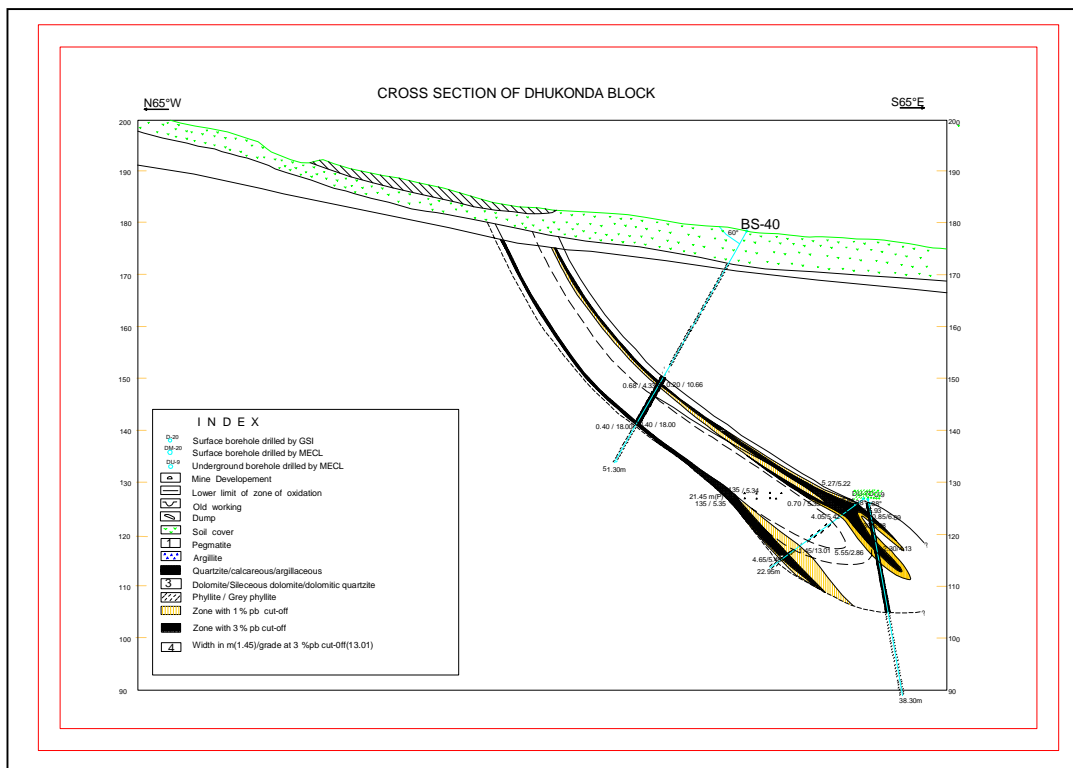


# EXPLORATION REPORT ON DHUKONDA LEAD DEPOSIT (NORTH EAST BLOCK) DISTRICT - GUNTUR, ANDHRA PRADESH

## EXECUTIVE SUMMARY



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

JANUARY-1994

# **GEOLOGICAL REPORT ON THE EXPLORATION FOR LEAD ORE, DHUKONDA LEAD DEPOSIT (NORTH-EAST BLOCK) DISTRICT GUNTUR, ANDHRA PRADESH**

## **EXECUTIVE SUMMARY**

### **1.0 LOCATION**

Dhukonda lead deposit is located 6 kms west of Ipur Village on Vinukonda-Macherla road and bounded between Latitude-16°13'30" - and Longitude-79°43'30". It covers in Survey of India Toposheet No.56P/12.. The nearest town, Vinukonda is 26kms away from the deposit, where all the necessary infrastructural facilities are available. The Bandalamottu mine and mill of Hindustan Zinc Limited is situated 8 km SW of the deposit.

### **2.0 GEOLOGY AND STRUCTURE**

The Dhukonda deposit is represented by predominantly Phyllites and argillites with interbedded quartzites, dolomites and dolomitic limestones of Cumbum stage of Nallamalai series of late pre-cambrian Cuddapah system. These rock types rest unconformably over the rocks of Archaean Basement Complex.

The litho-units of this block have suffered with poly deformational activities, which have resulted in doubly plunging NE-SE isoclinal synclines. These have been further anticlinally flexured with axial plane trending NW-SE, the crest of the anticline appears to have dragged and faulted trending N 80°E – S80°W. This has resulted in two crescent shaped segments (lense-I and lense-II) with convexity towards SE.

### **3.0 MINERALISATION**

Coarse grained calcareous quartzites, siliceous dolomites and dolomitic quartzites occurring as interbeds within the Cumbum phyllites and argillites host more than 90% of lead and copper mineralisation. The tectonic episode as manifested by NE-SW and E-W trending mostly tight isoclinal folds and the accompanying flexures/dragfolds sub parallel to them played a dominant role in the ore localization. The lodes have simple mineralogy Galena, chalcopyrite and pyrite together account for over 90% of the ore assemblage. The occurrence of

millerite (NiS) has been reported for the first time from this prospect and may be from India.

#### **4. QUANTUM OF WORK DONE**

MECL has carried out detailed Geological Mapping & Topographical survey as per requirement, 1568.30Mtrs of drilling in 34 boreholes, 300.00 cu.m of opencast excavation, 708.70m of mine development in the block. 2719 Nos. of primary & check samples were analysed for Pb, 1270 for Cu, 756 for Ag, 23 for Au, 53 for Fe and 53 for S. 53 samples for spectroscopic analysis and 92 samples for complete rock analysis, 103 samples for Petrographic studies, 82 samples for Mineragraphic studies, 142 samples for specific gravity determination test, 1 bulk sample for Bench scale beneficiation studies, were carried out by MECL in the Block. Based on the above data and earlier data of GSI, an exploration report

#### **5.0 ORE RESERVE ESTIMATION**

The reserves have been estimated under various categories at 3% Pb and 2m Minimum Stopping Width (MSW) cut-off.

The reserves are further grouped under two classifications viz. Main ore and Lean ore.

A total of 0.069 million tones of reserves with 5.66% Pb and 0.26% Cu and 0.071 Million tones of reserves with 6.16% Pb and 0.26% Cu were estimated for Lode-13 and Lode-12 respectively.

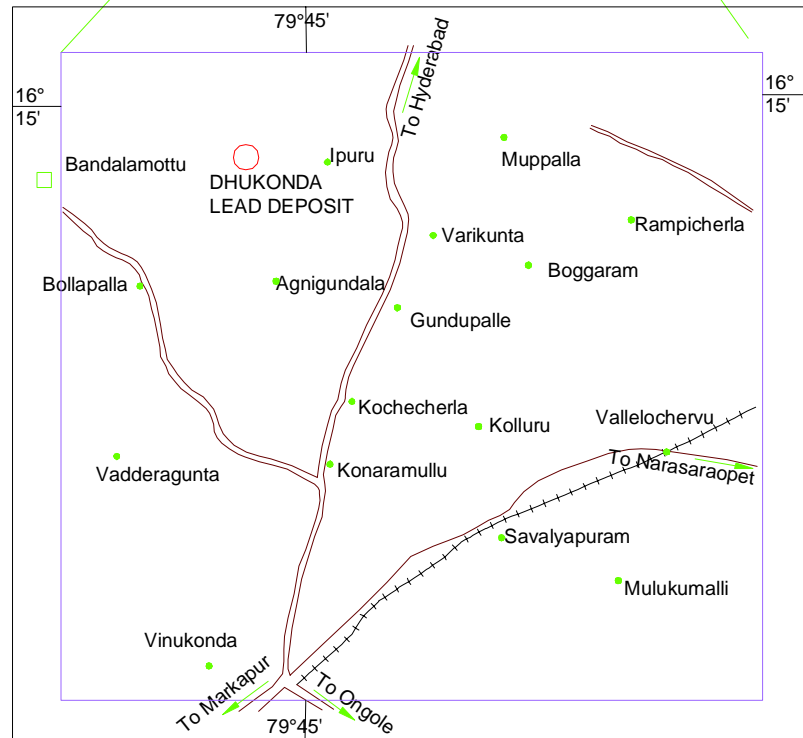
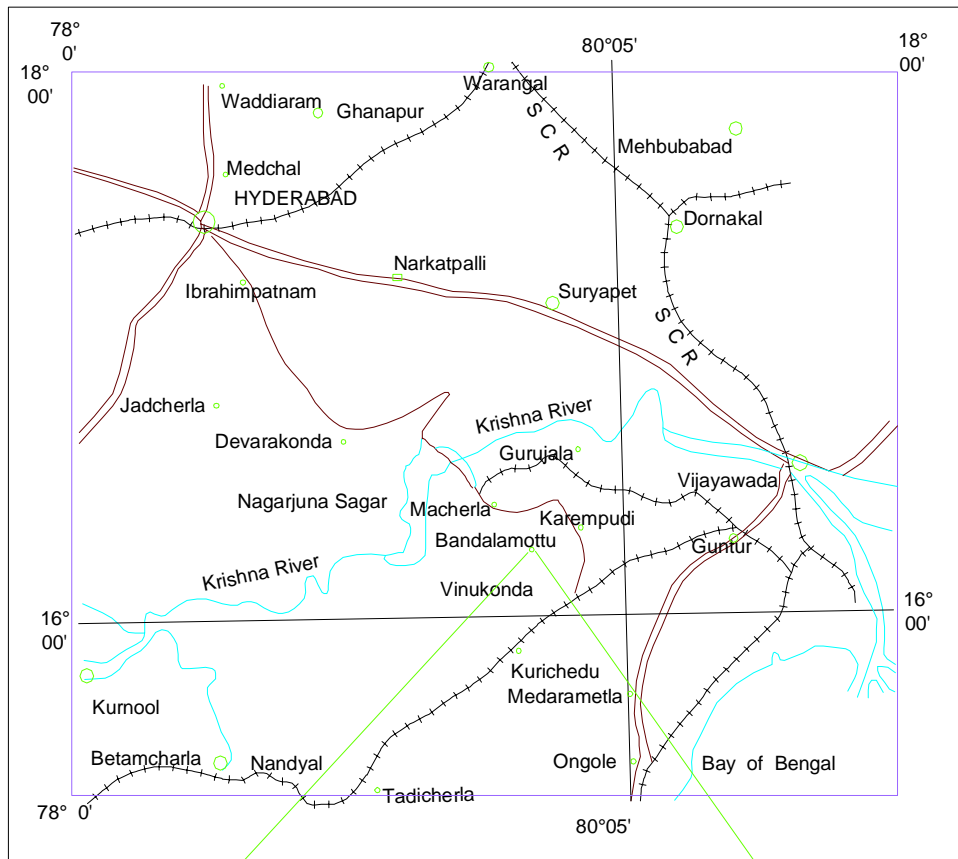
The bench scale beneficiation studies reveals that the Pb-Cu ore of lode 13 of this deposit is amenable for beneficiation

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

**The Total Cost of Exploration is Rs. 124.14 Lakhs.**

# LOCATION MAP OF DHUKONDA BLOCK

## LOCATION MAP



# GEOLOGICAL CROSS SECTION

## CROSS SECTION OF DHUKONDA BLOCK

