDS/22/FPS/22

Calibrated

19/03/2021 To 20/03/202

10.00 to 10.00 Hrs.

Min 19 Max 32

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182 24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	76.29	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	37.27	μg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	22.35	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.97	µg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	BDL(DL 1.0)	µg/m³	melro (56 va

BDL**(Below Detection Limit) DL Detection Limit

***End of Report*

(Checked By)

TECHNICAL MANAGER

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Note: Terms & conditions refer on backside of test report.





Test Report

Sample Number: VEL/REL/AA/01

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2103240001/B

: 24/03/2021-31/03/2021

Format No

· 7.8 F-01

Party Reference No

: NIL

Report Date

: 31/03/2021

Period of Analysis

Receipt Date

. 24/03/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Rest Shelter 1.5 KM in SE From the Mine

VEL Team

RDS/FPS

VEL/JAI/RDS/22/FPS/22

Calibrated

Clear Sky

19/03/2021 To 20/03/2021

10.00 to 10.00 Hrs. Min 19 Max 32

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
01,	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	µg/m³	Lab Yardan E

BDL**(Below Detection Limit) DL Detection Limit

End of Report

DINASH PALSANIYA

(Checked By)

TECHNICAL MANAGER

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number: VEL/REL/AA/02

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist, Raipur -493225

(CG)Talabira Mines

: VEL/A/2103240002/A Report No.

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

Report Date : 31/03/2021

: 24/03/2021-31/03/2021 Period of Analysis

Receipt Date . 24/03/2021

Sample Description

AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

R&R Colony 3.2 Km in NE From the Mine

VEL Team

RDS/FPS

VEL/JAI/RDS/23/FPS/23

Clear Sky

19/03/2021 To 20/03/2021

11.00 to 11.00 Hrs.

Min 19 Max 32

Human, Vehicular & Plant Activit

Regulatory Requirement

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	73.26	μg/m²	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	33.30	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P-6)-2006 RA.2017	19.49	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.80	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	BDL (*DL 0.02 µg/m³)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	BDL (*DL1.0 ng/m³)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807: 1988	BDL(DL 1.0)	µg/m³	Inviro (Sh Va

BDL**(Below Detection Limit) DL Detection Limit

DINESH PALSANIYA

***End of Report**

OKCHECKED BYICAL MANAGER

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Note: Terms & conditions refer on backside of test report





Test Report

Sample Number: \

Name & Address of the Party

VEL/REL/AA/02

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2103240002/B

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 31/03/2021

Period of Analysis

: 24/03/2021-31/03/2021

Receipt Date

24/03/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

matrament code

Instrument Calibration Status

Latitude

Longitude

Material

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring
Sampling & Analysis Protocol

Sampling Duration

Parameter Required

metati Varnium kimplinetalli yangam

R&R Colony 3.2 Km in NE From the Mine

VEL Team

RDS/FPS

: VEL/JAI/RDS/23/FPS/23

: Calibrated

to - Evision

: Clear Sky

. Clear Sky

19/03/2021 To 20/03/2021 11.00 to 11.00 Hrs.

Min 19 Max 32

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

: As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis, 3rd ed., 1988, Method No.317	BDL (*DL1.0 ng/m³)	hā/w ₂	tal(Vardan)

BDL**(Below Detection Limit) DL Detection Limit

End of Report

(Checked By)

(Authorized Signatory)

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Test Report

VEL Team RDS/FPS

Village - Khinda 3 KM in SE From the Mine

Sample Number: VEL/REL/AA/03

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No. : VEL/A/2103240003/A

Format No : 7.8 F-01

Party Reference No : NIL Report Date : 31/03/2021

Report Date : 31/03/2021 Period of Analysis : 24/03/2021-31/03/2021

Receipt Date : 24/03/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code : VEL/JAI/RDS/2/FPS/24

Instrument Calibration Status : Calibrated

Latitude wirehalt Vandan Environali Van :

Longitude :

Meteorological condition during monitoring : Clear Sky

Date of Monitoring : 19/03/2021 To 20/03/2021

Time of Monitoring : 12.00 to 12.00 Hrs.
Ambient Temperature (°C) : Min 19 Max 32

Surrounding Activity : Human, Vehicular & Plant Activity

Scope of Monitoring : Regulatory Requirement
Sampling & Analysis Protocol : IS:5182

Sampling Duration : 24 Hrs.

Parameter Required : As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	70.24	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	39.16	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	19.26	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.49	µg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	*BDL(**DL-0.05 µg/m3)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	*BDL(**DL-1.0 ng/m3)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	*BDL(**DL-0.2µg/ m³)	µg/m³	miroLau V

BDL**(Below Detection Limit) DL Detection Limit

End of Report

(Checked By)

(Authorized Signatory)

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Note: Terms & conditions refer on backside of test report.





Test Report

Sample Number: VEL/REL/AA/03

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2103240003/B

Format No

· 7.8 F-01

Party Reference No

: NIL

Report Date

: 31/03/2021

Period of Analysis

: 24/03/2021-31/03/2021

Receipt Date

: 24/03/2021

Sample Description

: AMBIENT AIR

General Information Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration

Parameter Required

Village - Khinda 3 KM in SE From the Mine

VEL Team

RDS/FPS

VEL/JAI/RDS/2/FPS/24

Calibrated

Clear Sky

19/03/2021 To 20/03/2021

12.00 to 12.00 Hrs.

Min 19 Max 32

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
012	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	μg/m³	Lab Vardun E

BDL**(Below Detection Limit) DL Detection Limit

End of Report

(Checked By) AL MANAGER

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Test Report

Sample Number: VEL/REL/AA/04

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2103240004/A

Format No.

. 7.8 F-01

Party Reference No : NIL

Report Date

: 31/03/2021

Period of Analysis

: 24/03/2021-31/03/2021

Receipt Date

. 24/03/2021

Sample Description

: AMBIENT AIR

General Information Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Village - Babu Khinda 3 Km in NE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/25/FPS/25

Calibrated

Clear Sky

19/03/2021 To 20/03/2021 13.00 to 13.00 Hrs.

Min 19 Max 32

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	64.36	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	26.97	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	18.35	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.19	µg/m³	80

(Checked By) UNICAL MANAGER

G M LAB OPERATION

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Test Report

Sample Number: VEL/REL/AA/05

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: VEL/A/2103240005/A

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

Report No.

: 31/03/2021

Period of Analysis

: 24/03/2021-31/03/2021

Receipt Date

: 24/03/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C

Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

Village - Babu Khinda 3 Km in NE From the mine

VEL Team

RDS/FPS

VEL/JAI/RDS/22/FPS/22

Calibrated

Clear Sky

20/03/2021 To 21/03/202 10.00 to 10.00 Hrs.

Min 18 Max 33

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182 24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
113	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	71.25	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	32.22	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	22.13	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	10.52	μg/m³	80
5	Lead (as Pb)	IS 5182 (P-22) : 2004 RA.2014	*BDL(**DL-0.05 µg/m3)	µg/m³	1.0
6	Arsenic (as As)	Methods of air sampling and analysis,3rd ed.,1988, Method No.302	*BDL(**DL-1.0 ng/m3)	ng/m³	6.0
7	Chromium as Cr	Methods of air sampling and analysis, 3rd Ed, 1988, Method No. 807:1988	*BDL(**DL-0.2µg/ m³)	µg/m³	miratās va ar Vardani

*BDL-Below Detection Limit, **DL-Detection Limit

***End of Report*

(Checked By)

TECHNICAL MANAGER

LAB OPERATION

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Test Report

Sample Number: VEL/REL/AA/05

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2103240005/B

: 7.8 F-01 Format No

Party Reference No : NIL

: 31/03/2021

Report Date Period of Analysis : 24/03/2021-31/03/2021

Receipt Date . 24/03/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Village - Babu Khinda 3 Km in NE From the mine VEL Team

Sample Collected by Sampling Equipment used

Instrument Code

VEL/JAI/RDS/22/FPS/22

Instrument Calibration Status

Calibrated

RDS/FPS

Latitude

Longitude

Meteorological condition during monitoring

Clear Sky

Date of Monitoring Time of Monitoring 20/03/2021 To 21/03/2021 10.00 to 10.00 Hrs.

Ambient Temperature (°C)

Min 18 Max 33

Surrounding Activity

Human, Vehicular & Plant Activity

Scope of Monitoring

Regulatory Requirement

Sampling & Analysis Protocol

IS:5182

Sampling Duration

24 Hrs.

Parameter Required

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Mercury (Hg)	Methods of air sampling and analysis,3rd ed.,1988, Method No.317	BDL (*DL1.0 ng/m³)	hã/w,	ab Vareion i EnviroLab V

*BDL-Below Detection Limit, **DL-Detection Limit

***End of Report**

(Checked By)

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Note: Terms & conditions refer on backside of test report.







Test Report

Sample Number: VEL/REL/AA/06

: M/s Raipur Energen Limited Name & Address of the Party

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2103240006/A

Format No

: 7.8 F-01

Party Reference No : NIL

Report Date

: 31/03/2021

Period of Analysis

: 24/03/2021-31/03/2021

Receipt Date

: 24/03/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity

Scope of Monitoring Sampling & Analysis Protocol

Sampling Duration

Parameter Required

Near Petrol Pump

VEL Team

RDS/FPS

VEL/JAI/RDS/23/FPS/23

Calibrated

Clear Sky 20/03/2021 To 21/03/202

11.00 to 11.00 Hrs.

Min 18 Max 33

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	59.12	µg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	36.94	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	16.95	µg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	8.11	µg/m³	80

*End of Report**

DINESH PALSANIYA

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Test Report

Sample Number : VEL/REL/AA/07

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: VEL/A/2103240007/A Report No.

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

: 31/03/2021 Report Date

: 24/03/2021-31/03/2021 Period of Analysis

: 24/03/2021 Receipt Date

Sample Description

: AMBIENT AIR

General Information Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C)

Surrounding Activity Scope of Monitoring

Sampling & Analysis Protocol

Sampling Duration Parameter Required In From of the Mine office

VEL Team

RDS/FPS

VEL/JAI/RDS/24/FPS/24

Calibrated

Clear Sky

20/03/2021 To 21/03/2021

12.00 to 12.00 Hrs.

Min 18 Max 33

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

24 Hrs.

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
1	Particulate Matter (as PM -10)	IS:5182 (P- 23)-2006,RA. 2017	71.36	μg/m³	100
2	Particulate Matter (as PM - 2.5)	IS:5182 (P- 24)-2019	33.36	µg/m³	60
3	Nitrogen Dioxides (as NO2)	IS:5182 (P- 6)-2006 RA.2017	18.30	μg/m³	80
4	Sulphur Dioxide (as SO2)	IS:5182 (P- 2)-2001, RA. 2017	9.13	μg/m³	80

End of Report

(Checked By)

RAJ KUMAR YADAV

(Authorn

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Test Report

Sample Number: VEL/REL/AA/08

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

: VEL/A/2103240008/B

Format No

· 7.8 F-01

Party Reference No.

: NIL

Report Date

: 31/03/2021

Period of Analysis

: 24/03/2021-31/03/2021

Receipt Date

: 24/03/2021

Sample Description

: AMBIENT AIR

General Information

Sampling Location

Sample Collected by

Sampling Equipment used

Instrument Code

Instrument Calibration Status

Latitude

Longitude

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring

Ambient Temperature (°C) Surrounding Activity

Scope of Monitoring

Sampling & Analysis Protocol Sampling Duration

Parameter Required

A1 Down Wind point of talabira mine Area

VEL Team

RDS/VOC

VEL/JAI/RDS/25/VOC/01

Calibrated

Clear Sky

20/03/2021 To 21/03/2021

13.00 to 13.00 Hrs.

Min 18 Max 33

Human, Vehicular & Plant Activity

Regulatory Requirement

IS:5182

As Per Work Order

S.No.	Parameters	Test Method	Results	Units	Limit as per CPCB
olai an E	Volatile Organic Compound (as BTX)	IS:5182 (P-11) :2006, RA 2017	BDL (*DL1.0 µg/m³)	µg/m³	Lab Varten (EnviroLab
2	Polycyclic Aromatic Hydrocarbon (as PAH)	IS:5182 (P-12):2004	*BDL(**DL-5.0ng/ m³)	ng/m³	nvirol als VE

^{*}BDL-Below Detection Limit, **DL-Detection Limit

"**End of Report"

TECHNICAL MANAGES

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Note: Terms & conditions refer on backside of test report.

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Test Report

Sample Number:

Name & Address of the Party

VEL/REL/AN/01

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Format No.

Report No.

: VEL/N/2103240001/A

· 7.8 F-01 Party Reference No.

· NIL

Report Date

Receipt Date

: 31/03/2021

- 24/03/2021

Sampling Duration

: 24 Hrs.

Sample Collected by

: VEL Team

Instrument Calibration Status : Calibrated

Protocol Used

Sample Description

Scope of Monitoring

Regulatory Requirement IS 9989: IS 9876

: Ambient Noise

Instrument Used SLM

> General Information Sampling Location

Instrument Code

Meteorological condition during monitoring

Date of Monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Parameter Required

In Front of the mine office

VEL/JAI/SLM/05

Clear Sky

19/03/2021 To 20/03/2021

06 00 to 06.00 Hrs.

Min 18 Max 33

Human, Vehicular & Plant Activity

As Per Work Order

No. Test Parameters	Protocol	Test Res	sult dB(A)
ny hotain Vardan Envirotato v	man freezabel viscom Freeza	Day Time	Night Time
1 Leq	IS 9989 - 1981	62.86	47.92

Category of Zones	Leq in dB(A)		
Category of Zories	Day	numerate V. Night Environment Ale Va	
Industrial	75	70	
Commercial	C Lab Varcian Erwire 65 o Vardao Enviro	Jub Vardan (55 Irotal) Verdan	
Residential	55	45 lan LuvinoLab	
Silence Zone	Neiralah Vardan I 50 helah Vardan I	noticed all vis 40 or Emissolate Va	

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

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

End of Report

Mileched By RAKUMAR

TECHNICAL MANAGER

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Test Report

Sample Number: Name & Address of the Party

VEL/REL/AN/02

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Ambient Noise

Sample Description Scope of Monitoring

Regulatory Requirement

Protocol Used

IS 9989: IS 9876

Instrument Used

: SLM

General Information

Sampling Location

Instrument Code

Meteorological condition during monitoring

Time of Monitoring Ambient Temperature (°C)

Surrounding Activity

Report No.

: VEL/N/2103240002/A

Format No

· 7.8 F-01

Party Reference No

: NIL

Report Date

: 31/03/2021

Receipt Date

· 24/03/2021

Sampling Duration

: 24 Hrs. : VEL Team

Sample Collected by Instrument

: Calibrated

Calibration Status

Date of Monitoring

Parameter Required

Near Petrol Pump

VEL/JAI/SLM/06

Clear Sky

19/03/2021 To 20/03/202 06.00 to 06.00 Hrs.

Min 18 Max 33

Human, Vehicular & Plant Activity

As Per Work Order

.No. Test Parameters	Protocol	Test Res	sult dB(A)
nv rotab Varden Envirotan V	ardan EnviroLab Vandan Envirol	Day Time	Night Time
1 Leg	IS 9989 - 1981	61.45	48.47

Category of Zones	Leq in dB(A)			
Category of Zones	Day County County	Night - Washington		
Industrial	75	70		
Commercial	re Lab Vardan Enviro 65 b Vardan Enviro	Lab Vandun 55 Hotan Verdan		
Residential	55	45 dan knyu orab		
Silence Zone	nyiroLab Vardan 50 roLah Vardan	nymotals va 40 n Emitrol ati Va		

1. Day Time is from 6.00 AM to 10.00 PM

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

3. SilenceZone is defined as an area up to 100m around premises of Hospitals, Educational Institutions and Courts. Use of vehicle horn ludspeaker and bursting of crackers is banned in these zones.

Note: Mixed categories of areas be declared as one of the four above mentioned categories by the competent Authority and the corresponding etandards charlespir

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Test Report

Sample Number: VEL/REL/AN/03

Name & Address of the Party

Sample Description

: M/s Raipur Energen Limited

: Ambient Noise

Village: Raikheda, Block-Tilda Dist. Raipur -493225 (CG)Talabira Mines

Scope of Monitoring : Regulatory Requirement

Protocol Used : IS 9989: IS 9876

Instrument Used : SLM

General Information

Sampling Location Instrument Code

Meteorological condition during monitoring

Date of Monitoring Time of Monitoring

Ambient Temperature (°C) Surrounding Activity

Parameter Required

Report No.

VEL/N/2103240003/A

7.8 F-01 Format No

Party Reference No : NIL

: 31/03/2021 Report Date Receipt Date 24/03/2021

24 Hrs. Sampling Duration Sample Collected by : VEL Team Instrument : Calibrated

Calibration Status

Near Weight Bridge VEL/JAI/SLM/05

Clear Sky

20/03/2021 To 21/03/2021

06.00 to 06.00 Hrs Min 18 Max 33

Human, Vehicular & Plant Activity

As Per Work Order

S.No.	Test Parameters	neters Protocol Test Re		sult dB(A)	
	rotab Vardan Envirotab Vard Envirotab Vardan Envirotab		Day Time	Night Time	
1	Leq	IS 9989 - 1981	54.71	43.26	

Category of Zones	Envirolate Vardan EmviroLate Vardan Leq in dB(A) vardan EnviroLate V			
Lowest Lab Varian Covirolati Vinata	Day Day	Night		
Industrial	75	70		
Commercial	r Lab Varden Envir 65 b Vardan Env	Iro Lab Vandam 155 IroLab Vordan		
Residential	55	45		
Silence Zone	nutrotals varden 50 rotals varde	n I mylroLaib V2 40 m EmpiroLink L		

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

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

(Checked By)

""End of Report""

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Note: Terms & conditions refer on backside of test report.

Page No. 1/1







Test Report

Sample Number:

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Report No.

Format No

7.8 F-01

Party Reference No

: NIL

Report Date

Period of Analysis

: 30/03/2021

Receipt Date

: 24/03/2021-30/03/202

: 24/03/2021

Sampling Date

: 20/03/2021

Sampling Quantity

: 2 Ltr.

Sampling Type

Location

Sample Description

: GROUND WATER : R&R Colony (Open Well)

Sample Collected by

: VEL Team

Preservation

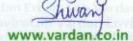
: Suitable Preservation

Sampling and Analysis

: IS 10500 -2012

Protocol

S.No.	Parameters	Protocols	Results	Units	IS:1	0500-2012
latt E	h Vardan EnviroLab Vardan Enviro h Vardan EnviroLab V	din Envirolab Vardan Envirola Lab Verdan Envirolab Vardan I Lagan Envirolab Vardan Enviro	nvirotab Varda Lab Vardan Env	n Envir roLab \	Acceptable Limits	Permissible Limits
1	pHLab Vandan EnviroLa	IS 3025 (P-11): 1983 Reaff. 2017	7.41	THE CITY	6.5 to 8.5	No Relaxation
2	Total Dissolved Solids	IS 3025 (P-16): 1984 Reaff 2017	255.00	mg/l	500	2000
3	Total Alkalinity (as CaCO3)	IS: 3025 (Part 23): 1986, Reaff. 2019	129.28	mg/l	200	600
4	Total Hardness (as CaCO3)	IS: 3025 (Part 21): 2009, Reaff. 2019	174.80	mg/I	200	600
5	Nitrate (as NO3)	IS: 3025 (Part 34): 1988, Reaff. 2019	3.03	mg/l	45	No Relaxation
6	Chloride (as CI)	IS: 3025 (Part 32): 1988, Reaff. 2019	57.43	mg/l	250	1000
7	Sulphate (as SO4)	IS: 3025 (Part 24): 1986, Reaff. 2019 Turbidity Method	12.30	mg/l	200	400
8	Calcium (as Ca)	IS: 3025 (Part 40): 1991 Reaff. 2019	60.84	mg/l	75	200
9	Magnesium (as Mg)	IS: 3025 (Part 46): 1994, Reaff. 2009 (EDTA method)	5.58	mg/l	30	100
10	Fluorides (as F)	APHA 23rd Edition 2017, 4500 FD	0.22	mg/l	1.0	1.5
11	Phenolic Compound (as C6H5OH)	APHA 23rd Edition 2017, 5530C	*BDL(**DL-0.001)	mg/l	0.001	0.002
12	Total Iron (as Fe)	IS 3025(P-53): 2003 Reaffirm 2019	*BDL(*DL- 0.1)	mg/l	0.3	No Relaxation
13	Arsenic (as As)	APHA (23rd edition-2017), 3114 C	*BDL(**DL-0.005)	mg/l	0.01	0.05
14	Mercury (as Hg)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.0005)	mg/l	0.001	No Relaxation
15	Lead (as Pb)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.005)	mg/l	0.01	No Relaxation
16	Cadmium (as Cd)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.002)	mg/l	0.003	No Relaxation
17	Chromium (as Cr)	APHA 23rd Edition Year 2017 Method No. 3113 B	*BDL(**DL-Q.02)	mg/I	0.05	No Relaxation
18	Copper (as Cu)	APHA 23rd Edition Year 2017 Method No. 3111B	*BDL(**DL-0.02)	mg/l	0.05	1.5
19 2	Zinc (as Zn)	APHA (23rd edition-2017), 3030D, 3113 B	*BDL(**DL-0.20)	mg/l	5.0	15
20 8	Selenium (as Se)	APHA (23rd edition-2017), 3114C	*BDL(**DL-0.005)	mg/l	0.01	No Relaxation



Note: Terms & conditions refer on backside of test report.

RAJ KagelNoRIZADAV







Test Report

Sample Number: VEL/REL/W/01	Sample	Number:	VEL/REL/W/01
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Report No.

VEL/W/2103240001//

-			C. 100 March 2007			
S.No.	Parameters	Protocols	Results	Units	IS:10	500-2012
Troy	rotab Vardan Envirota Vandan Envirotab Var	la Vareama merot ab Varelor Env In Envirol ab Varelor Envirol a	iroLab Vardan I a Vardan Enviru		Acceptable Limits	Permissible Limits
21	Turbidity	IS 3025 (Part 10): 1984, Ref: 2017, (Nephelometeric Method)	*BDL(**DL 1.0)	NTU	bread Envi	5 (a)
22	Aluminium	IS 3025 (Part-55): 2003, Reaff. 2019	*BDL(**DL-0.03)	mg/l	0.03	0.2
23	Manganese (as Mn)	IS: 3025 (Part 46): 1994, Reaff. 2019 (EDTA method)	*BDL(**DL-0.05)	mg/l	0.1	0.3
24	Boron (as B)	APHA 23rd Edition Year 2017 Method No. 4500B	*BDL(**DL-0.2)	mg/l	0.5	1.0
25	Free Residual Chlorine	IS: 3025 (Part 26): 1986 RA 2019	*BDL(**DL-0.2)	mg/l	0.2	1

*BDL- Below Detection Limit, **DL- Detection Limit

End of Report

RAJ KUMAR YADAV

(Authorized Signatory)

(Checked By)

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Note: Terms & conditions refer on backside of test report.

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Test Report

Sample Number:

Name & Address of the Party

: M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

: GROUND WATER

Format No

: 7.8 F-01

Party Reference No

: NIL

Report Date

: 30/03/2021

Period of Analysis

: 24/03/2021-30/03/202

Receipt Date

: 24/03/2021

Sampling Date

: 20/03/2021

Sampling Quantity

: 2 Ltr

Sampling Type

Location

Sample Description

: R&R Colony (Open Well) Sample Collected by : VEL Team

Preservation

: Suitable Preservation

Sampling and Analysis

: IS 10500 -2012

Protocol

S.No.	Parameters	Protocols	Results	Units	IS:10	0500-2012
an E	rviroLab Vardan EnviroL ab Vardan EnviroLab Vardan EnviroLab Va	an Envirolati Vardan Envirolat Ab Vardan Envirolati Vardan I Irlan Envirolati Vardan Enviro	nyirokab Vard Lab Vardan Enviro	n Envir	Acceptable Limits	Permissible Limits
il v	Total Coliform (By MPN Method)	IS:1622	Absent	MPN/10 0 ml	Shall not be Detectable in any 100 ml sample	NA
2	E-Coll. dan EnviroLab Va	Vardan Envirous S:1622 dan Enviro Vardan Envirous b Vardan Env	Absent	per 100 ml	Absent/100 ml	Absent/100 ml
3	Cyanide (as CN)	APHA 23rd Edition 2017, 4500CN D	*BDL(**DL-0.05)	mg/l	0.05	No Relaxation
4	Colour English Care Colour	IS 3025: 1983 (P-4) RA 2017	*BDL(**DL 1.0)	Hazen Unit	dan 5 nvira Stab Verdo	Lab V 15 lan V V Enviro Lab V
5	Odour Vardan EnviroLat	IS 3025 (P-5): RA. 2018	Agreeable	Qualitat ive	Agreeable	Agreeable
6	Taste Ward Hereit Environment	IS 3025(P-8):1984 RA. 2017	Agreeable	Qualitat ive	Agreeable	Agreeable
7	Anionic Surface Active Agent	APHA 23rd Edition 2017, 5540C	*BDL(**DL-0.05)	mg/l	0.2	1.0

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Test Report

Sample Number: VEL/REL/WW/01

Name & Address of the Party : M/s Raipur Energen Limited

Village: Raikheda, Block-Tilda Dist. Raipur -493225

(CG)Talabira Mines

Format No

: VEL/WW/2103240001/A

Party Reference No

· 7.8 F-01

: NIL

Report Date

Report No.

: 30/03/2021

Period of Analysis

: 24/03/2021-30/03/2021

Receipt Date

: 24/03/2021

Sampling Date

: 20/03/2021

Sampling Quantity

: 2 Ltr.

Sampling Type

: Grab

: As Per Work Order

: Waste Water

: STP Outlet

: VEL Team

Sampling and Analysis Protocol

Location

Sample Description

Sample Collected by

Parameter Required

: IS 3025

Packing Status

: Temp. Sealed

S.No.	Test Parameters	Test Method	Result	Unit	Prescribed Limit
	Vordan EnviroLab Vardan	EnviroLab Vardan EnviroLab Varda	an EnviroLab V	rdan Envir	dLab Vardan Ei
an E	ab Vardan EnviroLab Vardan	yardan EnviroLab Vardan EnviroL n EnviroLab Vardan EnviroLab Var	dan EnviroLab	Vardan En	vrolab Vardan
1	pH Lab Vardan EnviroLab Va	IS 3025 (P-11): 1983 RA2017	7.34	ab Vardan	5.5 - 9.0
2	Total Suspended Solids	IS: 3025 (Part 17): 1984, RA2017	24.5	mg/l	100.0
3	Oil & Grease	IS 3025(P-39):1991 RA 2019	0.5	mg/l	10.0
4	BOD (3 days @ 27°C)	IS: 3025 (Part-44): 1993, RA: 2019	13.2	mg/l	30.0
5	CODab Vardan Envirolenb Va	IS: 3025 (Part 58): 2006 RA: 2017	38.7	mg/l	250.0

(Checked By)

RAJ KUMAR YADAV (Authorized Signatory)

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