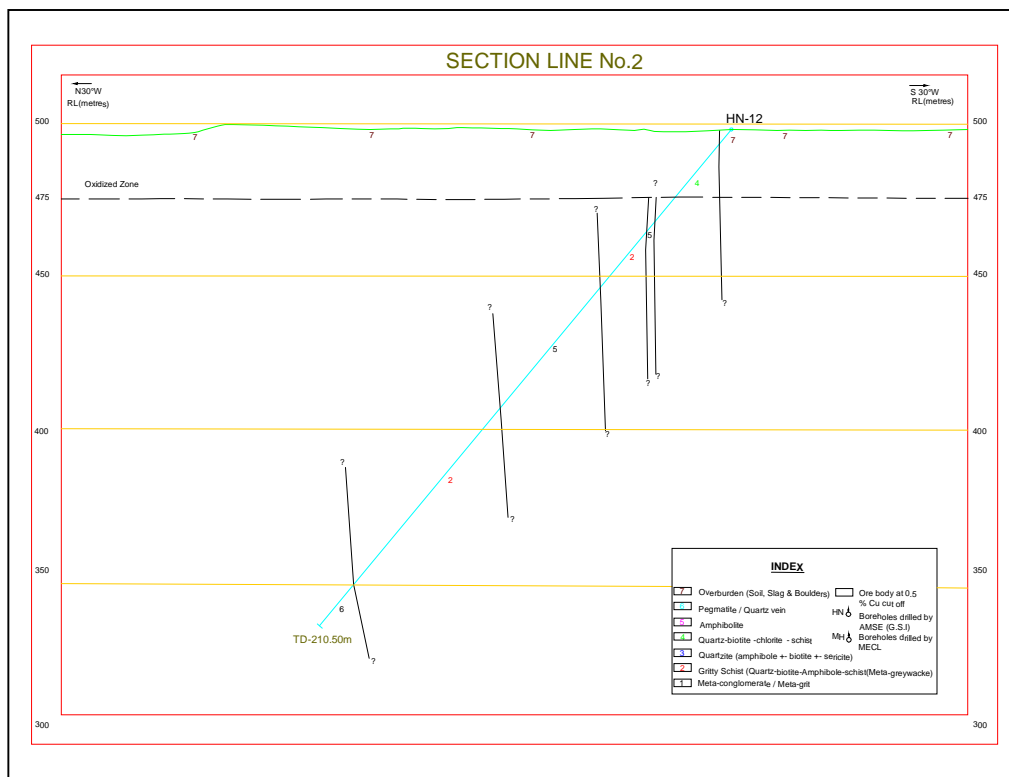


# GEOLOGICAL REPORT ON EXPLORATION FOR COPPER IN HANOTIA BLOCK, DISTRICT- AJMER, RAJASTHAN

## EXECUTIVE SUMMARY



**JULY 1991**

**MINERAL EXPLORATION CORPORATION LIMITED**  
(A Government of India Enterprise)  
**SEMINARY HILLS**  
**NAGPUR – 440006**

**JAIPUR AREA**  
**JAIPUR, RAJASTHAN (INDIA)**

# **GEOLOGICAL REPORT ON EXPLORATION FOR COPPER IN HANOTIA BLOCK, DISTRICT- AJMER, RAJASTHAN.**

## **EXECUTIVE SUMMARY**

### **1.0 LOCATION**

The Hanotia Block (Lat – 25° 57' 30" Long 74° 30' 30") is about 15 Km from Bijainagar along Bijainnagar – Beawar Road. District – Ajmer, Rajasthan. The block was earlier explored by Airborne Mineral Surveys & Exploration wing (GSI) through surface drilling.

### **2.0 GEOLOGY AND STRUCTURE**

The area is mostly covered with sand and alluvium and therefore the geology has been deciphered on the basis of sub-surface data. The rock types of this area are grouped under Sandmata complex under Bhilwara super group, which are pre-Aravallis and considered to be equivalent to banded gneissic complex. Rock types outcropping in the area, comprise unmigmatized metasediments viz. conglomerate, gritty metagreywacke, quartz mica schist, quartz-biotite – amphibole-chlorite schist, quartzite and metabasics.

The general strike of the formation in the Hanotia block is N 60° E – S 60° W with southeasterly dips varying between 60° to 75°.

### **3.0 MINERALISATION**

Surface manifestations of copper mineralisation in the block are in the form of old mining pits, mine dumps, slag heaps, with profuse malachite stains. The main host rock for copper mineralization in the block is coarse grained to gritty quartz-biotite-chlorite-amphibole schist. The main copper lode is of lenticular nature, pinching along strike and bottoming at depth around 325 MRL. The main sulphide minerals are chalcopyrite, pyrite and pyrrhotite.

### **4.0 QUANTUM OF WORK DONE**

MECL has carried out detailed Geological Mapping & topographical survey covering 0.80 Sq. Km areas. 5,914.40 Mtrs of drilling in 27 boreholes, 1193 (1084+109) number of primary and check samples, 37 Nos of composite samples are analysed for Au & Ag by Fire Assay method, 134 (97+37) Nos of primary & composite samples for Emission Spectroscopy studies. Petrographic studies on 57 Nos. of samples and Mineralogical studies on 47 Nos of samples were carried out by MECL in the Block. Based on the above data an exploration report was submitted by MECL.

## **5.0 ORE RESERVE ESTIMATION**

A total of 1.46 million tones of 'Probable' and Possible category of ore reserve with 1.48% copper have been estimated at 0.5% copper cut-off. Out of the total reserves estimated, main lode alone contains 1.22 million tones of Probable category with 1.54% copper, which accounts for 84% of the total reserves estimated.

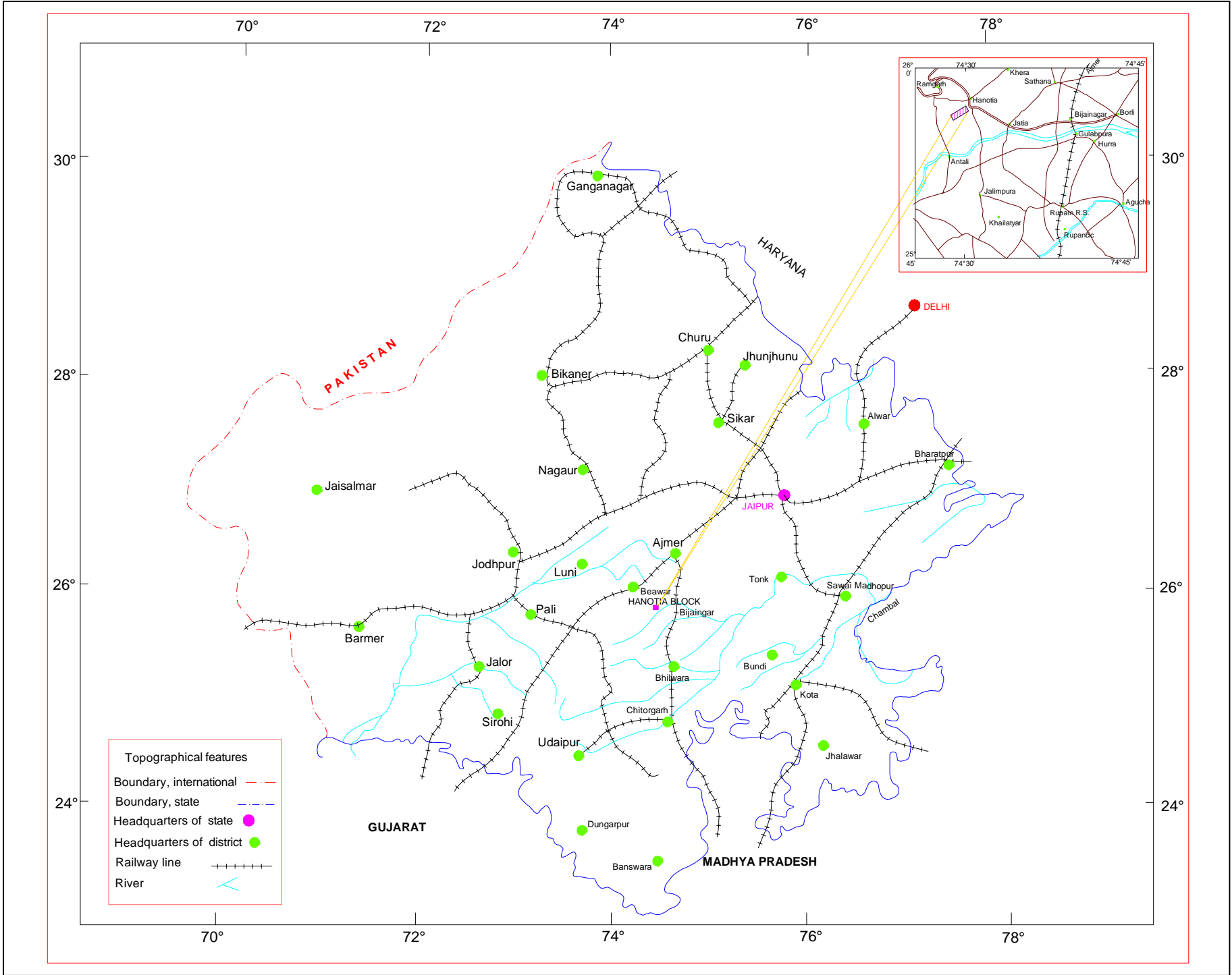
Geostatistical evaluation of the grade estimates indicates prediction accuracy of 81%. The tonnage estimates have a prediction accuracy of 93% to 95% confidence level.

The reserves established for main lode in Hanotia block – (1.22 million tones x 1.54% Cu) can sustain an underground mine of a capacity of 200 TPD for 15 years.

**The Deposit has been classified as Category 'C' of UNFC 332.**

**The Total Cost of Exploration is Rs. 143.14 Lakhs.**

# LOCATION MAP OF HANOTIA BLOCK



# GEOLOGICAL CROSS SECTION

## SECTION LINE No.2

