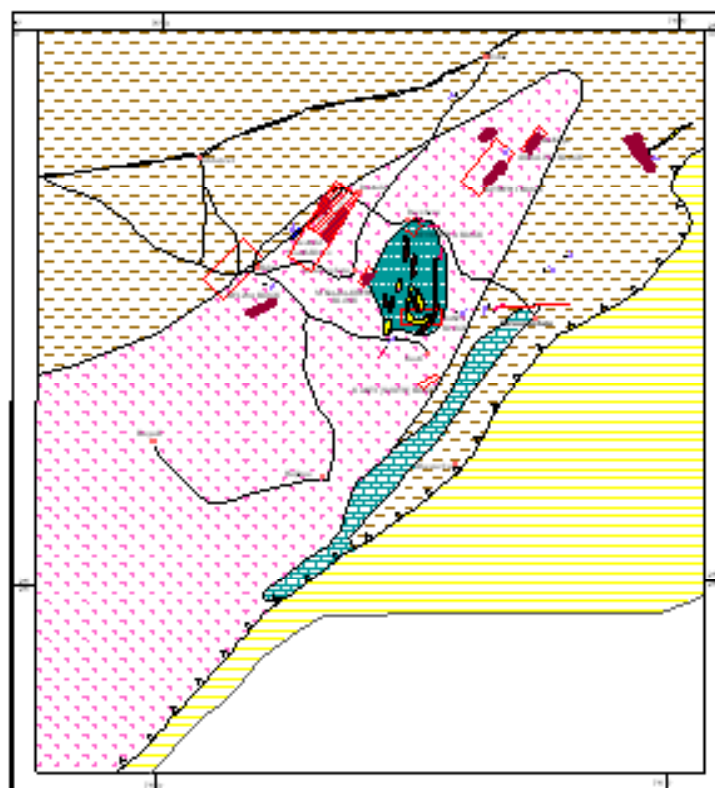


GEOLOGICAL REPORT ON EXPLORATION FOR DEVTALAI MULTIMETAL DEPOSIT DISTRICT - BHILWARA, RAJASTHAN

EXECUTIVE SUMMARY



MINERAL EXPLORATION CORPORATION LIMITED
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1.0 LOCATION

Devtalai block (Latitude 25° 27' 58" to 25° 28' 38" and Longitude 75° 01' 21" to 75° 01' 53") is located just south of Devtalai village having its tehsil headquarters at Kotri and district headquarters at Bhilwara in the state of Rajasthan. The area falls in the Survey of India Toposheet No.45 0/3

2.0 GEOLOGY AND STRUCTURE

The area forms a small segment of Mangalwar Complex and lies in the east-central part of Rajasthan. An older greenstone belt of the Mangalwar complex is thrust against the younger Archaean greenstone belt of the Hindoli Group lying further to east (Sinha Roy, 1985). The mineralized belt in Devtalai and Ratreri areas is located near the East-Central margin of the Manglwar complex

The area exposes rocks of Mangalwar complex and the Jahazpur group belonging to the Pre-Aravalli Super Group. The Mangalwar complex of the Archaean age constitutes a part of the banded gneissic complex.

The rocks of Devtalai block form a part of long belt of banded gneisses of Mangalwar complex. The eastern contact of the Mangalwar complex is tectonic against the Hindoli and Jahazpur Groups. The Rock types of the Mangalwars in Devtalai block are amphibolites, Biotite-chlorite schist's ± Amphiboles, tonalitic gneisses/quartz amphibole biotite rock. These are intruded by pink granites and grey granites followed by emplacement of quartz veins carrying sulphide mineralisation.

Most of the area in the block is covered with soil and alluvium. There are no surface exposures except few lensoidal quartz veins towards the eastern part of the block trending roughly NE-SW. The general trend of the rock formations as observed from subsurface data is NE-SW with dip of the formations varies between 15° - 30° due northwest. The quartz veins are highly sheared, brecciated, jointed and shows limonitic and malachite stains at places.

3.0 MINERALISATION

Mainly quartz veins host mineralisation in Devtalai block. The mineralisation is also observed in tonalite gneiss and Granitic gneisses. Chalcopyrite is main copper ore mineral in the area whereas Gold is a prominent associated metal, which can be recovered as by product. The other ore minerals are Pyrite, Magnetite & Pyrrhotite in the decreasing order of abundance. Mineralisation occurs as stringers, blebs, veins, veinlets, patches and disseminations, occasionally in massive form.

4.0 QUANTUM OF WORK DONE

MECL has carried out detailed Geological Mapping & topographical survey covering 1.0 Sq.km. area. 4702.65 m of drilling in 35 boreholes, 1595 Nos number of primary and check samples for copper and 1595 NO- of primary and check samples for gold (Fire Assay), 49 Nos of composite samples for (5 radicals i.e. Cu, As, Pb, Zn, & Bi) and 49 number of composite samples (for 4 radicals CO, MO, Ni & W), 20 number of composite samples for Tellurium and Platinum, 49 number of composite samples for Fire Assay for Au & Ag were also analysed. 49 Nos. of composite samples for Emission Spectroscopy (10 elements) and for XRD studies, Petrographic studies & Minerographic studies on 60 Nos. of samples and 80 Nos of specific gravity determination test were also carried out by MECL in the Block. Geotechnical studies were carried out on one borehole core (MDT-II/7) and one borehole core sample was subjected for beneficiation studies. Baseline Environmental studies were also carried out in the Block. Based on the above data and earlier data of GSI, an exploration report was submitted by MECL.

6.0 ORE RESERVE ESTIMATION

Three Nos. of mineable copper bearing lodes with associated gold values (in gms) hosted by vein quartz have been identified namely L-I, L-II, L-III and one Local lode above the Lode L-I (with intersection in only one section). The Lode L-I & L-II are more persistent in strike directions as well as in depth. Lode L-III shows mineable development in 3 sections only in continuity. The reserves on 0.50% Cu cut-off have been estimated to the maximum vertical depth of 210.00 m and that of 0.20% Cu cut-off up to the depth of 148.00 m from the surface.

The reserves estimated at 0.50% Cu cut-off are 1583511.49 tonnes with 1.2572% Cu and 503268.58kg of Au reserves.

The reserves estimated at 0.20% Cu cut-off are 2476277.85 tonnes with 0.97% Cu and 578057.82kg of Au reserves.

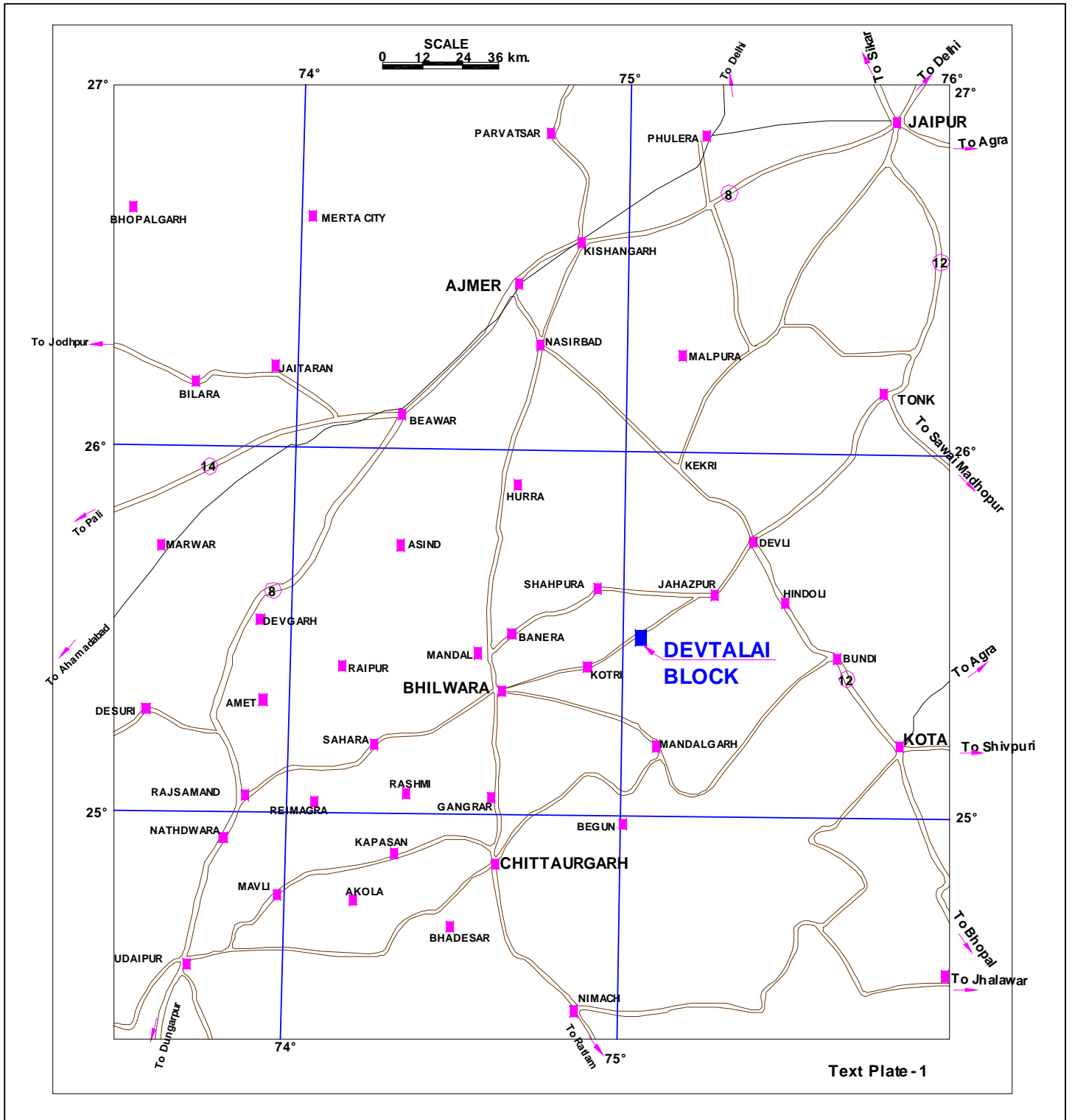
The oxidised zone reserve of 302884 tonnes taken as it is from Phase-I making the total copper ore reserves (Sulphide + Oxidised zone) to 2.779 m.t. with the grade of 0.90% Cu. at 0.20% Cu cutoff.

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

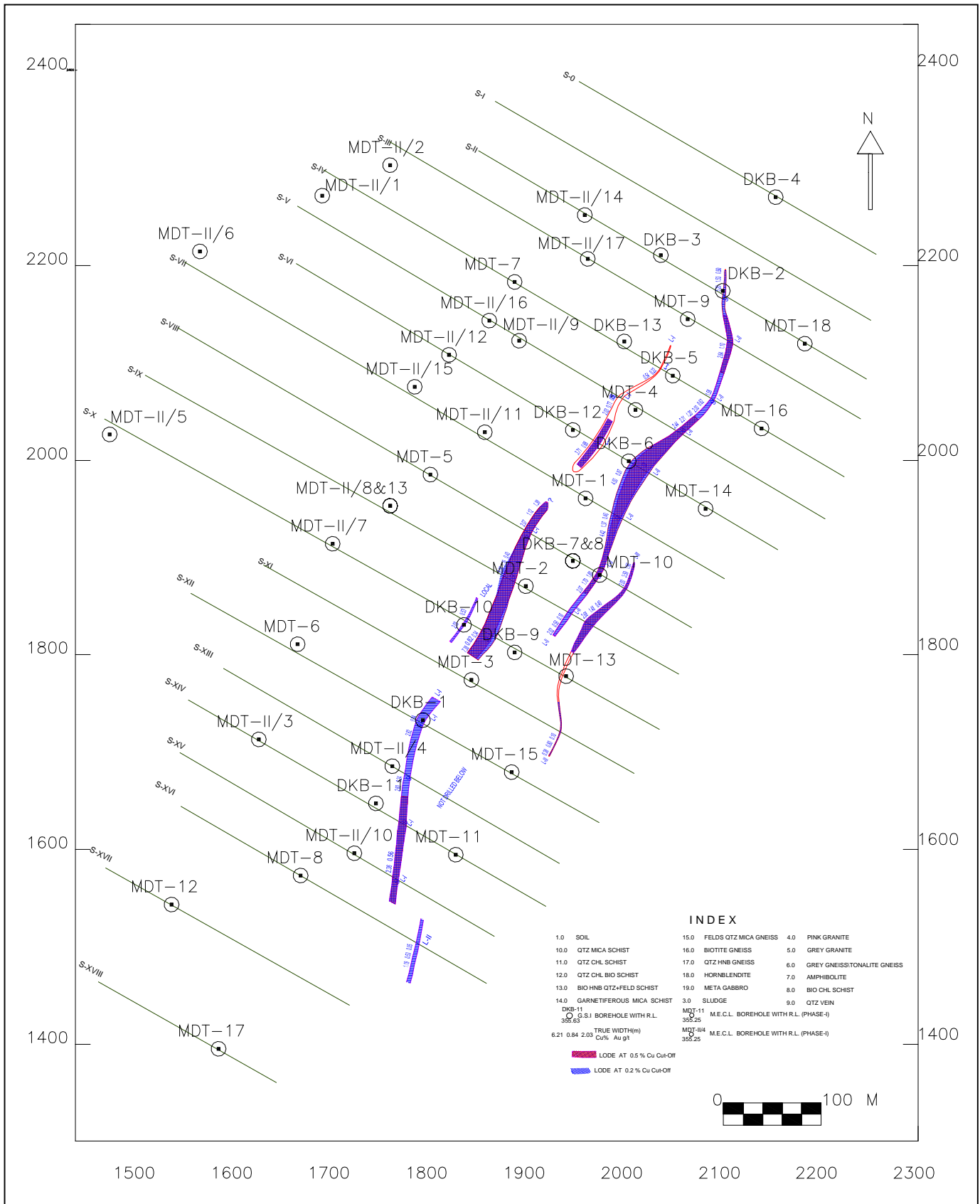
The studies on the baseline data of Environmental studies covering land use / land cover pattern studies and Geotechnical Studies on one borehole core have also been carried out in the block.

The Total Cost of Exploration is Rs. 356.00 Lakhs

LOCATION MAP OF DEVTALAI BLOCK



LEVEL PLAN AT 300 mRL



GEOLOGICAL CROSS SECTION

GEOLOGICAL CROSS-SECTION ALONG
SECTION LINE S-10
R.F. 1:1000

