

**5. Proposal For preliminary Exploration (G-3) For Limestone In Dongargaon-Kasara Block
(6.06sq.Km Area) District- Yavatmal, Maharashtra**

[Implementing Agency- MECL]

Features	Details
Block ID	Dongargaon-Kasara Limestone Block
Exploration Agency	Mineral Exploration and Consultancy Limited (MECL)
Commodity	Limestone
Mineral Belt	Penganga Beds or Penganga Series
Budget & Time schedule to complete the project	122.78 lakhs & 10 months
Objectives	<p>Based on the geological data of 10(A) 2(B) cases, provided by DGM, Maharashtra in and around Dongargaon village and data collected by MECL geologists in around the area the present exploration programme for Preliminary Exploration (G-3) for limestone in Dongargaon-Kasara Block, Distt- Yavatmal, Maharashtra, has been formulated.</p> <p>The objectives of the present Preliminary Exploration (G-3) are as follows:</p> <ul style="list-style-type: none"> i) To carry out Topographical Survey and Geological mapping on 1:4000 scale. ii) To delineate depth continuity of limestone by drilling on 800m strike / grid interval up to a vertical depth of 50m. iii) To assess the quality and quantity of the resources (333) as per UNFC norms & Minerals (Evidence of Mineral Contents) Rules- 2021. iv) The proposed exploration programme will be helpful in demarcating zone of various grades of limestone in the block as per UNFC norms and estimation of limestone resources which in turn will facilitate the State Govt. for auctioning of the block.
Whether the work will be carried out by the proposed agency or through outsourcing and details thereof. Components to be outsourced and name of the outsource agency	Work will be carried out by the proposed agency.
Name/Number of Geoscientists	

	Expected Field days (Geology, Geophysics, Surveyor)	Geologist Party days: Field -120 days & HQ-30 days																																
		Survey Party days: 30 days																																
		Sampling Party days: 59 days																																
1.	Location	The proposed exploration block is located in ZarijamniTehsil of Yavatmal district and about 120 km in south-east of district headquarter Yavatmal and about 20 km from tehsil headquartersZari-jamni. The area falls under the parts of Survey of India Toposheet No 56I/13 and is bounded by latitude 19°50' 23.532"Nto 19°51'19.012"Nand longitude 078° 48' 45.715" E to 078° 51' 26.327" E (Plate No I).																																
	Latitude and Longitude	<table><tr><th rowspan="2">Points</th><th colspan="2">UTM (ZONE-44), WGS-84</th><th colspan="2">GEOGRAPHIC (DMS), WGS-84</th></tr><tr><th>Easting</th><th>Northing</th><th>Latitude</th><th>Longitude</th></tr><tr><td>A</td><td>270945.369</td><td>2196952.209</td><td>19° 51' 19.008" N</td><td>078° 48' 45.715" E</td></tr><tr><td>B</td><td>274909.126</td><td>2196901.372</td><td>19° 51' 19.012" N</td><td>078° 51' 01.928" E</td></tr><tr><td>C</td><td>275598.413</td><td>2195263.685</td><td>19° 50' 26.057" N</td><td>078° 51' 26.327" E</td></tr><tr><td>D</td><td>272343.018</td><td>2195227.658</td><td>19° 50' 23.532" N</td><td>078° 49' 34.500" E</td></tr></table>				Points	UTM (ZONE-44), WGS-84		GEOGRAPHIC (DMS), WGS-84		Easting	Northing	Latitude	Longitude	A	270945.369	2196952.209	19° 51' 19.008" N	078° 48' 45.715" E	B	274909.126	2196901.372	19° 51' 19.012" N	078° 51' 01.928" E	C	275598.413	2195263.685	19° 50' 26.057" N	078° 51' 26.327" E	D	272343.018	2195227.658	19° 50' 23.532" N	078° 49' 34.500" E
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	Villages	Dongargaon, Kasara, Chendkapur, Pikiwadhona, Sindiwadhona, Ganeshpur, Khadki, Ruikot, Khadaki, Mukutban etc.																																
	Tehsil/Taluk	Zarijamni																																
	District	Yavatmal																																
	State	Maharashtra																																
2.	Area (hectares/ square kilometres)																																	
	Block Area	6.06sq.km																																
	Forest Area	Forest and Non-Forest area																																
	Government Land Area	Data not available																																

	Charagaha	Data not available
	Private Land Area	Data not available
3.	Accessibility	
	Nearest Rail Head	The nearest railhead is Wani in Central Region which is about 30 km north-northeast of the block.
	Road	The block area is well connected to district headquarter Yavatmal, by all weather metalled road from the MH SH237 and MH SH 234 via Ghatanji and Pandharkawada.
	Airport	The nearest airport is Dr. Babasaheb Ambedkar International Airport, Nagpur (about 160km).
4.	Hydrography	
	Local Surface Drainage Pattern (Channels)	The general slope of the country is towards southeast and east. The south-easterly flowing drainages are collected by easterly flowing Penganga River. However, easterly flowing drainages are collected by southerly flowing Vidarbha River, which ultimately goes to Penganga River. The area has got dendritic pattern of drainage.
	Rivers/ Streams	Vidarbha River towards east of the block and Penganga River towards south of the block.
5.	Climate	
	Mean Annual Rainfall	Average annual rainfall is about 100 cm
	Temperature:	Minimum temperatures: below 13°C (December-January), Maximum temperatures: up to 46°C (April-May)
6.	Topography	
	Toposheet Number	56I/13
	Morphology of the Area	The proposed block area covered under undulating terrain (hilly as well as flat terrain) with a gentle south-easterly and easterly slope. The most of the block area belongs to forest as well as agriculture land. The average elevation ranges from 230m to 260 m above MSL. The south-easterly flowing drainages are collected by easterly flowing Penganga River. However, the easterly flowing drainages are collected by southerly flowing Vidarbha River, which ultimately goes to Penganga River. The area has got dendritic pattern of drainage.

7.	Availability of baseline geoscience data															
	Geological Map (1:50K/25K)	1:25,000(NGDR)														
	Geochemical Map	Not available.														
	Geophysical Map (Aeromagnetic, ground geophysical, Regional as well as local scale GP maps)	Not available.														
8.	Justification for taking up Preliminary Exploration	<p>i) The Dongargaon-Kasara Limestone block is formulated on the basis of lapsed lease areas by State Government of Maharashtra in Dongargaon village of Zari-jamni Tehsil, Yavatmal, Maharashtra, which was granted as per section 10(A) 2(B) of the MMDR Act-15 and the geological data collected by MECL geologists.</p> <p>ii) The Directorate of Geology and Mining (DGM), Government of Maharashtra, Yavatmal requested MECL to take up the exploration through National Mineral Exploration Trust (NMET) funding mechanism in two lapsed lease areas by state govt. granted as per section 10(A) 2(B) of the MMDR Act-15 in and Dongargaon village vide letter no. Tech/1848/2023/260, dated 23/01/2024.</p> <p>iii) M/s Taj Lime Industries and Shri Prabin WamanraoKasawar have been carried out prospecting in Dongargaon area over 30.70 Ha and 41.00 Ha arearespectively. M/s Taj Lime Industries has analysed 5 samples for CaO, MgO and SiO₂from 5 trial pits andestablished 3.75 mt limestone resource. The analysis ranges of the samples are given below.</p> <table border="1"> <thead> <tr> <th rowspan="2">Constituents</th><th colspan="2">Grade(%)</th></tr> <tr> <th>From</th><th>To</th></tr> </thead> <tbody> <tr> <td>CaO</td><td>31.18</td><td>57.07</td></tr> <tr> <td>MgO</td><td>0.77</td><td>23.13</td></tr> <tr> <td>SiO₂</td><td>2.82</td><td>5.18</td></tr> </tbody> </table>	Constituents	Grade(%)		From	To	CaO	31.18	57.07	MgO	0.77	23.13	SiO₂	2.82	5.18
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Shri Prabin WamanraoKasawar has analysed 4 samples for CaO, MgO and SiO₂ from 4 trial pits and established 4.25 mt limestone resource. The analysis ranges of the samples are given below.

Constituents	Grade(%)	
	From	To
CaO	32.62	54.16
MgO	0.19	18.58
SiO ₂	0.98	2.09

- iv) Considering the available exploration data and field visit by MECL geologists, MECL has planned to carry out further exploration in the Dongargaon-Kasara Block and proposed Preliminary Exploration (G-3) exploration in block to fulfil the demand of limestone in the country.