

**2. Preliminary Exploration for (G 3 Stage) Limestone in Harnasa-Umbri Block, Gir
Somnath District, Gujarat
[Implementing Agency- CGM Gujarat]**

	Features	Details			
	Block ID	CGM/NMET/Limestone/09/2024-25			
	Exploration Agency	Commissioner of Geology & Mining, Gujarat			
	Previous Exploration Agency	Commissioner of Geology & Mining, Gujarat			
	Previous Stage Geological Report	<p>The area of 200 sq.kms. Between Kodinar and Veraval was mapped by Rao U.D.G. (1965-66), on a scale of 1:10,000. He found that limestone had variable thickness and have intervening layers of marl, murrum etc. These limestones are not deposited under similar conditions but there had been many transgressions and regressions of the sea during the period of formation of these deposits.</p> <p>R.N. Goswami (Field Season – 1969-70) has done the drilling work near the proposed region. A total of 650.87 meters of actual drilling was done for these 30 numbers of boreholes. The limestone occurs in borehole suggesting a high-grade limestone is deposited in the region.</p>			
	Commodity	Limestone			
	Mineral Belt	Miliolite Formation			
	Completion Period with entire Time schedule and cost	08 months (Review : After 4 months) 77.91 lakhs			
	Objectives	To assess & identify qualitative and quantitative mineral resource of Limestone mineral at G3 stage in the proposed block area.			
	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	The entire work will be carried out through Gujarat Mineral Research & Development society (GMRDS) working under Industries & Mines Department Government of Gujarat.			
	Name/ Number of Geoscientists	Geologist: 1 (Field) + 1(HQ)			
	Expected Field days (Geology) Geological Party Days	90 days: Field Geologist 60 days: HQ Geologist 30 days: Surveyor			
1.	Location				
	Latitude and Longitude	Block corner points	Latitude	Longitude	
		1	20°52'14.3	70°29'17.2	

			6"N	8"E	
		2	20°53'7.52" N	70°29'16.6 5"E	
		3	20°53'10.9 9"N	70°32'3.49" E	
		4	20°52'6.00" N	70°32'18.4 2"E	
	Villages	Harnasa, Umbri, sundarpara			
	Tehsil/ Taluk	Sutrapada			
	District	Gir Somnath			
	State	Gujarat			
2.	Area (hectares/ square kilometers)				
	Block Area	915 Hectares			
	Forest Area	Nil			
	Government Land Area	NA			
	Private Land Area	NA			
3.	Accessibility				
	Nearest Rail Head	Veraval railway station – 12.00 km			
	Road	NH 51 – 2.00 km			
	Airport	Diu airport – 43.00 km			
4.	Hydrography				
	Local Surface Drainage Pattern (Channels) / Rivers/ Streams	Sub-parallel Pattern, Small nallas presents in the area.			
5.	Climate				
	Mean Annual Rainfall	824 mm			
	Temperatures (December) (Minimum)	Minimum – 16° C			
	Temperatures (June) (Maximum)	Maximum – 43° C			
6.	Topography				
	Toposheet Number	41L/9 41L/05			
	Morphology of the Area	The proposed area is generally covered by dry barren and agricultural fields. The topography of the proposed region is looking gently slope toward east-west direction. The elevation of the area ranges from 27mts to 38 mts above mean sea level.			
7	Availability of baseline geosciences data				
	Geological Map (1:50K/ 25K)	Plate-1			
	Geochemical Map	Not available			
	Geophysical Map	Not available			
8.	Justification for taking up G-3 or G-2 Stage	A part of the proposed area was previously explored by CGM through drilling in 1971-1972 which prove			

	mineral Exploration	<p>positive result of limestone, so this area can be studied to evaluate the extent and quality of limestone reserves in the proposed area</p> <ul style="list-style-type: none"> • CGM have collected 06 grab samples during the recent geological travers survey of CGM geologist, the analysis results of these samples indicated Cao% from 52.41 % to 55.42 %. • Lithology of the target area have milliolic limestone deposit, these deposits have very less overburden and occurred in form of low ridges and low mounds. So, it can be easily minable deposit • The proposed block is surrounded by the existing working Limestone leases, so this area can be studied as an extension of the already existing mineable deposits. • Thus, the block is suggested for G3 level of exploration.
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