PROPOSAL FOR REGIONAL CONSOLIDATION & RAPID SUBSURFACE SCREENING OF SIWANA RING COMPLEX, BALOTRA DISTRICT, RAJASTHAN STATE

By

CRITICAL MINERAL TRACKERS

Place: Hyderabad
Date: 21/04/2026

GENERAL INFORMATION ABOUT THE SIWANA RING COMPLEX BLOCK

	Features	Details
	Block ID	CMT/NMEDT/G3/005/2026
	Exploration Agency	Critical Mineral Trackers, Hyderabad
	Commodity	Rare Earth Elements (specifically HREE), Niobium (Nb), Yttrium (Y), Zirconium (Zr), Lithium (Li), Tungsten (W), Tin (Sn), Rubdium (Rb), Vanadium (V) and Molybdenum (Mo)
	Mineral Belt	Siwana Ring Complex (SRC), Malani Igneous Suite
	Completion Period with entire Time schedule to complete the project	10 months
	Objectives	To collate the existing data pertaining to the area with respect to NGCM, NGPM, AMD, Geology Structure, Tectonics and carry out field studies and identify the potential Mineral zones.
	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 by the proposed agency CRITICAL MINERAL TRACKERS.
	Name/ Number of Geoscientists	Senior Geologists -2 Geologists -4 (as per requirement)
	Expected Field days (Geology) Geological Party Days	180 Days
1.	**Location**	
	Latitude (DMS) Northern	

1	25°39'3.38"N	21	25°36'35.30" N
2	25°37'25.99"N	22	25°37'40.33" N
3	25°37'24.82"N	23	25°37'41.54" N
4	25°36'19.83"N	24	25°38'46.52" N
5	25°36'20.66"N	25	25°38'41.49" N
6	25°35'16.14"N	26	25°39'13.96" N
7	25°35'17.47"N	27	25°33'51.69"N
8	25°39'4.67"N	28	25°33'19.27"N
9	25°39'5.91"N	29	25°33'23.13"N
10	25°35'51.13"N	30	25°34'24.75"N
11	25°35'52.31"N	31	25°34'25.26"N
12	25°37'29.33"N	32	25°36'49.46"N
13	25°37'33.96"N	33	25°36'49.66"N

		14	25°38'6.28"N	34	25°37'12.72"N	
		15	25°38'8.52"N	35	25°37'11.40"N	
		16	25°37'3.93"N	36	25°35'1.66"N	
		17	25°37'2.76"N	37	25°35'0.36"N	
		18	25°35'57.80"N	38	25°34'27.99"N	
		19	25°36'1.63"N	39	25°34'26.57"N	
		20	25°36'33.75"N	40	25°33'54.25"N	
	Longitude (DMS) Eastern	1	72°14'4.87"E	21	72°27'16.54"E	
		2	72°14'7.06"E	22	72°27'15.14"E	
		3	72°13'5.85"E	23	72°28'26.77"E	
		4	72°13'0.56"E	24	72°28'25.42"E	
		5	72°14'8.57"E	25	72°23'39.01"E	
		6	72°14'10.15"E	26	72°23'38.07"E	
		7	72°15'21.62"E	27	72°26'8.43"E	
		8	72°15'16.56"E	28	72°26'9.06"E	
		9	72°16'28.10"E	29	72°29'54.38"E	
		10	72°16'32.50"E	30	72°29'55.68"E	
		11	72°17'44.19"E	31	72°31'36.08"E	
		12	72°17'41.99"E	32	72°31'34.73"E	
		13	72°21'17.07"E	33	72°32'2.93"E	
		14	72°21'16.26"E	34	72°32'2.51"E	
		15	72°23'39.23"E	35	72°30'50.75"E	
		16	72°23'40.95"E	36	72°30'53.48"E	
		17	72°22'29.35"E	37	72°29'41.82"E	
		18	72°22'30.74"E	38	72°29'42.54"E	
		19	72°26'5.61"E	39	72°28'30.72"E	
		20	72°26'4.65"E	40	72°28'31.54"E	
	Villages	Devpura, Indrana, Baliyana Devandi, Bhuriyo ka Goliya, Mokalsar, Ramaniya, Peeploon, Nal, Nalghuda,Mavadi, Mawara				
	Tehsil/ Taluk	Siwana				
	District	Balotra				
	State	Rajasthan				
2.	**Area (hectares/ square kilometres)**					
	Block Area	114 sq.km				
	Forest Area	Nil				
	Government Land Area	Not Known				
	Private Land Area	Not Known				
3.	**Accessibility**					
	Nearest Rail Head	Mokalsar Railway Station				
	Road	SH-325				
	Airport	Jodhpur Airport				
4.	**Hydrography**					

	Local Surface Drainage Pattern (Channels)	Dendritic
	Rivers/ Streams	Luni River & Mamaji ka Wala Nala
5.	**Climate**	
	Average Annual Rainfall	277 mm
	Temperatures (January) (Minimum) Temperatures (May) (Maximum)	20 °C - 29°C 46 °C - 51°C
6.	**Topography**	
	Toposheet Number	45C/2, 45C/6 & 45C/10
	Morphology of the Area	Predominantly plain/valley areas masked by thick aeolian sand and alluvium, with isolated basement inliers.
7	**Availability of baseline geoscience data**	
	Geological Map (1:50K/ 25K)	Not available
	Geochemical Map	Not Available
8.	**Justification for taking up Regional consolidation & Rapid Subsurface Screening of Siwana Ring Complex**	Regional Consolidation & Rapid Subsurface Screening for Rare Earth Elements (REE), Rare Metals (RM) such as Niobium and Zirconium, and associated Critical Minerals in the Siwana Ring Complex of Balotra district, Rajasthan, covering parts of Survey of India toposheets 45C/06 and 45C/10 has been proposed. This district is bounded by Jaisalmer district to the north, Jalore district to the south, and shares an international border to the west, with Balotra serving as a major nearby urban center and railway link. The area is predominantly arid and undulating in nature, characterized by isolated, rugged ring-fracture hills such as the Chhappan-ka-Pahar, which are heavily surrounded and interspersed by extensive aeolian sand dunes and thick alluvial soil cover. The drainage in the region is sparse, ephemeral, and structurally controlled by the regional fracture systems. The area under reference forms a critical part of the Neoproterozoic Malani Igneous Suite, exposing all the characteristic volcano-plutonic lithounits of the Siwana Ring Complex. The complex is primarily

		represented by extrusive acid volcanics, predominantly porphyritic and aphanitic rhyolites, which have been intruded by hypersolvus peralkaline granites. The younger intrusive group consists of various dyke swarms, including microgranites and trachydacites. In this area, the contact zones between the intrusive granites and the extrusive rhyolites act as highly enriched, potential units for REE and RM mineralization, and the younger dykes emplaced along pervasive N-S to NNW-SSE trending fracture planes are also associated with significant concentrations of these strategic metals. The REE mineral phases, including monazite, bastnaesite, and parisite, are fine-grained and lack prominent surface indications, with the highly prospective contact zones mostly concealed beneath the desert sand. This area is reported to have significant structurally controlled mineralization zones which are potential areas for high-grade deposits. Previous G-3 stage exploration work by GSI in the isolated South of Gura Nal and SE of Mawri blocks within this complex reported highly encouraging inferred occurrences, estimating millions of tonnes of REE, Niobium, and Zirconium resources successfully delineated through subsurface drilling and borehole gamma logging. Therefore, since the structural and lithological controls of the ore are now well-established but heavily concealed by the surface terrain, this area has been proposed to carry out Regional Consolidation and Rapid Subsurface Screening for delineating the regional continuity and potential concealed Mineral zones of the critical elements such as REE, Niobium, Zirconium, and associated strategic metals across the entire ring complex.

LOCATION MAP

***Figure:*1**

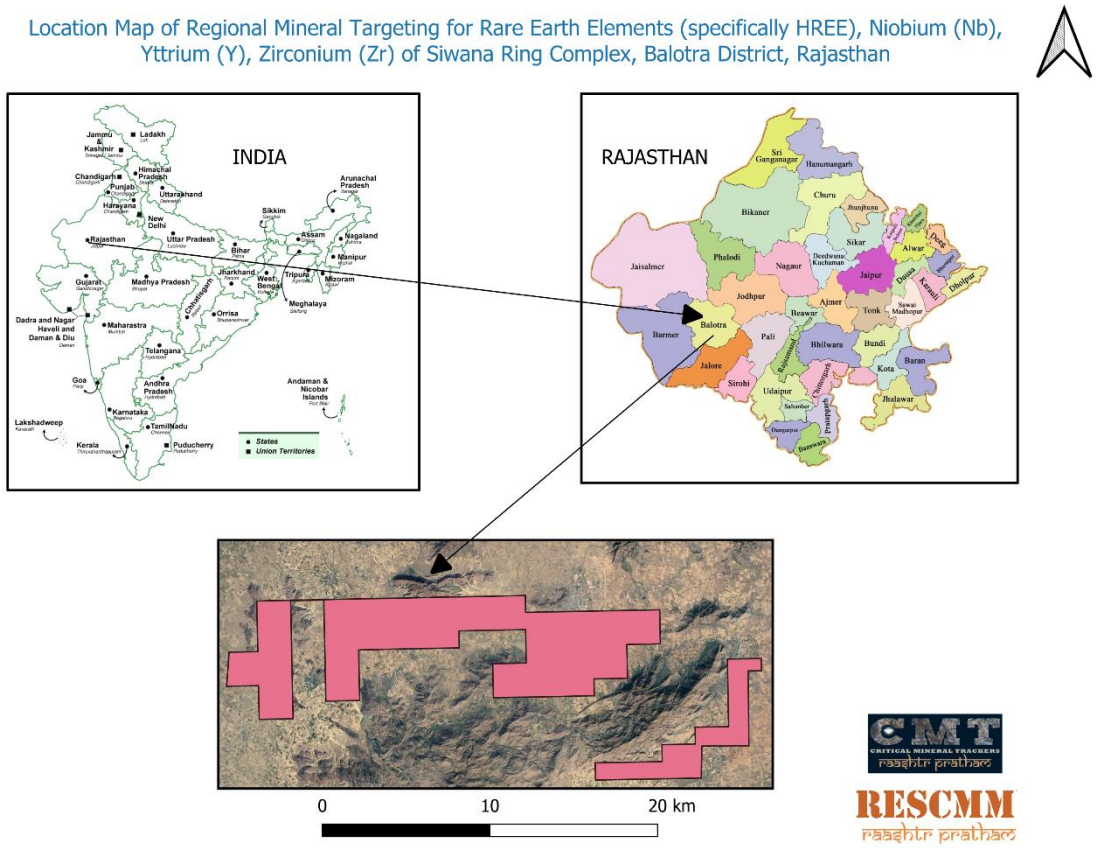
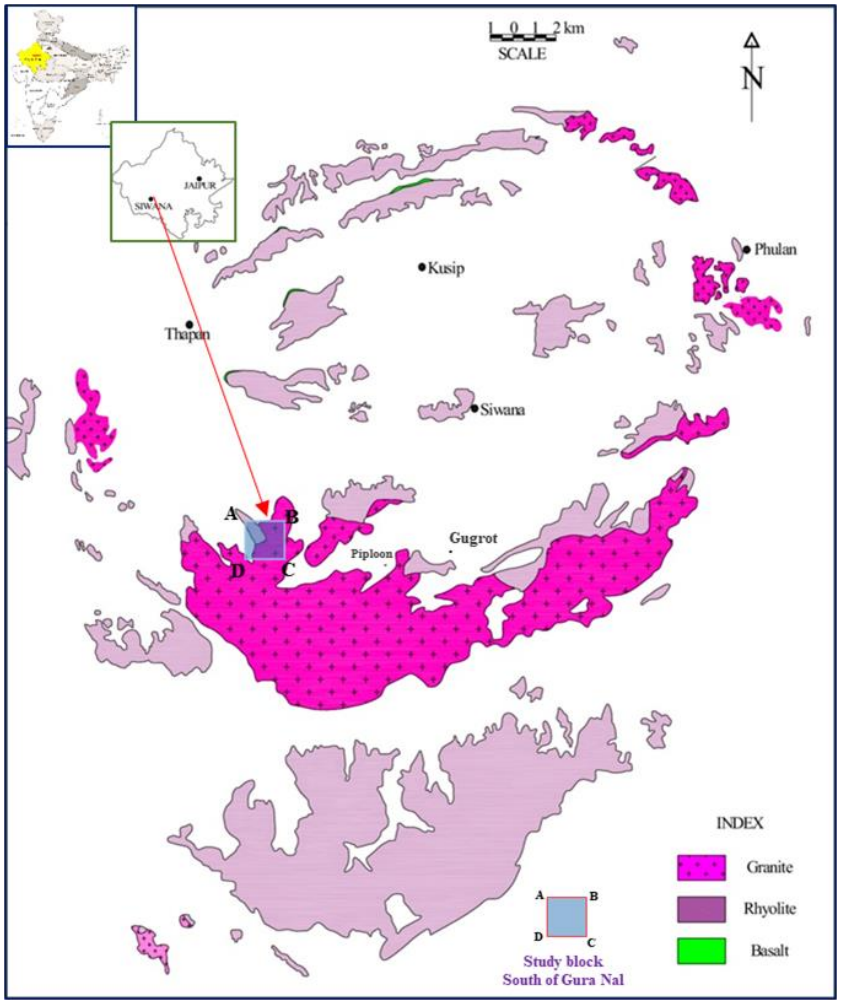


Figure:2

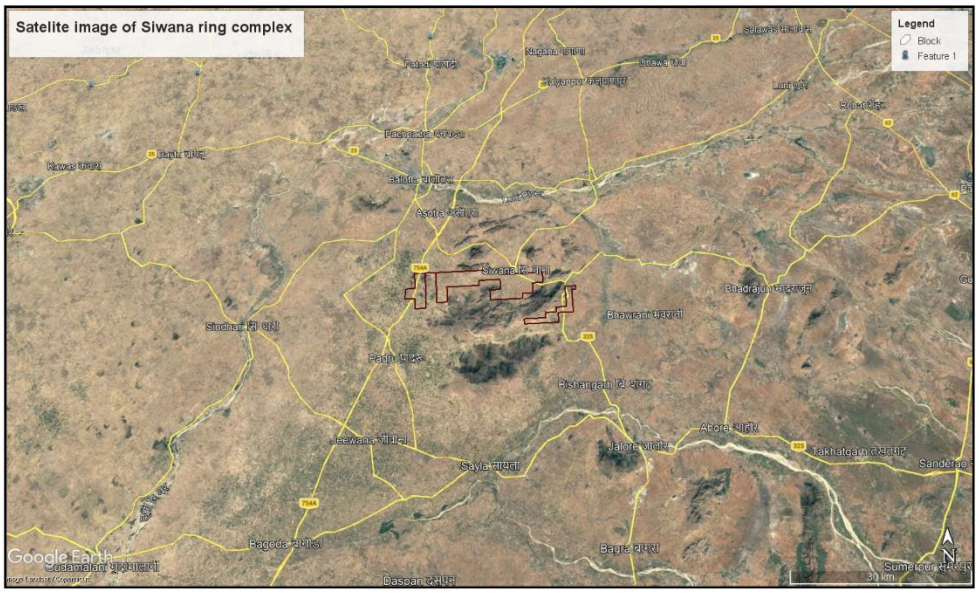
Location of the Study block in parts of TS no. 45 C/06, Siwana, Barmer District (Rajasthan), Source: GSI Report



SATELLITE IMAGERY

Figure:3

SATELLITE IMAGERY OF SIWANA RING COMPLEX, BALOTRA DISTRICT, RAJASTHAN



Regional Consolidation & Rapid Subsurface Screening of Siwana Ring Complex, Balotra District, Rajasthan State In SOI Toposheets 45C/2, 45C/6 and 45C/10

REGIONAL GEOLOGY

The Siwana Ring Complex (SRC), located in the Barmer district of western Rajasthan, India, is a well-preserved, elliptical to circular collapsed caldera structure. It is a key geological feature of the Malani Igneous Suite (MIS), the third-largest felsic igneous province in the world. This report provides a detailed geological assessment of the block, integrating regional and local geology, geochronology, physiography, climate, and previous exploration work, with a particular focus on its rare earth element (REE) and associated mineral potential.

2. Regional Geology

The regional geological framework of the area is defined by the Malani Igneous Suite and its host Trans-Aravalli Block.

2.1. Tectonic Setting and Supergroup

The Siwana Ring Complex is situated within the **Trans-Aravalli Block** and is a prominent member of the **Malani Igneous Suite (MIS)**. The MIS is a Neoproterozoic, anorogenic, rift-related, bimodal volcano-plutonic rock association covering an area of over 800 sq. km. This suite is characterized by non-orogenic peraluminous (Jalore and Tusham) to peralkaline (Siwana) granites, along with a cogenetic carapace of acid volcanics. The magmatism is interpreted to be the result of hot-spot activity, marking the final tectono-magmatic event that led to the cratonization (stabilization) of the northern part of the Indian shield after the closure of the Aravalli-Delhi orogenic cycles.

2.2. Stratigraphy of the Malani Igneous Suite

The Malani Igneous Suite unconformably overlies the Archean-Proterozoic metasediments and granite gneisses. Its formation is classically divided into three main phases:

Phase	Lithology	Description
Extrusive Phase	Bimodal volcanics (mafic followed by felsic flows)	Initial volcanic activity comprising mafic (basalt) and felsic (rhyolite) lava flows.
Intrusive Phase	Felsic granite plutons	Large-scale intrusion of felsic granite plutons.
Hypabyssal Phase	Basic and felsic dike intrusions	Late-stage dyke intrusions along rift fractures.

Within the complex, the rock types exposed include peralkaline granite, rhyolite, pyroclastics, tuff, and later microgranite, aplite, and felsite dykes.

2.3. Geochronology

The SRC is Neoproterozoic in age, with several radiometric studies providing age constraints:

- The Malani Igneous Suite as a whole has yielded ages ranging from **~751 to 771 Ma**.
- A more precise Rb-Sr isochron age for the felsic rocks of the related Jalor Complex is **725 ± 7 Ma**, with data indicating the complexes are coeval.
- Isotopic studies (Sr, Nd, Pb) suggest that the Siwana magma is primarily mantle-derived, with the Jalor complex showing evidence of variable crustal contamination.

3. Physiography and Drainage

- **Physiography**: The Siwana region is part of the Thar Desert, characterized by an arid western plain. The landscape is dominated by sand dunes and aeolian soils, interspersed with the rocky outcrops of the Siwana Ring Complex, which forms a prominent topographical feature. Siwana itself is described as an intermontane basin.
- **Drainage**: The area falls within the arid zone with ephemeral drainage. Drainage patterns in the broader region are linear, sub-parallel, sub-dendritic, and radial, with the highest concentration of streams in the piedmont zone. The SRC is known to host thermal springs, which are near-neutral to mildly alkaline with surface temperatures between 31°C and 39°C. Groundwater aquifers are associated with clay and silt layers.

4. Climate and Rainfall

The Siwana block lies in an arid to semi-arid climatic zone.

- **Rainfall**: Rainfall is meager and highly variable. The average annual rainfall in Barmer district is approximately **281.8 mm** (based on 1971–2005 data), with most precipitation occurring during the southwest monsoon. The region experiences frequent droughts. However, recent studies indicate a long-term increasing trend in monsoon and annual rainfall over the past century.
- **Temperature**: The region experiences extreme temperatures, with very hot summers and cool winters, typical of the Thar Desert.

5. Land Use and Land Cover

The land use in the Siwana region is primarily influenced by groundwater availability and the arid climate. Key aspects include:

- **Agriculture**: The predominant land use is agriculture, with **pearl millet (bajra)** being the major kharif (monsoon) crop, followed by cluster bean and moth bean. In the rabi (winter) season, crops like cumin, mustard, and wheat are grown. A significant portion of the cropped area (about 93%) is rain-fed, with only 7% under irrigation.
- **Land Cover**: The area is characterized by sandy desert soils, sand dunes, and inter-dunal plains. The rocky, barren exposures of the Siwana Ring Complex constitute a distinct land cover type, with sparse natural vegetation.

- **Recent Changes**: Recent decades have seen a transformation, with increased rainfall leading to agricultural expansion onto sand dunes and a general increase in greenery across the region.

6. Local Geology of the Block

The assigned block, as indicated by the red boundary in the provided image, is situated within the Siwana Ring Complex. The SRC is a collapsed caldera with a bimodal (felsic and basic) volcano-plutonic rock association. The local geology within the block is likely composed of the following rock types:

- **Peralkaline Granite**: The primary intrusive rock, characterized by hypersolvus texture and containing alkali amphiboles and pyroxenes (e.g., arfvedsonite, aegirine). These granites are A-type, anorogenic, and enriched in sodium and potassium.
- **Rhyolite**: The dominant extrusive volcanic rock, forming lava flows and domes. These rhyolites are peralkaline to peraluminous in nature and are often associated with pyroclastic deposits.
- **Microgranite, Aplite, and Felsite Dykes**: Late-stage, hypabyssal intrusions that cut the earlier volcanic and plutonic rocks. These dykes are of particular economic importance as they are often enriched in REEs and other trace elements.
- **Basic Rocks**: Minor occurrences of gabbro and basalt are present, representing the mafic component of the bimodal suite. The gabbro is a small intrusive body, while basalt occurs as flows, often associated with rhyolitic tuff.
- **Pyroclastics and Tuff**: Volcaniclastic rocks, including rhyolitic tuff, are found, particularly in the intra-caldera sequences.

The SRC is structurally controlled by NE-SW, E-W, and NW-SE trending faults and fractures, which likely control the emplacement of the late-stage dykes and associated mineralization.

7. Previous Work by the Geological Survey of India (GSI)

The Geological Survey of India has conducted significant work in the Siwana region.

- **REE Resource Estimation**: GSI has identified the Siwana Ring Complex as a promising area for REE deposits. The GSI's Western Region has established sizeable resources at several mineralized centers within the SRC.
- **Exploration Projects**: The GSI has executed multiple exploration projects in the region to assess the potential for REE, niobium (Nb), yttrium (Y), and zirconium (Zr). The Atomic Minerals Directorate for Exploration and Research (AMD) has also carried out test drilling, indicating low-grade, medium-tonnage exploitable resources.
- **Research and Publications**: GSI scientists have co-authored key research papers on the SRC, including detailed studies on REE mineral chemistry and the use of spectroscopic techniques for exploration.

8. Mineral Exploration Details

The Siwana Ring Complex is considered a potential hub for REE and associated high-field-strength elements (HFSE).

- **Mineralization Type**: The primary mineralization is hosted in peralkaline igneous rocks, including peralkaline granite, rhyolite, and younger felsic intrusives such as microgranite, aplite, and felsite dykes. The caldera margins and central facies have been the main targets of exploration.
- **Key Mineralized Centers**: Several areas within the SRC have been identified with significant REE concentrations, including:
    - **Nal (Southwest Margin)**: The assigned block is located here. It is one of the four major mineralized centers, with average REE values ranging from **0.57% to 0.96%**.
    - **Bhatikhera (Northern Margin)**: Another significant center.
    - **Phulan (Northeastern Margin)**: Known for felsite dykes enriched in REEs and other elements.
    - **Ramaniya (Southern Margin)**: A key area of REE enrichment.
- **REE Geochemistry**: The SRC is unique for hosting both **Light Rare Earth Elements (LREE)** and **Heavy Rare Earth Elements (HREE)**. The REE-bearing minerals identified include monazite, bastnaesite, parisite, allanite, and eudialyte, among others. In the felsite dykes at Phulan, high concentrations of elements like Ce (up to 1.17%), La (0.6%), Y (0.8%), and Nb (1385 ppm) have been reported.
- **Exploration Techniques**: Modern exploration has employed advanced techniques, including:
    - **Hyperspectral Remote Sensing**: Using PRISMA and AVIRIS-NG data to map high-REE concentration zones and identify kaolinite-rich, altered rhyolitic tuff.
    - **Spectroscopy**: Laboratory-based spectroscopic studies have been used to detect diagnostic absorption features of REEs like neodymium (Nd) and erbium (Er).
    - **Geochemical Analysis**: Extensive geochemical sampling and analysis have been conducted to delineate the grade and extent of mineralization.
    - **Thermal Infrared (TIR) Data**: ASTER TIR data has been used to distinguish peralkaline granite from other granitoids, as REE anomalies are strongly associated with this rock type.

9. Summary and Conclusion

The assigned block within the Siwana Ring Complex of the Malani Igneous Suite has excellent potential for rare earth element mineralization. The complex is a well-defined, Neoproterozoic collapsed caldera with a peralkaline geochemical signature favorable for REE and HFSE enrichment. The block is located in a region with a confirmed resource base at the Nal mineralized center. Given the extensive previous work by the GSI and the application of advanced exploration techniques, the block warrants focused, detailed exploration to quantify its REE and associated critical mineral potential. The local geology within the block is expected to consist of peralkaline granite, rhyolite, and potentially mineralized felsic dykes and pyroclastic rocks, all of which are known hosts for REE mineralization in the complex.

METHODOLOGY

Phase I: Surface Exploration, Geophysics, and Scout Drilling

Phase I encompasses the initial six months of the project and is explicitly designed to establish the structural controls and confirm the presence of subsurface mineralization before committing to bulk drilling.

1. **Geological Mapping and Surface Sampling**: Field geologists will execute detailed geological mapping at a 1:12,500 scale across the block. Concurrently, surface sampling regimes will involve localized pitting and trenching to extract 30 Bed Rock Samples (BRS) utilizing systematic channel sampling techniques to evaluate surface REE manifestations.
2. **Topographical Surveying**: A dedicated survey team will utilize Differential Global Positioning Systems (DGPS) to precisely demarcate the lease boundaries. Crucially, they will fix the exact coordinates and Reduced Levels (RL) for the initial 14 scout borehole locations prior to rig mobilization.
3. **Ground Geophysical Investigation**: To penetrate the thick aeolian sand cover masking the geology, a high-resolution ground gravity survey will be executed over 1,425 designated stations. The survey utilizes a highly dense grid with a 200-meter station interval and 400-meter traverse spacing, yielding 25 measurement points per 2-square-kilometer grid, ensuring an accurate mapping of subsurface density contrasts and concealed structural lineaments.
4. **Scout Core Drilling**: A hard-rock, HQ-size diamond core drilling campaign will be initiated across the 14 demarcated boreholes. The drilling targets an average depth of 125 meters per hole, amounting to a total of 1,750 meters of exploratory drilling for this phase. Standard environmental and site preservation protocols will be strictly adhered to, which includes the permanent cement plugging of all boreholes, the erection of inscribed concrete pillars at the collar, and the statutory skeletonization and preservation of 450 meters of drill core for the archive.
5. **Laboratory Studies**: Recovered drill core and bedrock samples will undergo rigorous geochemical assaying to confirm mineralization. A total of 450 core samples and the 30 BRS will be analyzed using Inductively Coupled Plasma Mass Spectrometry (ICP-MS) for Rare Earth Elements and trace elements, supported by 45 blind check samples for strict QA/QC validation. Additionally, 25 samples will undergo Wavelength Dispersive X-Ray Fluorescence (WD-XRF) to determine major oxides and 24 trace elements, 10 samples will be subjected to X-Ray Diffraction (XRD) for distinct mineral identification, and 10 polished thin sections will be prepared for detailed petrographic and ore microscopic studies.

6.2 Phase II: Infill Drilling, Bulk Assaying, and Resource Modeling

Contingent upon a successful technical review by the Technical-cum-Cost Committee (TCC) confirming positive Phase I outcomes, Phase II will execute the bulk of the volumetric resource definition over the remaining project timeline.

1. **Detailed Infill Drilling**: The HQ-size diamond core drilling operation will scale up significantly to encompass the remaining 43 boreholes designed on the structural grid, totaling 5,375 meters of continuous deep drilling. Field geologists will conduct continuous core logging, recovery assessment, and sampling. Following logging, 1,350 meters of this core will be preserved. Site remediation will continue concurrently with the plugging and pillaring of all 43 executed sites.
2. **Phase II Laboratory Studies**: To establish a high-confidence, three-dimensional grade distribution model, the analytical throughput will increase. A massive batch of 1,290 primary core samples will be analyzed via ICP-MS, subjected to a rigorous QA/QC protocol involving 129 check samples.

Further whole-rock geochemistry will be established through WD-XRF on an additional 25 samples (plus 2 check samples). Mineralogical characterization will continue with 10 further XRD analyses and 10 comprehensive petrographic/mineragraphic studies.

3. **Data Synthesis and Final Reporting**: Following the cessation of field activities, operations will shift entirely to the headquarters. Geoscientists will integrate the massive influx of topographic data, gravimetric anomaly maps, continuous drill-logs, and high-precision geochemical datasets to mathematically model the ore body. A comprehensive, peer-reviewed Final Geological Report will be generated to formalize the UNFC-compliant G3 resource estimation.

Implementation Artificial Intelligence and Machine Learning in Regional Consolidation & Rapid Subsurface Screening of Siwana Ring Complex, Balotra District, Rajasthan State For Regional Mineral Targeting (45C/2, 45C/6 & 45C/10)

INTRODUCTION

Mineral deposits explored earlier are going to be exhausted in the near future, identification of new deposits, particularly, scarcely and deep-seated minerals of economic and strategic importance is a major challenge. It leads to an abnormal increase of exploration cost and time, limited success with the conventional approaches of exploration methods. To overcome/compliment this, we need to find new approaches, capable of providing better *insights from combined geoscience data of multi-sensor/parameters*.

In the present work, based on the available geological and geophysical data available from NGDR website, data visualization maps of different mineral concentrations, gravity and magnetic anomaly maps along with mineralization and structural features superimposed on study area, can help to understand the data coverage, data gaps for qualitative and AI/ML implementation. This will significantly reduce the further level of exporation. These maps are essential before any exploration/ identifying regional potential mineral blocks, Besides, Box plots, Histograms and scatter plots for geochemical data of acquired geological samples and other geophysical data. Qualitative control of data to devoid of duplicates, missing, unwanted data, outliers, is prior requirement for AI/ML implementation.

Artificial Intelligence (AI) and Machine learning (ML) algorithms are proven to be good in classification and identification/prediction of possible potential mineral zones for primary and secondary/associated minerals/host rocks/ in SRC blocks from combined geological and geophysical data.

The results provide better insights into possible areas of potential mineral zones and also the extension of existing zones. Additional high-resolution data can improve prediction accuracy.

OBJECTIVE

The primary objective of deploying Artificial Intelligence and Machine Learning (AI/ML) in this G4 reconnaissance survey is to synthesize massive, multi-disciplinary datasets to rapidly and accurately delineate Regional Mineral Targeting (RMT) blocks hosting Rare Earth Elements (REE) and associated High-Field-Strength Elements (HFSE) within the Siwana Ring Complex.

Specifically, the AI/ML integration aims to achieve the following:

i) Predictive Geochemical Modeling for REE Concentration: To predict subsurface concentrations of targeted critical minerals (LREE, HREE, Y, Nb, Zr) by analyzing complex, multi-elemental relationships derived from HR-ICPMS and WDXRF laboratory data. The AI algorithms will identify hidden geochemical halos, pathfinder element correlations, and patterns of variability associated with REE-bearing minerals (e.g., Eudialyte, Monazite) to accurately forecast mineral grades at unsampled or closely gridded locations without requiring exhaustive physical drilling.

ii) Multi-Parametric Spatial Integration for Target Generation: To autonomously identify and prioritize new potential mineralized zones by fusing diverse geological and geophysical layers. The AI models will integrate surface geological mapping, hyperspectral remote sensing (ASTER/PRISMA alteration signatures), and subsurface geophysical profiling (Gravity, Magnetic, and Electrical Resistivity Tomography) to pinpoint prospective late-stage felsic dykes and peralkaline granite contact zones that human interpretation might overlook.

iii) Automated Structural Correlation and 3D Demarcation: To rapidly generate high-resolution predictive maps that correlate geophysical anomalies with the complex structural features of the caldera (such as ring faults and radial fractures). The AI system will benchmark conventional geological interpretations against machine-derived patterns, ultimately providing precise 3D visualizations of the mineralized zones. This will optimize the exact placement of Phase 2 deep scout boreholes and finalize the boundaries of the RMT blocks for subsequent G3 exploration.

Timeline: 10 Months

Revised Time Line for Geological and Geophysical Survey in part of Siwana Ring Complex Area (Block-C), Balotra District, Rajasthan State; Area: 114 sq. km

Sno	Activity	Unit	Months												Days
			1	2	3	Review	4	5	6	Review	7	8	Review	9	10	
1	Geologist Days HQ	Days														30days
2	Geologist Party Days Field	Days														80 days
3	Geophysical field party days	Days														80 days
4	Sampling (Pitting & Trenching)	Days														90 days
5	Laboratory Studies	Days														90 days
6	Core Drilling	Days														90 days
7	Survey Party Days	Days														90 days
8	Post Field Interpretation	Days														60 days
9	Report Compilation, review & Submission	Days														60 days