

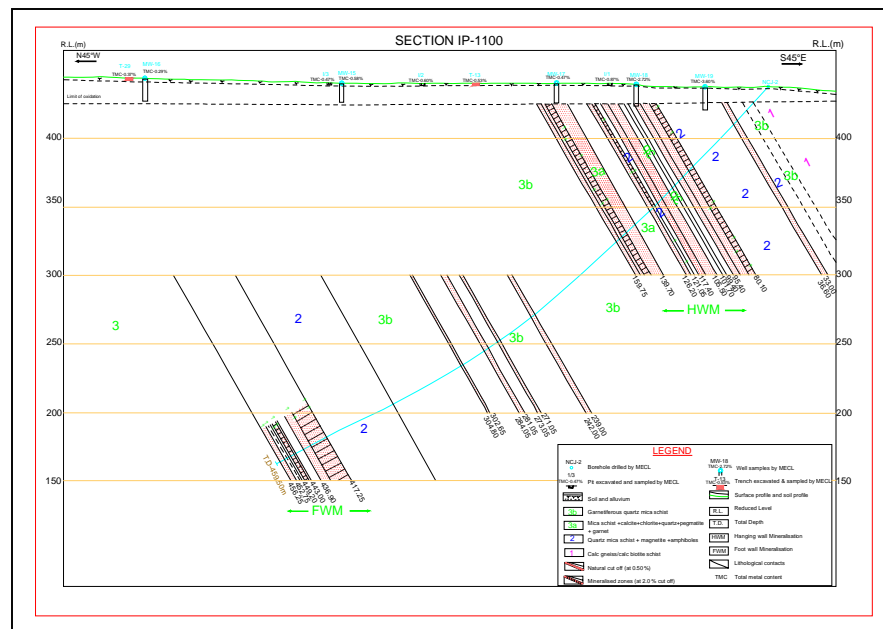
A GEOLOGICAL REPORT ON EXPLORATION FOR LEAD-ZINC ORES IN

NEHRU-CENTENARY PROSPECT

NEAR VILLAGE JALIYA,

DISTRICT- BHILWARA, RAJASTHAN

EXECUTIVE SUMMARY



MINERAL EXPLORATION CORPORATION LIMITED
(A Government of India Enterprise)
SEMINARY HILLS, NAGPUR

JAIPUR AREA
JAIPUR, RAJASTHAN (INDIA)
NOVEMBER-1993

A GEOLOGICAL REPORT ON EXPLORATION FOR LEAD-ZINC ORES IN NEHRU-CENTENARY PROSPECT NEAR VILLAGE JALIYA, DISTRICT, BHILWARA, RAJASTHAN

EXECUTIVE SUMMARY

1.0 LOCATION

Nehru Centenary Prospect (NCP) is about 12.00 kms. South of Bhilwara, district headquarter in the state of Rajasthan. The block is bounded by Latitude 25°27'00" Longitude 70°28'0" and is covered in Toposheet No. 45K/11 of Survey of India.

2.0 GEOLOGY AND STRUCTURE

The litho units of Nehru Centenary Prospect are part of the Bhilwara Super group of the Archaean age. The local geological setting is as follows.

| | | |
|----------|----------------------|---|
| Recent | | Soil and alluvium |
| Archaean | Bhilwara Super Group | Pegmatite intrusive and calcite veins |
| | | Garnetiferous quartz-mica-schist (Host Rock) |
| | | Quartz-magnetite-amphibole-biotite-schist |
| | | Calc-gneiss |

The area exhibits a large synformal fold plunging in NE direction. The low lying area between the eastern and western limb covers the Nehru Centenary Prospect. The general trend of formations is NE – SW with dips ranging from 45° to 65° mostly towards east.

3.0 MINERALISATION

Gossan bands were traced intermittently on HW/FW sides and old workings were observed on the footwall contact.

In this region, Quartz-magnetite-amphibole-biotite schist is the host rock for Lead-Zinc mineralisation. However, during exploration in northern part of Devpura block, concentration of Lead-Zinc Mineralisation in mica schist was observed. In this region, Quartz-magnetite-amphibole-biotite schist is the host rock for Lead-Zinc mineralisation. However, during exploration in northern part of Devpura block, concentration of Lead-Zinc Mineralisation in mica schist was observed.

The sulphide mineralisation is mostly confined to mica schist in the form of disseminations, stringers and fracture filling. The ore minerals are pyrrhotite, sphalerite and galena associated with other sulphides in minor quantities.

4.0 QUANTUM OF WORK DONE

MECL has carried out detailed Surveying Geological Mapping & topographical survey covering 3.00 Sq. Km area. A total of six boreholes involving 2366.60 m of drilling, 3055 Cu.m of pitting and trenching, 2688 nos. of samples for primary & check and composite analysis 93 Nos. of samples for spectroscopic, 29 Nos. for Petrographic, 26 Nos. for mineragraphic studies. 34 Nos. for XRD, 42 Nos. for Fire Assay for Au & Ag, and 24 Nos. for water samples were also subjected to analysis. 7 Nos samples for specific gravity determination test were also carried out by MECL in the Block. In addition to above 40 sq.km geophysical survey with 8Nos sounding and 425 stations of magnetic survey was also carried out by MECL in the block. Based on the above data and earlier data of GSI, an exploration report was submitted by MECL.

4.0 ORE RESERVE ESTIMATION

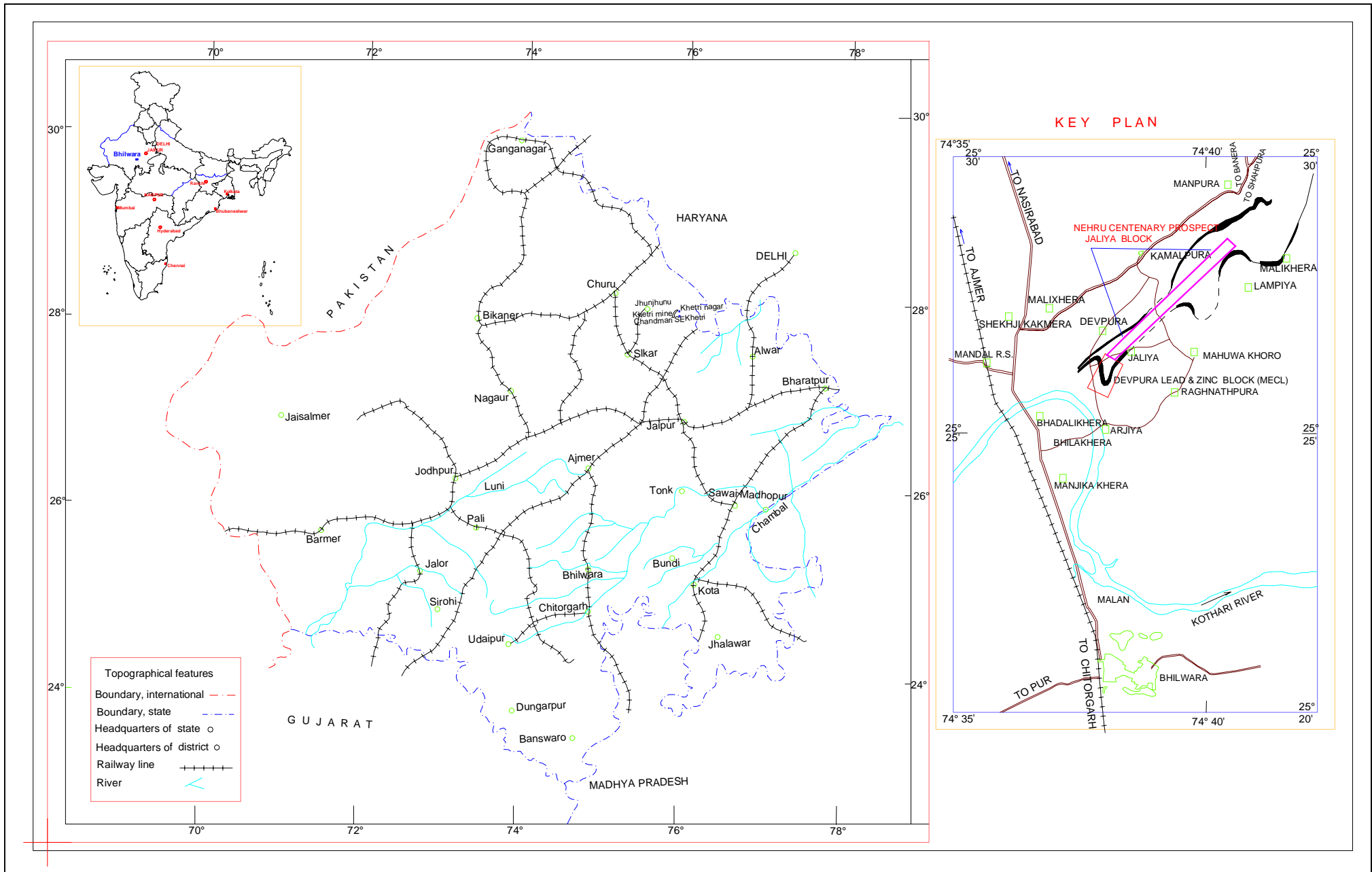
The reserves have been computed with the help of cross section method. The base metal mineralisation was observed over a strike length of 645 m on hanging wall side. In view of the wide spaced intersections possible category reserves of 2.62 million tones of Lead-Zinc ore with 0.40% Pb and 2.10% Zn (TMC 2.50%) were identified at 2.0% cut off grade (between section IP 1100 and IP 3400). These reserves have been computed for a vertical column of 125 m falling between 425 MRL and 300 MRL.

The deposit has been classified as Category “D” of UNFC 332

Environmental studies on a limited scale were undertaken during the last phase of work of Devpura exploration programme on the southern extension of Nehru Centenary Prospect. The studies included collection of hydro meteorological data, soil, ground water, forest, socio-economic aspects etc.

The total Cost of Exploration is Rs. 90.74 Lakhs

LOCATION MAP OF NEHRU CENTANARY BLOCK



GEOLOGICAL CROSS SECTION

