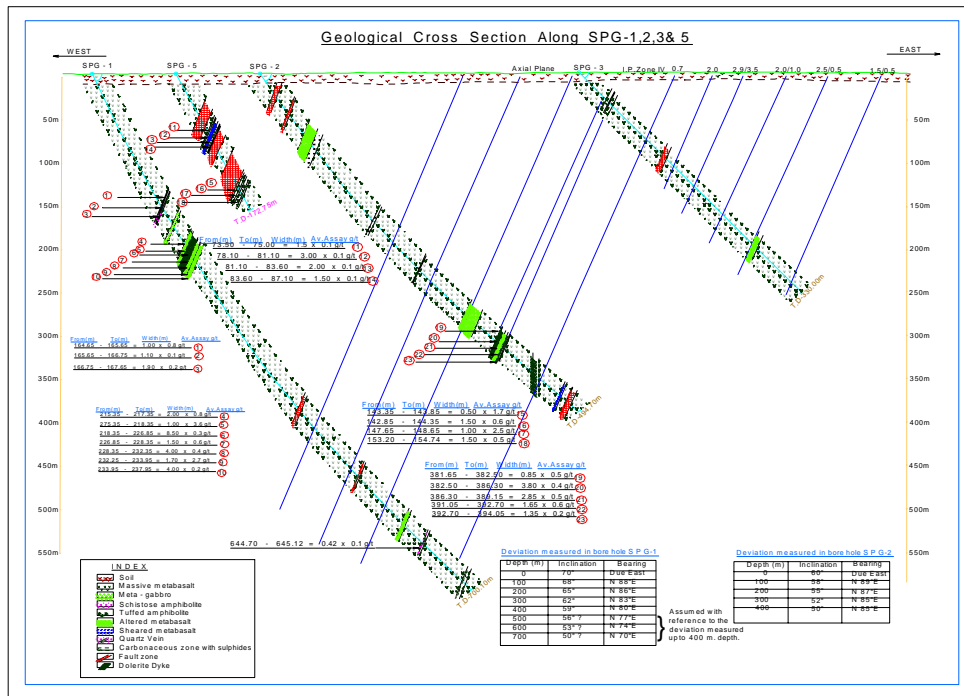


GEOLOGICAL REPORT ON CONCEPTUAL DRILLING FOR GOLD JADERI AREA

NORTH KOLAR SCHIST BELT DISTRICT- KOLAR, KARNATAKA

EXECUTIVE SUMMARY



MINERAL EXPLORATION CORPORATION LIMITED
(A Government of India Enterprise)
SEMINARY HILLS, NAGPUR
JULY-1988

**GEOLOGICAL REPORT ON CONCEPTUL DRILLING
FOR GOLD IN JADERI AREA,
NORTH KOLAR SCHIST BELT
DISTRICT-KOLAR, KARNATAKA**

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1.0 LOCATION

The Jaderi and Arikere blocks are situated 30 kms north of the Kolar Gold Fields (KGF), which in turn lies 100km east of Bangalore. The area is bounded by North Latitude 13°20', East Longitude 78°18' and falls in Survey of India Toposheet No.57 L /5. Srinivaspur is the nearest railhead on the narrow gauge line connecting Bangarpet and Yelahanka and also the taluk headquarters. It can be reached by an all weather road from KGF. The area falls in the Kolar district of Karnataka State. School, College, Post Office and Marketing facilities are also available at this town

2.0 GEOLOGY AND STRUCTURE

The Jaderi and Arikere blocks are situated in the northern side of the Kolar green-schist of Pre-cambrian age. This belt comprises of mainly metavolcanics, mostly basic and also acidic and ultramafic (meta-basalt). The formations of the area exhibit prominent schistosity with foliations parallel to the major fold axial plane. Regionally the rocks are affected by several sub-vertically dipping faults.

In Jaderi and Arikere blocks the surface is covered with the soil to a major extent.

The rocks of Jaderi blocks are mainly actinolite / tremolite plagioclase-epidote schist (metabasalt) with thin bands of quartz-biotite-schist with occasional occurrences of graphitic bands.

The formations of the area exhibit prominent schistosity with the foliations parallel to the major fold axial plane. The regional strike of the foliation varies between N-S and NNE-SSW directions, the latter being prominent in the north Kolar schist belt i.e., the area under investigation. The rocks are tightly folded into a number of antiforms and synforms. In the northern portion of the belt, a major synformal structure, overturned and plunging steeply (60°) to north has been deciphered (GSI-1985).

3.0 MINERALISATION

The expected “Champion Lode” type of ore body in Jaderi is supposed to be gold bearing quartz vein with litter sulphides, containing pyrite and galena commonly and rare arsenopyrite and pyrrhotite. But the quartz veins at the expected shear-zones returned very poor values. There is a parallel carbonaceous schist band giving low gold values from the borehole cores. In KGF extensions, it is observed that the carbonaceous schist, though gold bearing, returned only poor values.

4.0 QUANTUM OF WORK DONE

MECL has carried out detailed Geological Mapping & Topographical survey covering 0.50 Sq.km area, 1819.80 m of drilling in 5 boreholes, 137 Nos. of primary samples analysed for gold by Fire assay method and 302 Nos. of samples analysed for 8 element by AAS method. Petrographic studies on 14 Nos.of samples was also carried out by MECL in the Block. Based on the above data and earlier data, an exploration report was submitted by MECL.

5.0 ORE RESERVE ESTIMATION

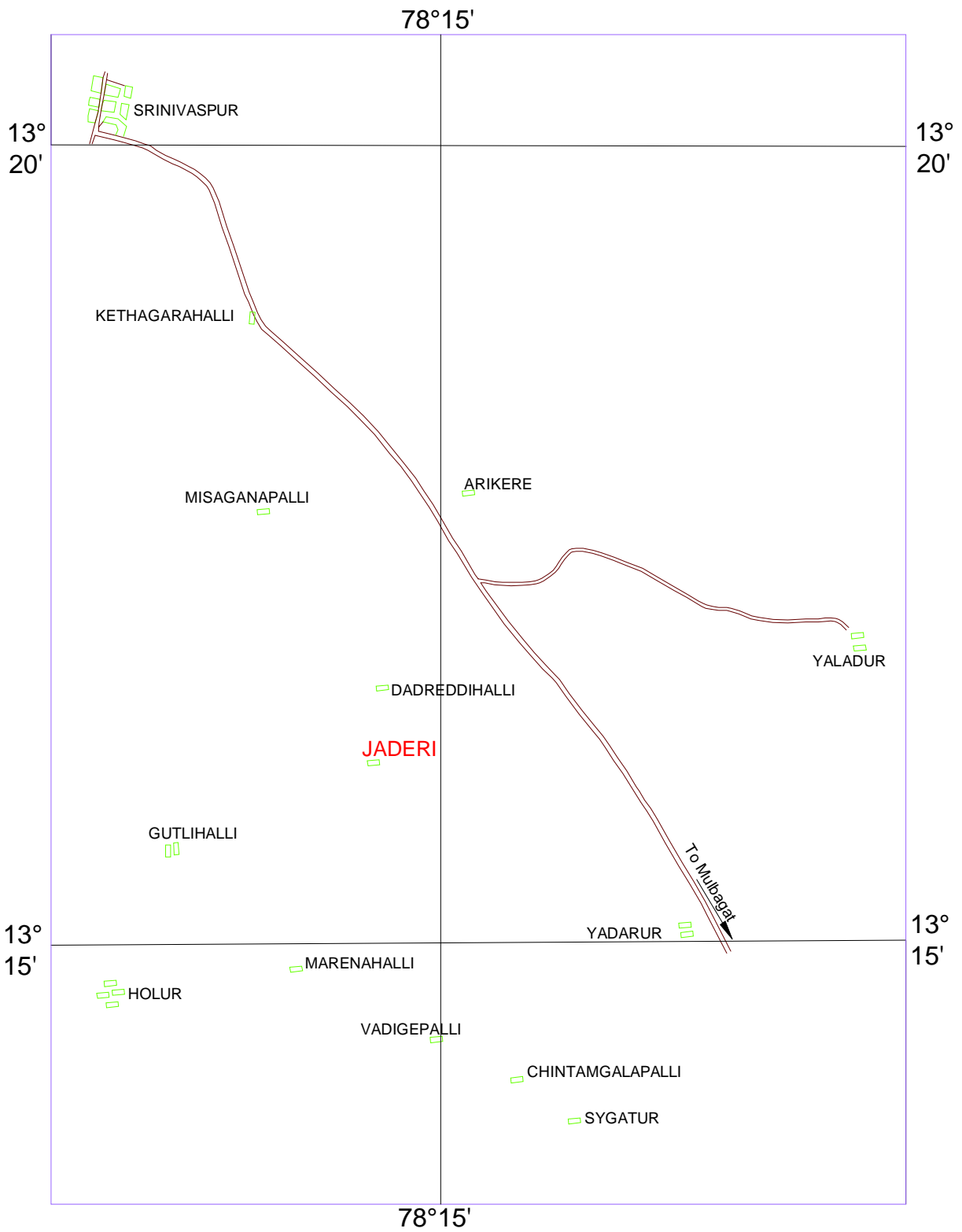
The exploration data has helped in finding out possibility of presence or otherwise of major shears along the trace of the axial plane. The drilling in the Jaderi block, though, has confirmed the thick pile of meta-volcanics constituting the North Kolar Schist Belt, it has failed to reveal the presence of any shear zone along the projected axial plane of the schist belt.

The Deposit has been classified as Category ‘D’ of UNFC 333.

The Total Cost of Exploration is Rs. 39.43 Lakhs.

GEOLOGICAL MAP OF NORTHERN PART OF KOLAR BELT SHOWING GRAVITY LOW ZONE

Location Map of Jaderi Block



BOREHOLE CROSS-SECTIONS OF SPG-1, 2, 3 & 5

