

	Features	Details
	Block ID	Madanpur-Rampur-Kankatru
	Exploration Agency	Natural Resources Division, Tata Steel Ltd.
	Commodity	REE, Base Metal and other mineralization
	Mineral Belt	Eastern Ghat Mobile Belt (EGMB)
	Budget & Time schedule to complete the project	Budget = 5.24 Cr. Timeline = 24 Months
	Objectives	1. Identification of Mineral systems and their controls with emphasis on REE and base metal mineralization 2. Prospectivity mapping and delineation of potential area of REE, base metal and other economic mineralization for further probing.
	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	Inhouse activities- 1. Survey (topographical, boundary & borehole pillars) 2. Geological mapping 3. Chemical analysis (graphite and manganese) Outsourced activities- 1. Geophysical Survey 2. Chemical analysis (REE & Base metal) 3. Mineragraphic study and related analysis Exploratory Drilling
	Name/Number of Geoscientists	Remote Sensing Expert - 1 Geologist - 4 Geophysicist -1
	Expected Field days (Geology, Geophysics, Surveyor)	Geology =270
		Geophysicist = 60
		Surveyor = 0
1.	Location	
	Latitude and Longitude	Latitude: 19°48'20.96" to 20°15'12.63" Longitude: 83°18'57.05" to 83°33'30.38"
	Villages	Madanpur Rampur Kankatru
	Tehsil/Taluk	Madanpur-Rampur & Lanjigarh
	District	Kalahandi
	State	Odisha
2.	Area (hectares/ square kilometres)	
	Block Area	1087 Sq. Km.

	Forest Area	-
	Government Land Area	-
	Charagaha	-
	Private Land Area	-
3.	Accessibility	
	Nearest Rail Head	Narla railway station - within the western part of the block Lanjigarh Road - within the western part of the block
	Road	SH-6A passed through the western part of the block. SH-6 passes through the southwest to southern part of the block.
	Airport	Raipur - 295 Km Jharsuguda - 250 Km
4.	Hydrography	
	Local Surface Drainage Pattern (Channels)	Dendritic in nature.
	Rivers/ Streams	Utei River is flowing in block from south to north while originating from a spring located in the southern part of the block and converge to Tel River outside the block in the north. Other small perineal nalah are flowing in the area finally meet Tel River system in the downstream sides.
5.	Climate	
	Mean Annual Rainfall	1378.20 mm
	Temperature:	Max: 46°C Min: 4°C
6.	Topography	
	Toposheet Number	64 P/7, 64 P/8, 64 P/11, 64 P/12 and 65 M/5
	Morphology of the Area	Overall, the area has several mounts and intermittent valleys. The west central part of the block has the highest elevation of 943 mRL whereas the lowest point is located at the northern block boundary having elevation of 195 mRL. About 60% of the area is covered with hilly and rugged terrain with thick forest cover. Whereas the northwestern and southern part is having plain land with isolated mounts.
7.	Availability of baseline geoscience data	
	Geological Map (1:50K/25K)	1:50K
	Geochemical Map	NGCM

	Geophysical Map (Aeromagnetic, ground geophysical, Regional as well as local scale GP maps)	NGPM
8.	Justification for taking up the project	The proposed area encompasses north central segment of Eastern Ghat Province occupied by lithounits of Eastern Ghat Mobile Belt (EGMB). The EGMB of Odisha segment consists dominantly of granulite facies of metasediments popularly known as Khondalite suite of rocks. Charnockite Suite of orthogneisses and granulites (charnockite, enderbite, two-pyroxene granulite) are characteristic of this belt occurring in varying proportion in different parts. Quartzo-feldspathic gneisses and diatexitic granites (commonly leptynite) also occurs as one of the dominant lithounits. The rocks were intruded by massif type of anorthosite plutons and miaskitic alkaline intrusive of Meso-Proterozoic in age Nanda et al,2022). STM carried out in 2003-05 in Saintala and surrounding areas revealed a number of brecciated quartz veins with specks/lumps of Pb mineralization. Samples from the brecciated quartz vein near Badipura indicated Pb value from 83 ppm to as high as 14.8% in eight samples where mineralization is observed within relatively undeformed quartz and pegmatite veins. In recent time one item of reconnaissance study (G-4) for base metal, graphite and REE was undertaken in a similar set up in the adjacent Ampali-Badipura- Saintala areas near to Tel Shear Zone in Toposheet No 64P/7. During the investigation, four brecciated quartz veins showed surface indications of lead mineralization in the form of chunks of galena as cavity filling. Old workings for galena (roughly measures about 15m x 20m x 5m and 25m x 20m x 3m) are observed near Badipura and Jalorpadar area respectively within the brecciated quartz veins. The study further highlighted occurrence of an allanite-fluorite rich rock of about 8m thick and about 45m of strike length is exposed near Bibina area having potentiality for REE mineralization. Apart from the base metal and REE small part of the area was also surveyed extensively for manganese and graphite mineralization. Two G3 projects (completed) for graphite and manganese are also located within this RMT block boundary. Keeping in view of the above, the Madanpur-Rampur-Kankatru block in Kalahandi district encompassing an area of 1047 Sq. Km. (appx.) is promising for conducting a RMT project.