

**गवेषण रिपोर्ट
सिधेश्वर तॉबा निक्षेप (ब्लॉक-१)
सिंघभूम कॉपर बेल्ट, बिहार**

**EXPLORATION REPORT
SIDHESHWAR COPPER DEPOSIT (BLOCK-1)
SINGHBHUM COPPER BELT, BIHAR**

EXECUTIVE SUMMARY



खनिज गवेषण निगम लिमिटेड

MINERAL EXPLORATION CORPORATION LIMITED

(A Government of India Enterprise)

NAGPUR

(भारत सरकार का उद्यम)

नागपुर

मई १९८४

MAY 1984

**GEOLOGICAL REPORT ON EXPLORATION FOR COPPER ORE
IN
SIDHESHWAR COPPER DEPOSIT, BLOCK-I,
SINGHBHUM COPPER BELT,
DISTRICT- EAST SINGHBHUM, JHARKHAND**

EXECUTIVE SUMMARY

1.0 LOCATION

Sidheshwar Copper deposit, Block-I is located in Singhbhum Copper Belt, District- East Singhbhum, Jharkhand. It is about 5 km East of Rakha mines of HCL. The nearest railway station is Ghatshila on Howrah-Mumbai main line of SE railway. Ghatshila is about 20 km from the block. Smelter of M/s. Hindustan Copper Limited (HCL) is situated at Moubhandar which is about 17 km from the block.

2.0 GEOLOGY

Rock formation belongs to Singhbhum shear zone. The area is occupied by Precambrian metamorphites of Dhanjori group, represented by metabasics and its metamorphosed variants. The rock exposures in the block are quartz chlorite schist, mica schist, sericite schist/quartzite, biotite chlorite quartz schist and Chibasa quartzite. General strike of foliation is NNE – SSW with 40° – 50° south west dip. Host rock for mineralisation is mainly quartz-chlorite-sericite schist and quartzite.

3.0 MINERALISATION

Surface manifestation of mineralisation is in the form of malachite staining, feebly developed gossan, limonitisation and old working. The mineralisation in the block is litho- structural control. Two numbers of lodes have been identified in the block. The major sulphide minerals are chalcopyrite, pyrite & pyrrhotite.

4.0 QUANTUM OF WORK

MECL has carried out detailed geological mapping covering 1.00-sq.km area. 12071m of drilling in 37 boreholes along with associated geological and laboratory work. Based on above data , an exploration report was submitted by MECL.

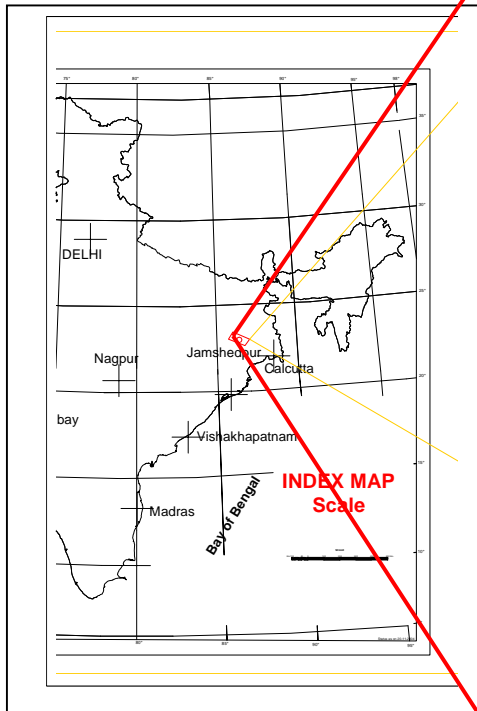
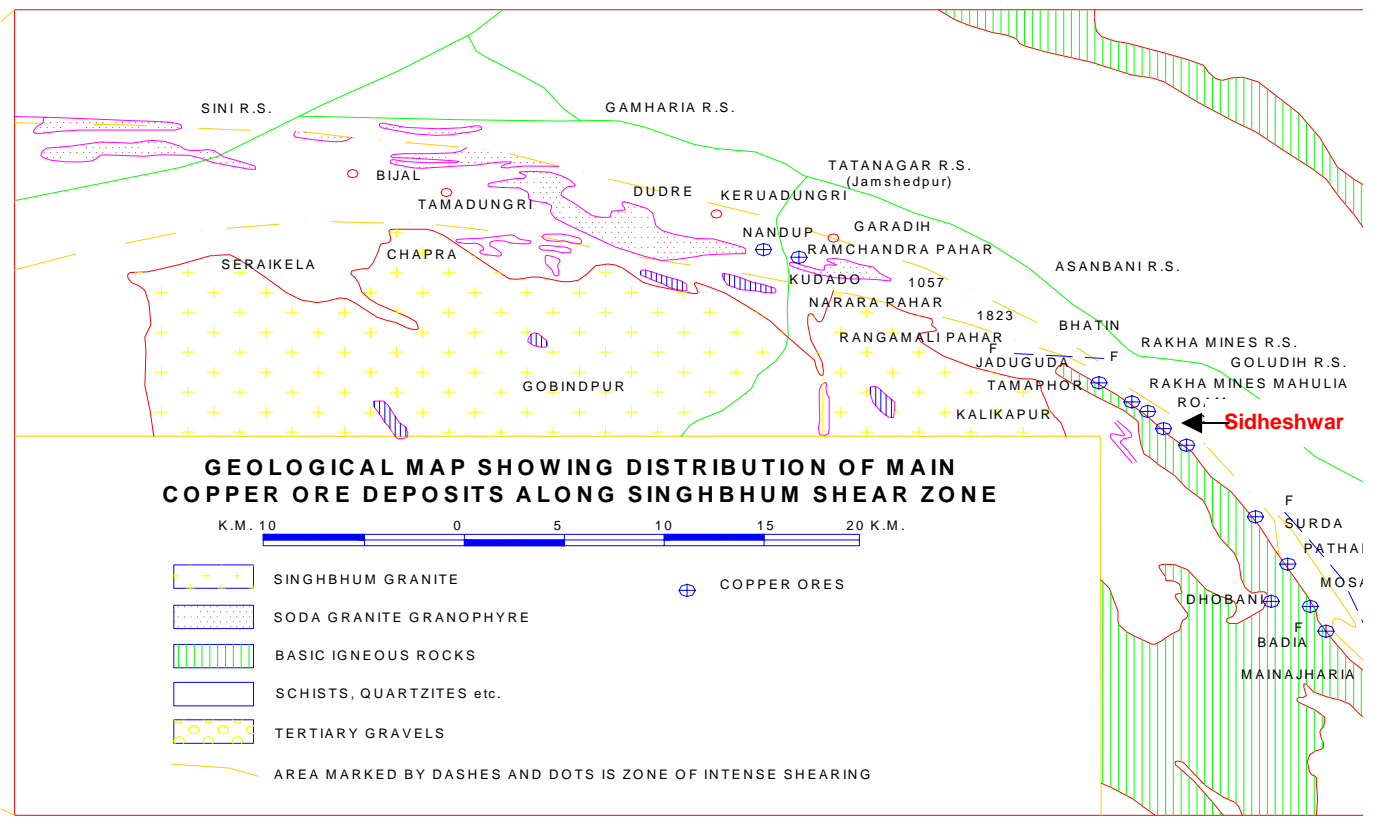
5.0 ORE RESERVE ESTIMATION

A total of 3.97 million tonnes of copper ore reserves with average grade of 1.83% of Cu at 0.5% cut-off have been estimated in main lode and footwall lodes covering cumulative strike length of 1150 m. With vertical depth of 300m from surface.

The deposit has been placed under category-‘A’ of UNFC 331.

The total cost of exploration is Rs.84.16 lacs.

Location Map of Siddheshwar Copper Deposit



Geological Cross Section of Siddheshwar Copper Deposit, Block-1

