

**GEOLOGICAL REPORT ON
DETAILED EXPLORATION FOR
COPPER & GOLD MINERALISATION AT
DHANI BASRI PROSPECT
DISTRICT- DAUSA, RAJASTHAN**

EXECUTIVE SUMMARY



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AUGUST, 2008

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1.0 LOCATION

Dhani-Basri prospect falls in Survey of India Toposheet No. 54A/8, bounded by Latitude 27° 00' 15" to 27°00' 44" and Longitude 76°15'54" to 76°16' 26" and is located 15 Km NNW of Dausa town on Tehla road (Fig.1). The prospect lies at 75 km north-east of Jaipur.

2.0 GEOLOGY AND STRUCTURE

The auriferous sulphide mineralization at Dhani-Basri, prospect, Dausa district, Rajasthan is occurring in the Archean basement rocks (Mangalwar complex). Regional geological set-up of Dhani-Basri, Andhi-Bapi area, Dausa district, Rajasthan.

This area forms a few pen plain with scanty out crops of weathered granite gneiss, Amphibolite, besides the silicified zone. This prospect is characterized by a paneplained terrain with occasional small linear exposures that constitute the silicified shear zones trending N10° W-S10°E to N-S direction and are confined to BGC. These shear zones are silicified and ferruginous are host for mineralization in Dhani-Basri.

There are two mineralized zones, which are separated by biotite rich granite gneiss and biotite-chlorite schist. The contact of these silicified zones is brecciated, and has slickenslides. This main sheared zone disposed in lensoidal shape controlling mineralization which is traversed by WNW-ESE trending quartz vein brecciated and no sulphides.

3.0 MINERALISATION

The surface indication of mineralisation exhibited in the form of intense silicification, profuse ferruginization and weak development of box work and malachite encrustations observed in the silicified zone which are exposed in the northern part of the block. Major part of the block is covered by soil.

The bulk of the mineralisation occurs in the form of fracture filling, cavity filling and stringers occupying the fractures, micro-shears and

fractures, act as favourable locis for sulphides in silicified granite gneiss and quartz vein.

The Petro-mineralogical Studies indicate that the principle ore minerals are chalcopyrite, pyrite, pyrrhotite, pentlandite as the sulphide phase and magnetite as the oxide phase, besides these the occurrence of free gold grains in chalcopyrite as well as in the gangue.

The drilling data has revealed the presence of two mineralized zones separated by biotite rich granite gneiss and biotite-chlorite schist.

4.0 QUANTUM OF WORK DONE

Sr. No	Item of Work	Achievement
I	Topographic & Geological Mapping on 1:1000 scale	1 Sq Km
II	Drilling (Spacing)	4215.25 Metre (16 Bhs.)
III	<p>Laboratory Studies :</p> <p>a) Chemical Analysis</p> <p>1. Primary +check samples for Cu and Au</p> <p>2. Composite samples for 6 radicals i.e. Cu, Ni, Co, Mo, Pb, Zn</p> <p>3. Composite samples for Au & Ag</p> <p>b) Spectroscopic Studies</p> <p>c) XRD Studies</p> <p>d) Petrographic Studies</p> <p>e) Mineragraphic Studies</p> <p>f) Specific Gravity Determination</p> <p>g) Beneficiation Studies</p> <p>h) Environment Studies</p>	<p>838 Nos.</p> <p>31 Nos.</p> <p>31 Nos.</p> <p>30 Nos.</p> <p>20 Nos.</p> <p>35 Nos.</p> <p>33 Nos.</p> <p>53 Nos.</p> <p>1 No.</p> <p>1 No.</p>

5.0 ORE RESERVE ESTIMATION

The mineralised zones have been computed at both 0.20% & 0.50% cut-off for Cu (Copper) and Au (Gold) with 3.00m. parting and 2.00m. minimum stopping width.

A total of 5.13 million tonnes reserves with 1.17% Cu and 1.27 g/pt Au in 0.50 cut-off has been estimated under probable and possible category. Under the probable category a total of 2.95 m.t. with 1.17% Cu and 1.28 g/pt of Au and under the possible category a total of 2.18 m.t. with 1.165% Cu and 1.25 g/pt of Au have been calculated over a strike length of 530m. and vertical depth of 270m. cumulative (310 mRL and 40 mRL).

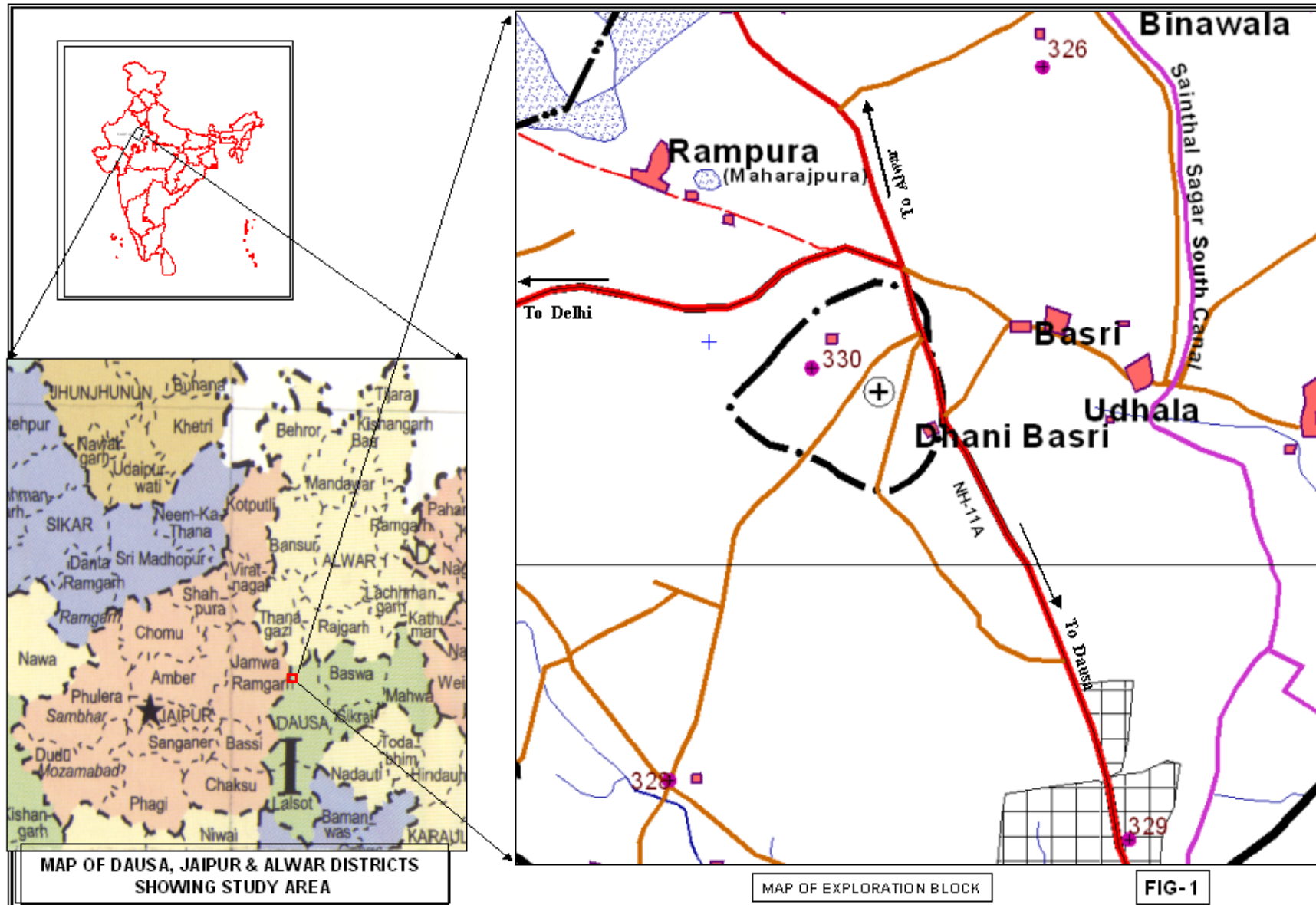
The reserves have also been calculated at 0.20 cut-off grade, which is 8.68 m.t. with 0.82% Cu and 1.01 g/pt of Au.

The studies on the baseline data of Environmental studies covering land use / land cover pattern studies have been carried out in the block.

The deposit has been classified as Category 'A' of UNFC 331.

The total cost of exploration is Rs. 351.83 Lakhs.

LOCATION MAP OF THE DHANI BASRI COPPER & GOLD PROSPECT



**GEOLOGICAL MAP OF
DHANIBASRI COPPER & GOLD PROSPECT
WITH BOREHOLE LOCATION
(R.F. 1:6320)**

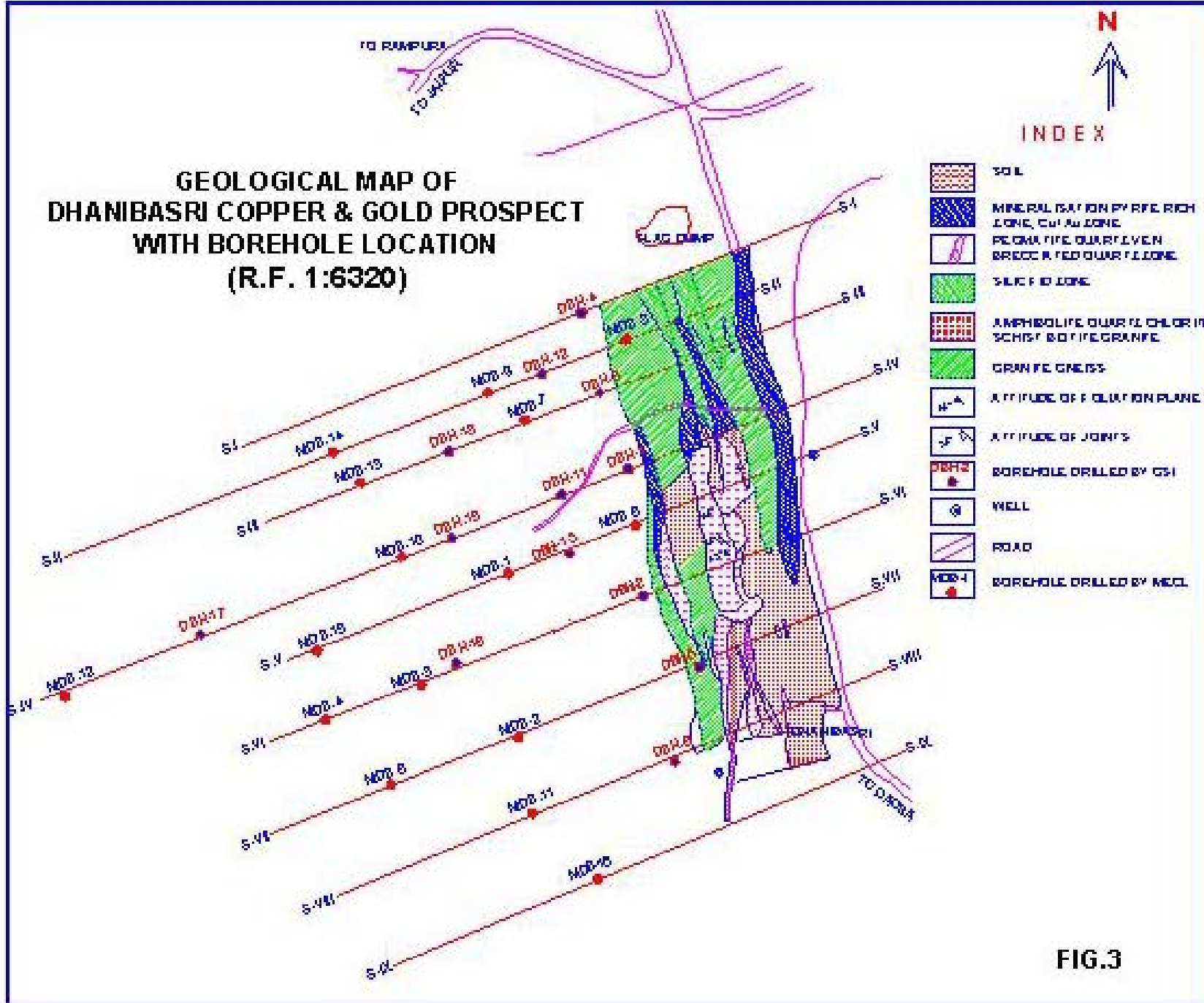


FIG.3

GEOLOGICAL CROSS SECTION : S-IV OF DHANI BASRI COPPER & GOLD PROSPECT

S70°W

N70°E

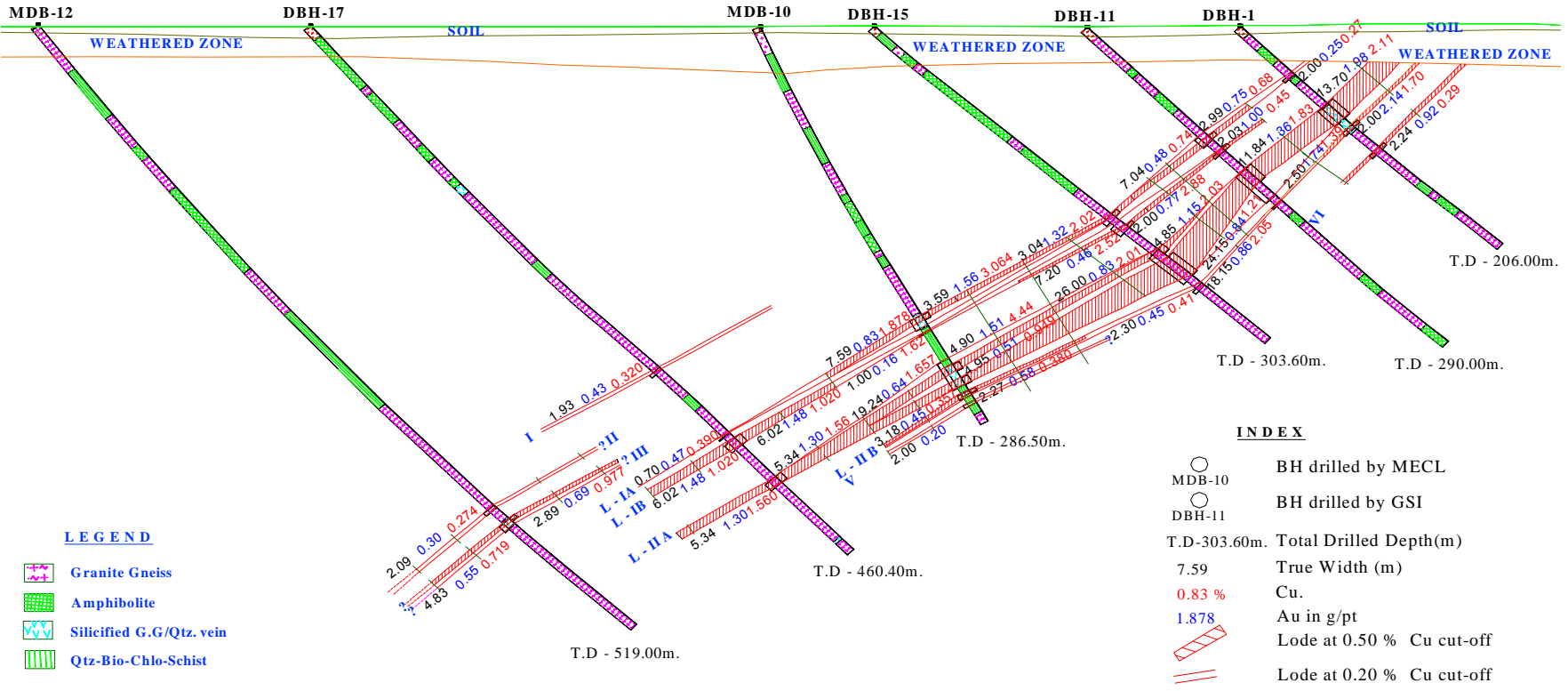


FIG. 4

LEVEL PLAN 225 mRL
DHANI BASRI COPPER & GOLD PROSPECT

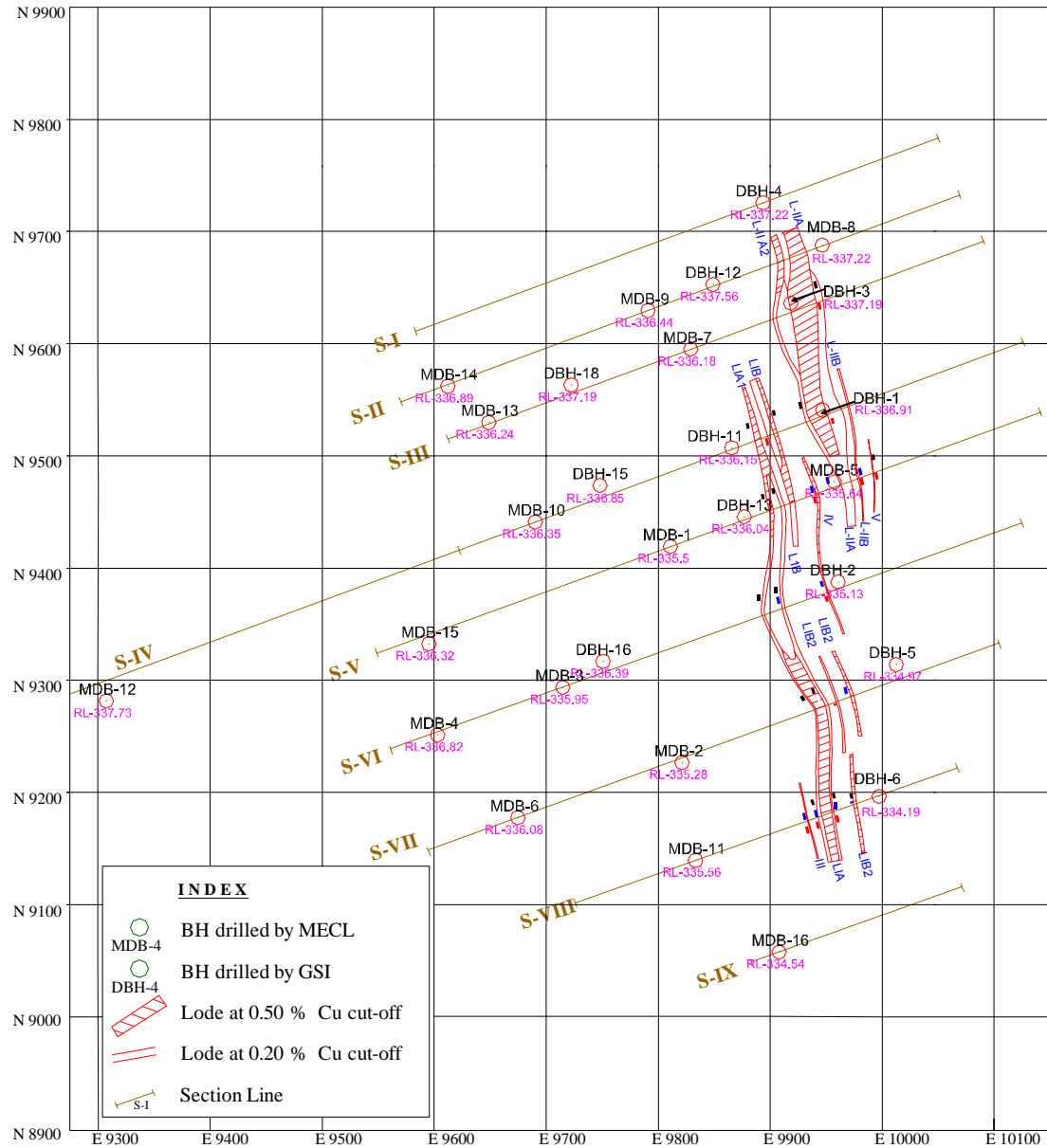


FIG. - 5