



RAJ 11

Rajasthan
HD

CROWN MINING PVT LTD

***FINAL REPORT ON
EXPLORATION ON RP
2/2004.***

OCTOBER 20, 2005

to

OCTOBER 19, 2008

Ajmer, Pali & Nagaur Districts

STA (AR)
[Signature]
16.7

नगरीसंख्या / Diary No 474
तारीख / Date 9 Oct 09
पुर्वज्ञानिक, रसायन विभाग, जकारा
Geological Mapping & Mineral Map Cell

**FINAL REPORT FOR RP NO. 2/2004 AREA OF
671.88 SQ. KM IN AJMER, PALI & NAGOUR
DISTRICTS FROM 20.10.2005 TO 19.10.2008.**

Summary

The Nasirabad RP [2/2004] is located 20 kms South East of the major town of Ajmer in the state of Rajasthan. The major mines of Kayar and Rampura Agucha located 20 kms North East and 40 kms south of the RP, respectively. These are lead zinc mines, but the main potential in the Nasirabad RP is copper – there are several known occurrences in close proximity, all appearing to be associated with the major shear zone that separates the Delhi Group in the North West from the Bhilwara Supergroup to the South East. The Nasirabad RP is elongate NE-SW, parallel to this shear, and around 5km SE of it. Accordingly it is underlain wholly by Bhilwara Supergroup rocks, which in this area are comprised mostly of biotite schists intruded by meta-granite gneisses. There are 5 small copper occurrences known in close proximity and the State Government Directorate of Mining and Geology (DMG) has explored at the northernmost one, Hathibatta, immediately west of the RP boundary. Here, thin stringers of chalcopyrite are found lying parallel to the schistosity over several metres in deep (200-400m) diamond holes. One borehole had a reported intersection of 9m at 1.5% Cu. The dimensions of the occurrence are unknown. A prominent NE-SW Landsat lineament runs through the RP area, and across the RP, and is parallel to a granite gneiss boundary. Once again, there are several strong structural features in the remote sensing data set and Crown Mining has explored their association with possible copper mineralisation.

In general, copper mineralisation appears to occur in rocks of widely varying geological ages. Previous geological mapping and exploration have emphasised the lithology and stratigraphy at the expense of structural features, which has provided a focus for the exploration completed by the company. These disparate ages (Archaean, Palaeo-, Meso-, and Neo- Proterozoic) indicate that it is likely to be structural rather than stratigraphic control that is the dominant agent.

Crown Mining Pvt. Ltd. [CMPL] executed Reconnaissance Permit [RP 2/2004] in Rajasthan on October 20, 2005. A total area of 671.88 km² in Rajasthan was initially granted to Crown Mining Private Limited for reconnaissance of Lead, Zinc, Copper & Precious Stones and other associated minerals including Gold, Silver, Cadmium, Germanium in the districts of Pali, Ajmer and Nagaur of Rajasthan [for 3 years by State Government Order No. F.18 (21)Mines/Gr.II/2004 dated 01.08.2005]. From this total area, 50% was relinquished after completion of 2 years and only northern half of the RP area 334.80 Sq.km was retained.

This report summarises the reconnaissance work carried out during the period from October 19, 2005 to October 19, 2008.

S. No./ File No.	RP No.	District Name:	Area: (Km ²)	Date of Execution	Date of Expiry	Area Relinquished & Retained
2. 245/A	2/2004	Ajmer, Pali and Nagaur districts	671.88	20.10.05	19.10.08	Area relinquished 337.08 Sq. Kms Area retained 334.80 Sq. Kms.

The regional location OF RP 2/2004 is shown in Figure 1:

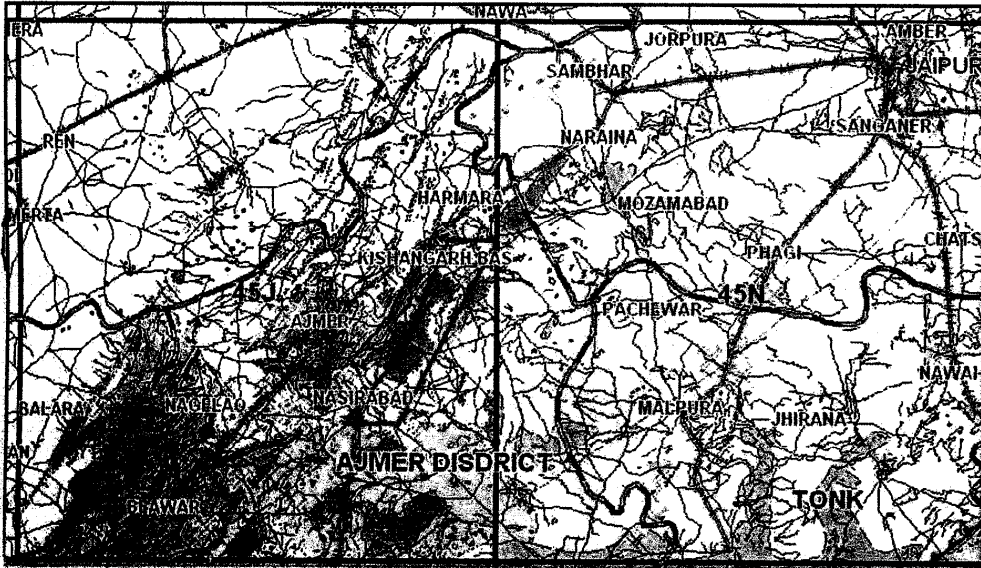
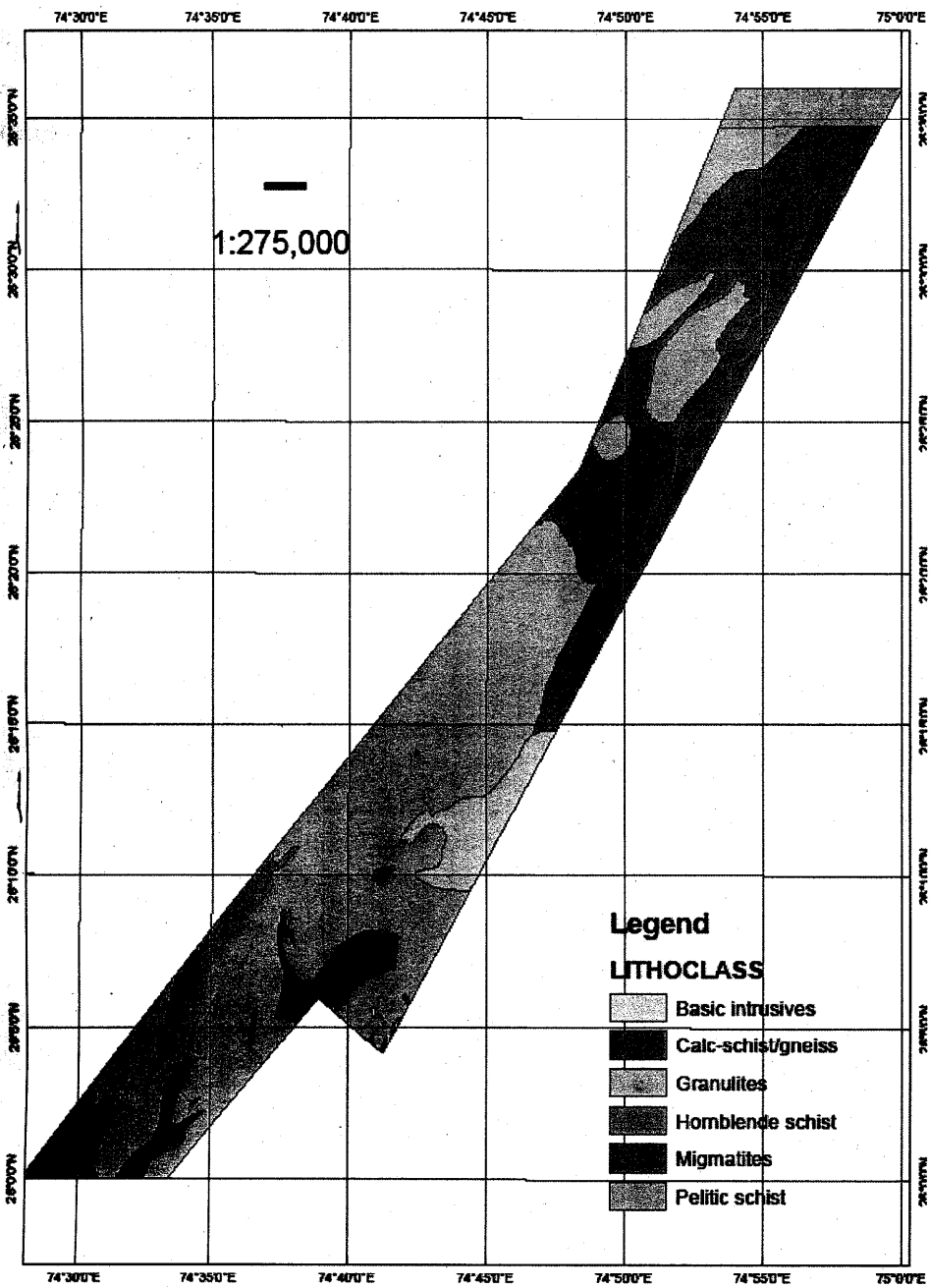


Figure 1 – CMPL's RP2/2004 Regional Location



The regional location OF RP 2/2004 is shown in Figure 2:

Figure 3 shows the original RP before mandatory relinquishment at the end of the second year of tenure. Reconnaissance Permits in Rajasthan are valid for three years and CMPL's leases have expired recently on October 19, 2008.

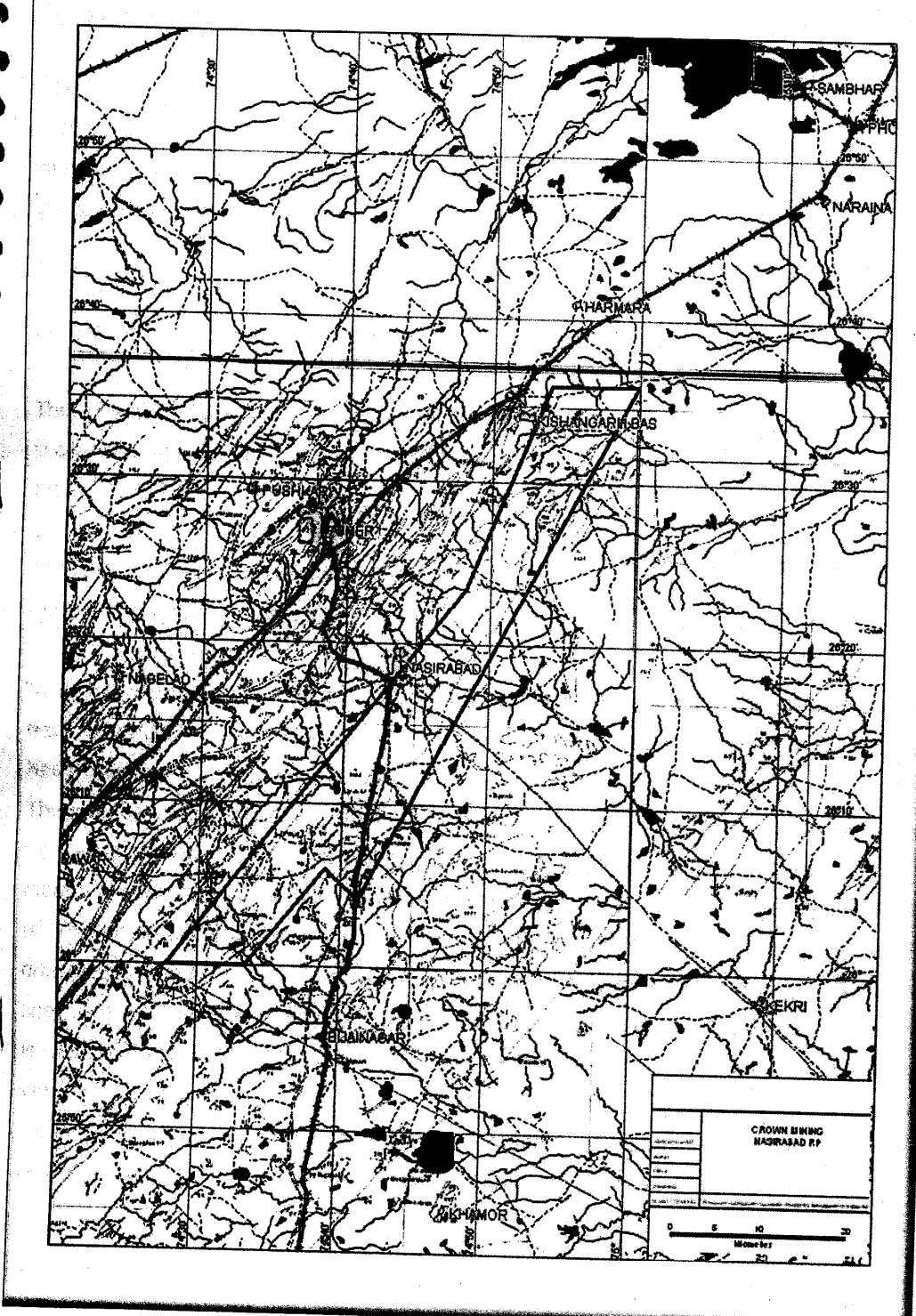


Figure 3– CMPL’s Original (pre-relinquishment) RP2/2004 Location

Regional Geological Setting

The RP is located in the Archaean-Proterozoic Aravalli Metallogenic Province of Western India, which comprises Archaean basement overlain by thick successions of intensely deformed and metamorphosed Proterozoic volcano-sedimentary units. The analysis of multi-disciplinary datasets, particularly geophysical work, defined three major tectonostratigraphic units:

The Bhilwara Supergroup comprises the Archaean basement of the province and consists predominantly of granitic gneiss complexes with large metavolcano-sedimentary rock enclaves.

The Aravalli Supergroup made up of a number of Palaeo- to Mesoproterozoic metasedimentary sequences, which in the central part of the province hosts some of the largest Pb-Zn deposits of India.

The Delhi Supergroup consists of Meso- to Neoproterozoic metasedimentary assemblages with metavolcanic units also present.

In addition to these major divisions, undeformed and unmetamorphosed sedimentary sequences of Neoproterozoic to Lower Cambrian age (the Vindhyan and Marwar Supergroups), and the extensive Neoproterozoic Malani Igneous Suite also occur.

The region is also frequently referred to as the Aravalli-Delhi Orogenic Belt. Pioneering work by the Geological Survey of India established the broad tectonostratigraphic framework, and since then many workers have refined this framework considerably. The Proterozoic Aravalli-Delhi Orogenic Belt of northwest India comprises a 30-200km wide belt extending for 700km in a northeast-southwest orientation. The orogen is bisected along its length by a major structure termed the Rakhabdev lineament, which divides the orogen into two distinct assemblages. To the east, Archaean basement is overlain by Mesoproterozoic Aravalli or Bhilwara supracrustal belts or by the Neoproterozoic Vindhyan Supergroup. On the west of the structure, the Jharol and Delhi metasedimentary / metavolcanic belts are extensively intruded by granitoid suites. The Rakhabdev lineament appears to be a significant tectonic feature as it separates belts with contrasting geological histories.

The Bhilwara Belt comprises metasedimentary units which show a range of compositions in different parts of the orogen, and often host mineralisation. For example, in the Sawar area, sillimanite-bearing pelitic schists host Cu and Pb-Zn mineralisation, and in the Pur-Banera mineralised zone, metavolcanic rocks are relatively common within an otherwise repetitive sequence of argillaceous, arenaceous and calcareous metasediments of amphibolite facies grade. Further south, the Rajpura-Dariba mineralised belt is characterised by amphibolitic basic sills, dolomitic marbles, kyanite/staurolite bearing graphitic mica schists and bedded cherts. Whilst at Rampura-Agucha transitional amphibolite to granulite metamorphic grade schists and gneisses host mineralisation. The Aravalli Belt consists of a dominantly argillaceous sequence that lies unconformably on the Archaean basement, with the base commonly marked by an aluminous pyrophyllite-muscovite-sericite horizon. The basal sequence consists mainly of fuchsite-bearing quartzites, overlain by a 500m to 3km thick unit of greenschists and amphibolites showing komatiitic affinity. These are in turn overlaid by carbonate units which give way to clastic depositional units reflecting interpreted rapid uplift of basinal margins. Finally, the Raialo limestone units are thought to mark the end of the Aravalli sedimentation. The Rakhadev Lineament reportedly marks the western edge of the Aravalli belt with the Jharol and Delhi belts located within the terrane to the west. A number of structural / tectonic studies of the orogen have been undertaken: these suggest that the Aravalli, Bhilwara and Jharol belts record similar tectonic histories, with an early east-west stretching phase resulting in F1 folds being drawn into parallelism with associated mylonitisation of basement-supracrustal contacts. The studies further infer that the supracrustal belts have been thrust over the basement units and support an allochthonous nature of these belts relative to the basement. Subsequent second generation (D2) deformation involved rotation of D1 fabrics into subvertical orientations with F2 fold hinges, noted to trend consistently north-south. A third deformation period (D3) was dominated by subhorizontal shear parallel to the trend of the orogen. The Delhi belt is considered to be somewhat similar, with the major difference being the orientation of F1 folds.

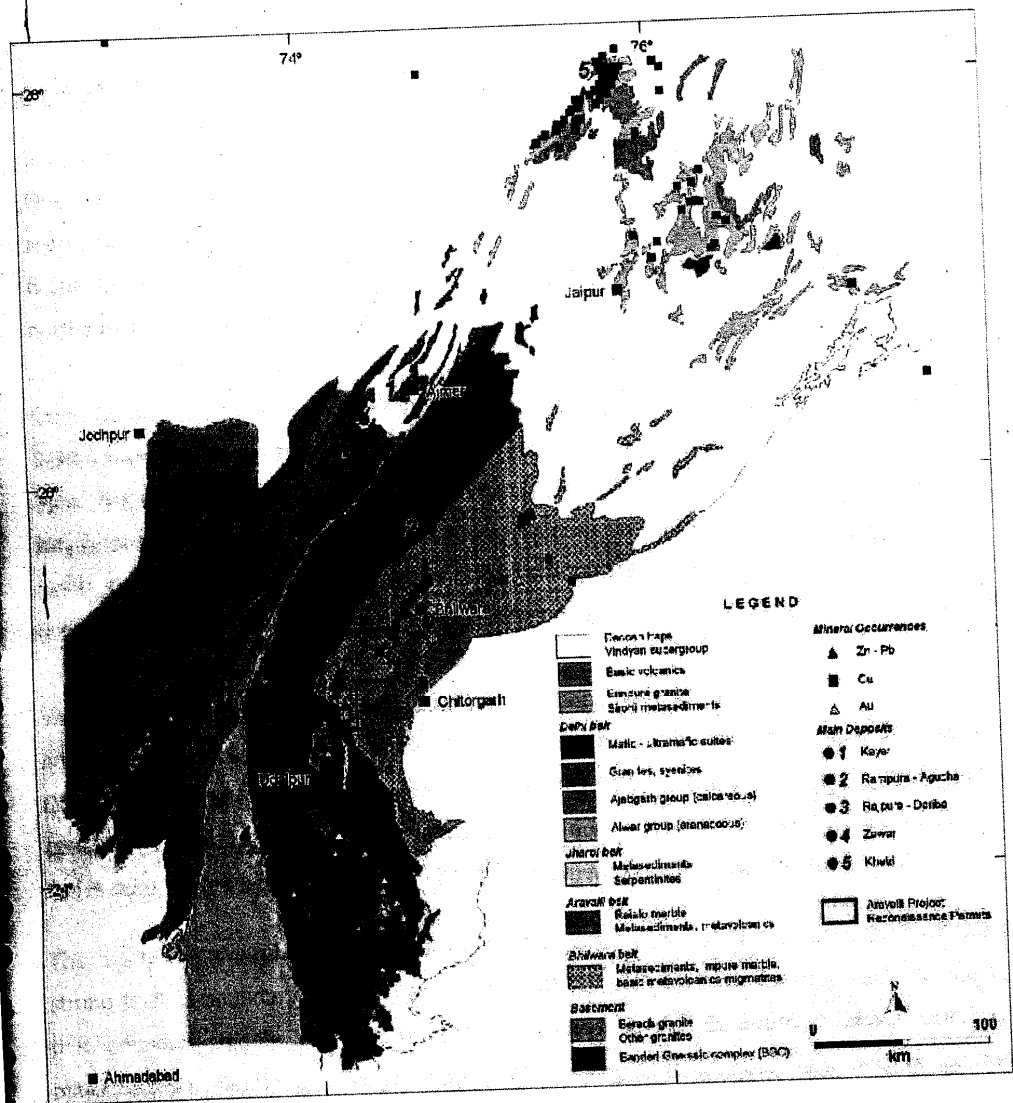


Figure 4: Regional Geological Map of the CMPL RPs

Local Geology

Reports of previous exploration at Nasirabad are confined to work by State Government agencies. Five small Cu occurrences were targeted by the Rajasthan DMG. Thin stringers of chalcopyrite were reported, developed parallel to the schistosity over several metres in deep (200-400m) diamond holes. CMPL has interpreted any previous work in their tenement areas and noted a prominent northeast-trending Landsat feature.

Other Cu occurrences include Chenpura where three holes were drilled by GSI under an 800m long, 5-30m wide gossanous zone with surface grab sample values of copper in the range 750ppm – 1000 ppm. No anomalous results were reported. Other occurrences are named Kiriap, Anarkhera (or Nayakheda) and Hanotia. The latter corresponds to historical workings up to 5m deep developed along a 400m strike length of gossan. GSI drilling has intersected a 375m long lensoid body of mineralisation, 3-24m wide, to a depth of 200m below surface containing copper to a grade of 1.4%.

The heterogeneous metasediments and meta-igneous rocks of the Nasirabad RP are poorly exposed and generally are obscured by a surficial cover of alluvial and colluvial origin. The exposed rocks in the RP area trend NNE parallel to the main Aravalli Range. The area is geologically and structurally complex. The ortho- and para-metamorphic rocks are of amphibolite facies grade, with rare granulite facies occurrences being associated with the basement Archaean Sandmata Complex.

The highly metamorphosed Sandmata Complex rocks occur in the eastern part of the RP, with a strong faulted boundary (Kalaguman Lineament) against Delhi Supergroup rocks to the West. Along this boundary highly crushed fractured rocks of Delhi Supergroup show signs of sulphide mineralisation. Overlying younger rocks, comprising arkosic quartzites and conglomerates with characteristically elongated pebbles indicating tectonic nature of contact, occur also. Surface indications of basemetal mineralization in areas adjacent to the RP occur as old workings, slag heaps and malachite staining in local well excavations.

Exploration Activities

Three anomalous areas were previously identified by CMPL during previous field work; these are shown in Figures 6 to 8:

1. The Tikawara anomaly lies on strike from the DMG prospect at Hathibatta which has been drilled recently. The prospect is defined by copper values up to 98ppm, with lesser zinc. Lead appears to the SW and NE, up to 99ppm. It lies on the NW side of an interpreted granite intrusion (white area outlined by red in the image), where there appear to be a number of faulted offsets in the granite boundary.
2. The Baniwari anomaly is a single line anomaly to the SE of the interpreted granite, on a major offset of the granite boundary. The anomaly is essentially Zn only (up to 101ppm).
3. To the NE at Gordhanputa the third target lies at the NE culmination of the interpreted granite. These types of culminations are often associated with mineralised dilation zones during later deformation. Copper is up to 78ppm in the northern part of the prospect (N-S lines), while the northernmost E-W soil line shows anomalies of both copper (80ppm) and zinc (66ppm). Further south there are some weak lead and zinc anomalies.

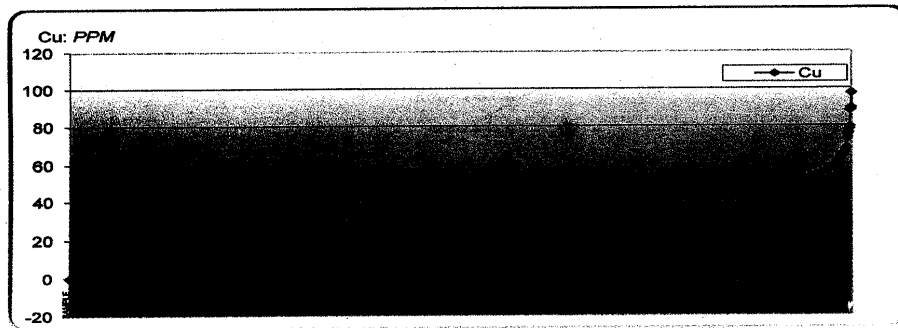


Figure 5: Statistical Distribution & Anomaly Threshold.

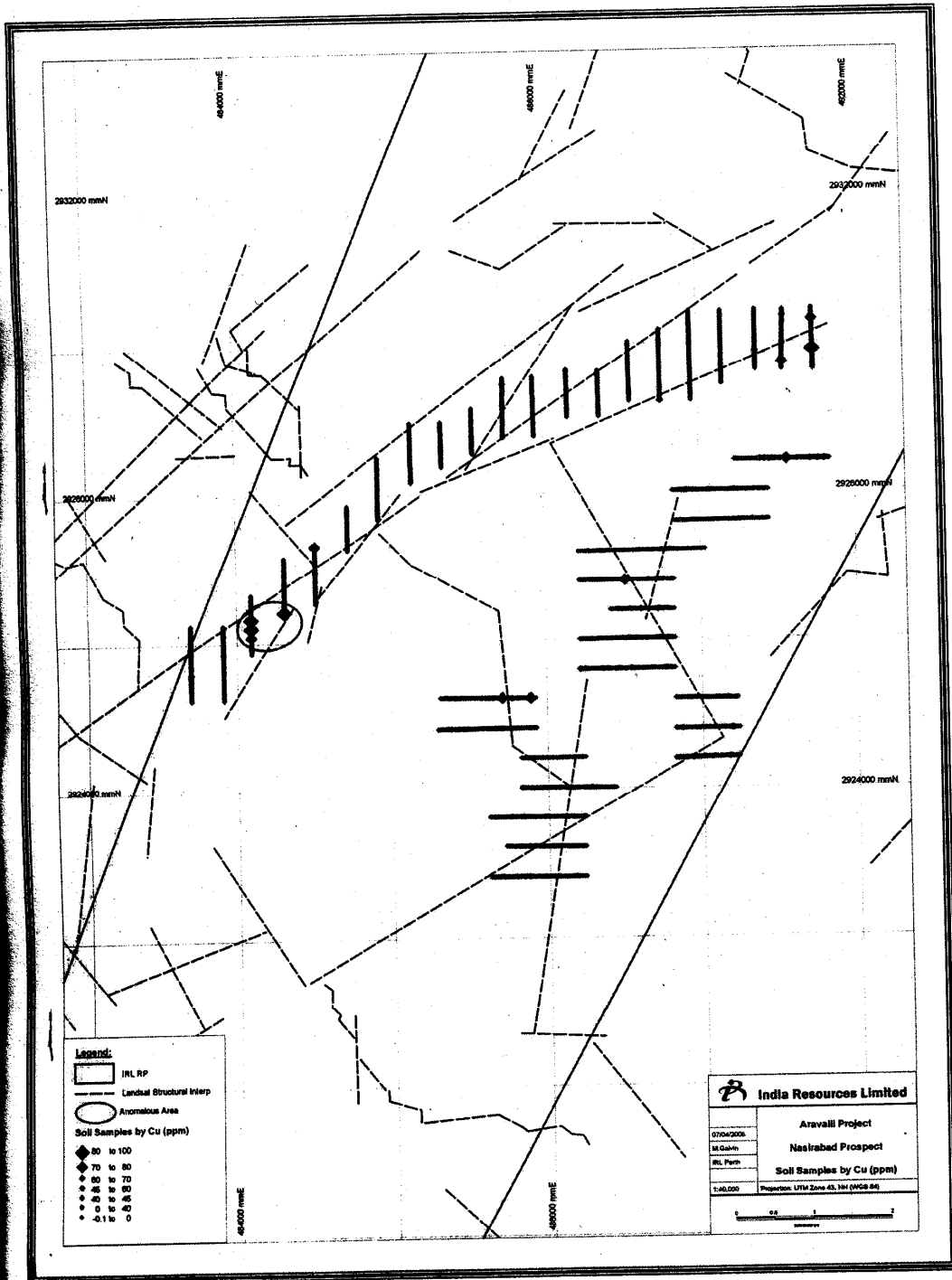


Figure 6: Map of Copper Soil Anomalies

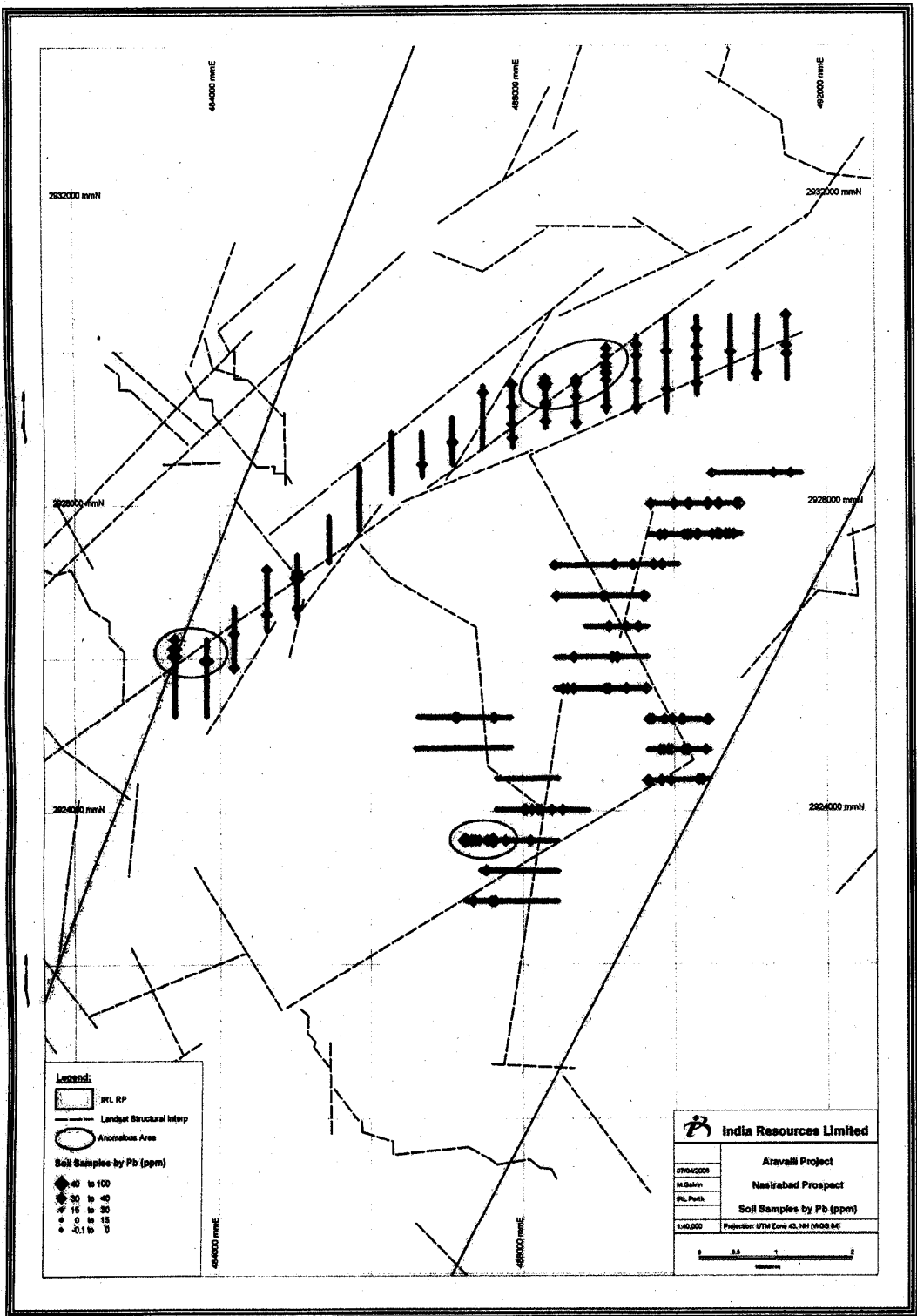


Figure 7: Map of Lead soil anomalies.

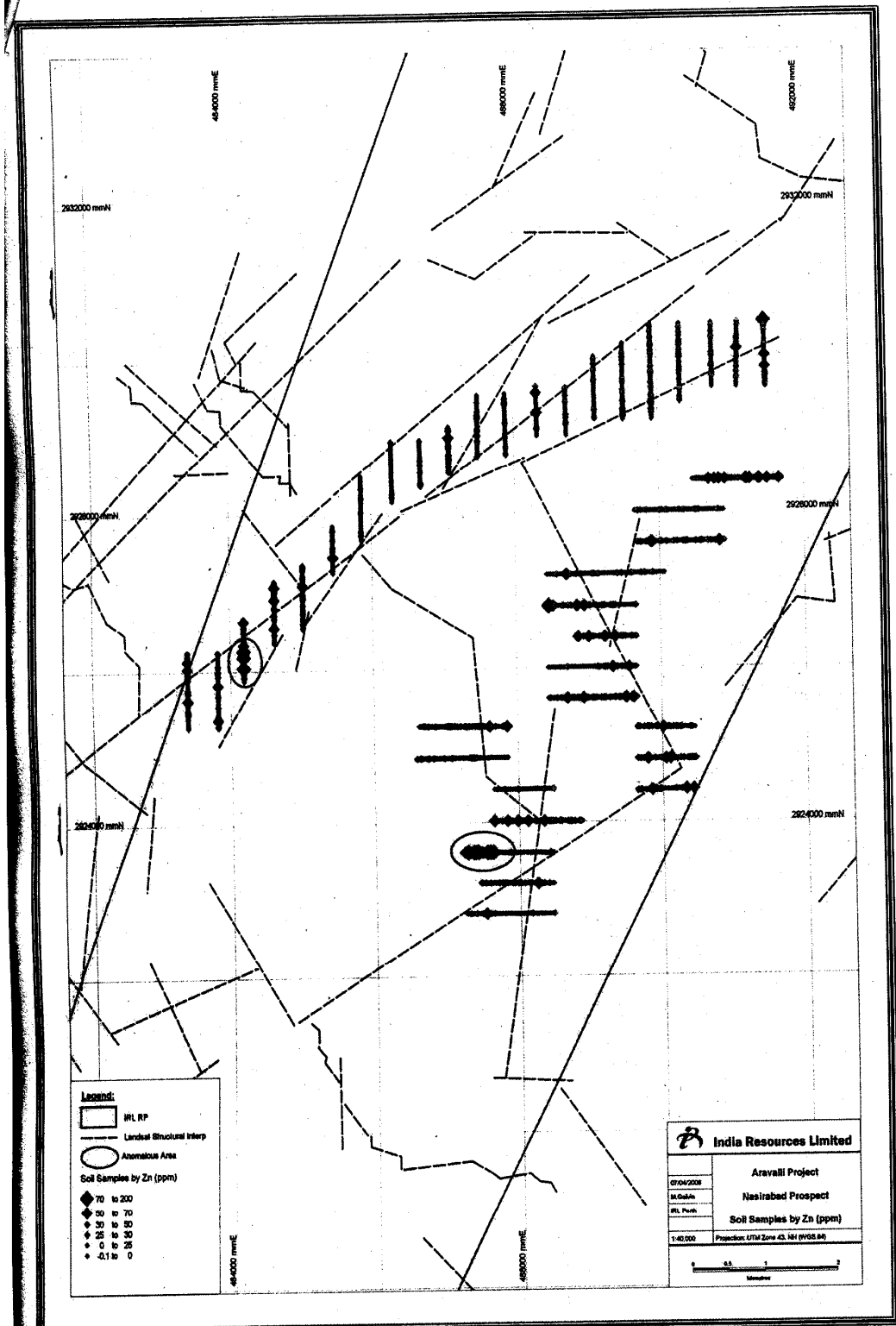


Figure 8: Map of Zinc soil anomalies

In July, 2008 CMPL began a campaign to identify further regional anomalies, other than the three mentioned here, which appeared too spatially delimited and characterised by a relatively low Cu-Pb-Zn concentrations, to warrant further work. The exploration philosophy underpinning this strategy was to optimise the prospectivity of any potential Prospecting Licence (PL) application, which would inevitably follow the discovery of a more extensive anomalous area with characteristically elevated Cu-Pb-Zn values.

CMPL, accordingly, acquired old aeromagnetic data which was flown over a large part of RP 2/2004. The raw aeromagnetic data were reprocessed in Australia and the area covered is shown in Figure 9:



Figure 9: RP2/2004, Aeromagnetic coverage area outlined

The image presented below in Figure 10 is a first vertical derivative of an Analytical Signal image:

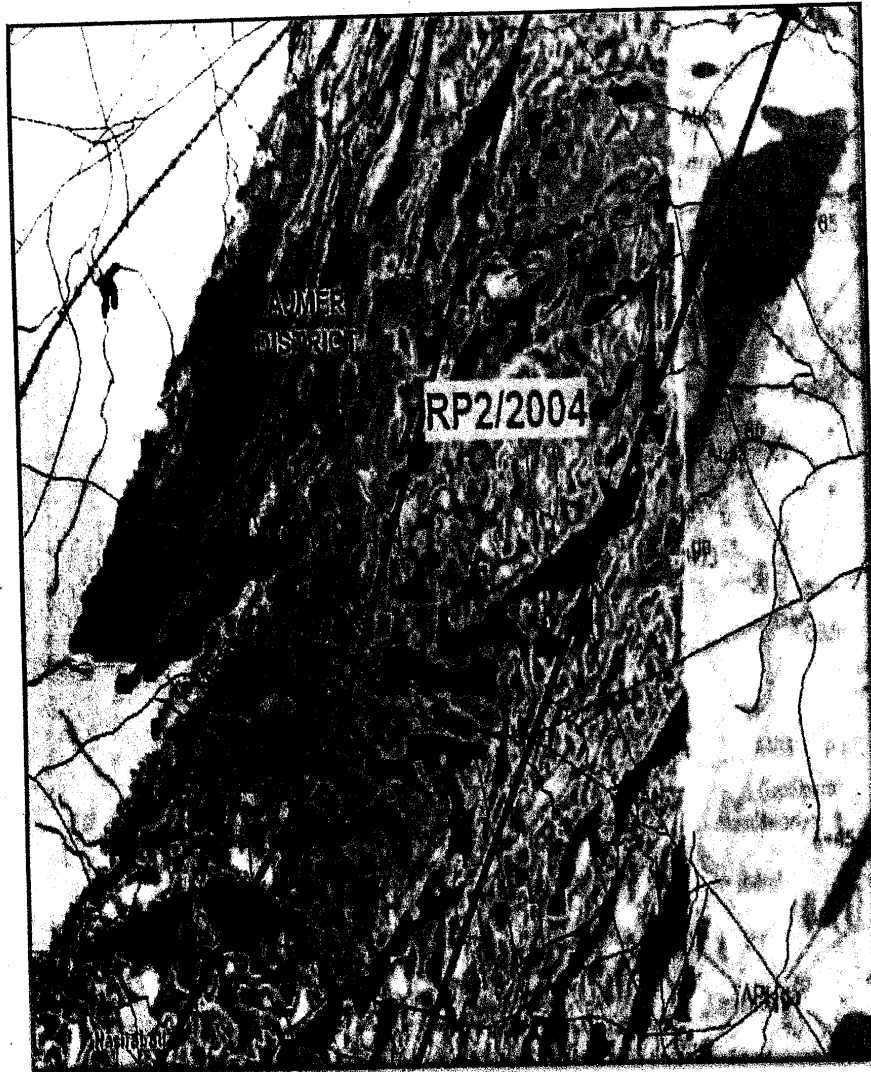


Figure 10: First Vertical Derivative Image

Figure 11 provides a similar view but with the GSI interpreted Aravalli Structure map overlain on a black and white magnetic image. It also shows three co-parallel major structural corridors which are associated with pronounced magnetic lineaments.

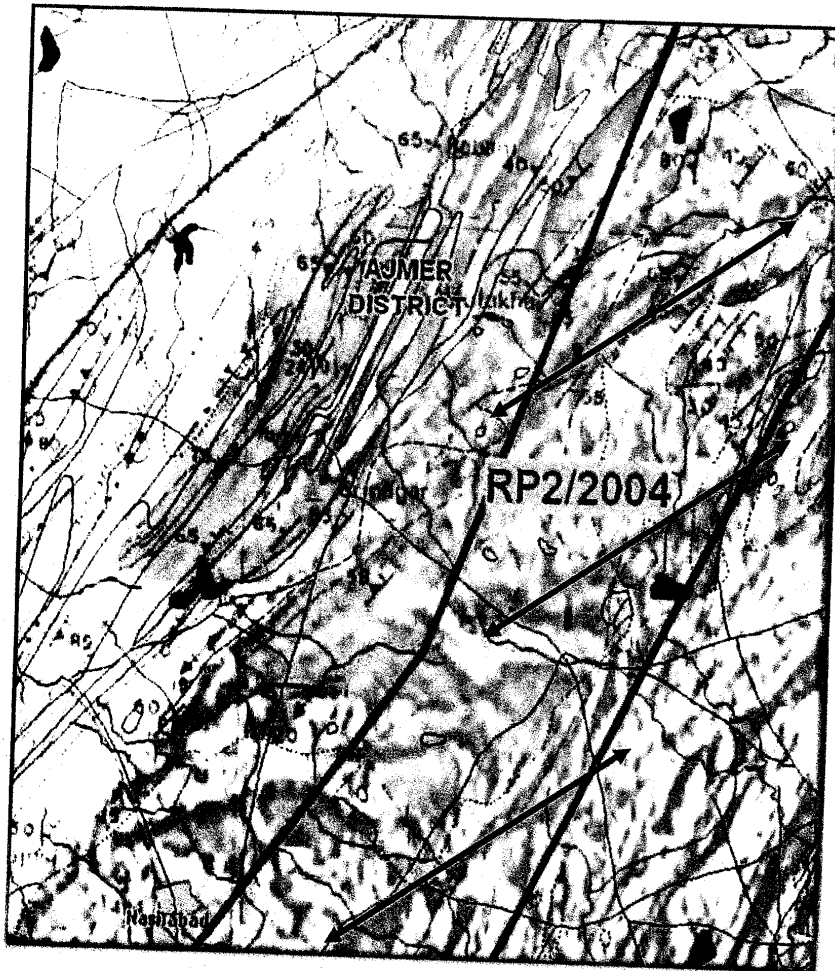


Figure 11: Major ENE-trending Structural Lineaments

Figure 11 shows an "Analytical signal" image with a lighting angle applied from the southeast that emphasises NE-SW trending magnetic anomalies. The image shows continuous magnetic anomalies extending across the RP, strengthening CMPL's interpretation that the mineralisation also extends in a similar fashion, coincident with the structural trend.

Intersections of the interpreted basement structures are considered as good targets in the search for strongly anomalous zones, characterised by elevated Copper values in soil samples.

The company identified seven target areas, ranked from 1 to 7 in order of priority. Target 1 is located immediately to the east of the NE extremity of a previous surface geochemical anomaly, characterised by elevated Copper, Lead & Zinc values. Copper is up to 78ppm in the northern part of the prospect with anomalies of both copper (80ppm) and zinc (66ppm) occurring immediately to the south. Target 1 includes the previously mentioned Gordhanputa Anomaly but is designed to extend the coverage further to the East and North.

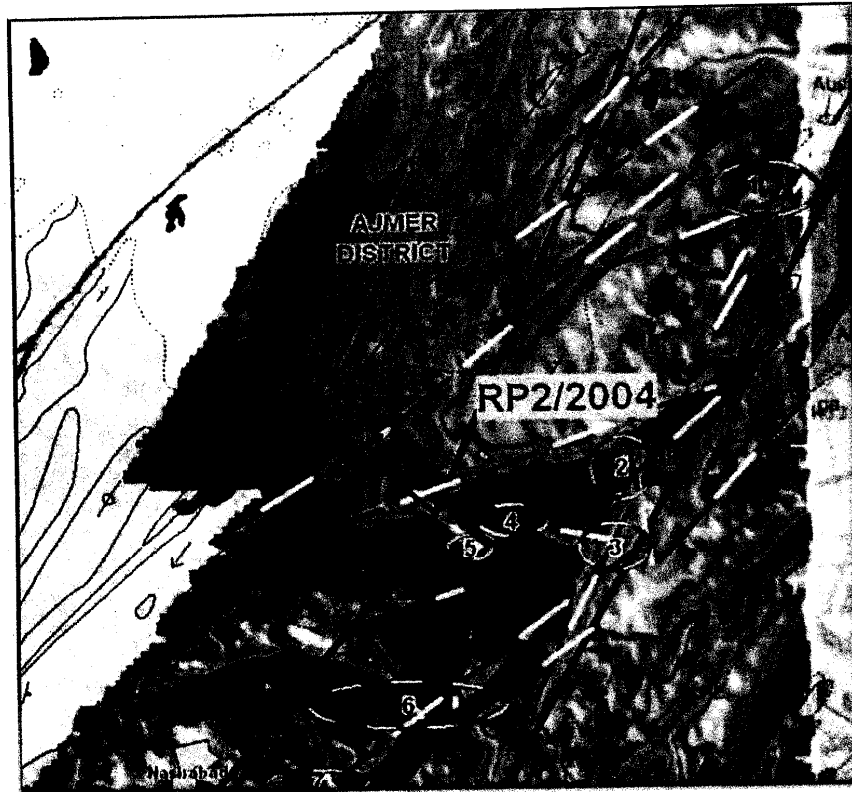


Figure 12: Interpreted Geophysical & Geochemical Target Zones

Target 2 is located to the south of the previously mentioned Baniwari anomaly, described in earlier reports. The remaining targets, three to seven, are speculative geophysical targets without any supporting geochemical data, hence the lower attributed priority.

The most recent work completed on RP2/2004 involved preliminary site visits to each target area to determine access issues with the local landowners and also to assess the average depth and nature of the local regolith cover. These preparations however proved in vain as the expiry of the three year RP term intervened and the geochemical evaluation program could not be completed before October 19, 2008.

EXPENDITURE :

Out of committed for 1st Year & IIInd year (i.e. Oct 05 to Sept 07) Rs. 52,00,000/- (1,30,000 USD) a sum of Rs. 1,24,56,560/- (3,11,414USD) has been spent for exploration work. Rs. 40,97,960/- (102449 USD) has been spent in the period from Oct 07 to March'08 & in the period April'08 to June'08 Rs. 15,40,000/- (38500 USD) from July 08 to October 08 Rs. 12,84,410/- (29870 USD) has been spent. The details of expenditure are as follows:

ITEMS	YEAR 05-07 (Oct 05 to Sept 07) (IN USD)	10/07 TO 03/08(In USD)	04/08 TO 06/08 (In USD)	July 1 to October 19, 2008
GSI Reports	---	---	---	---
Geo Chemistry/analysis	98107.00	32,821.00	10,000.00	---
Geophysics/Processing/Interpretation	12989.00	-	-	12,000.00
Travel/Vehicles/Accommodation	96787.00	17,128.00	5,000.00	4,200.00
Freight/Shipping & Courier	1500.00	2000.00	500.00	320.00
Utilities	40469.00	15,500.00	3,000.00	1,150.00
Employee Costs	60663.00	35,000.00	20,000.00	12,000.00
Insurance	382.00	-	-	200.00
Taxes/Fees	517.00	-	-	-
Total	3,11,414.00	1,02,449.00	38,500.00	\$29,870.00

@ 1\$ = Rs 120/-
Rs 16.47 Lakhs.