The deposit is located at a distance of 45 km to the East of Zaporizzhya.

Geologic structure is characterized by:

— highly metamorphized and intensely dislocated volcanogenic, sedimentary-volcanogenic and sedimentary sequences, ultrametamorphic and intrusive Archean, Lower and Upper Proterozoic formations;

— their weathering crust;

— rocks of sedimentary cover of Mesozoic and Cenozoic age 25 — 50 meters thick.

The mineralization of commercial importance is represented by a deposit having a North-Eastern trend. It had been formed by four closely located (0.5 — 1.5 km) blanket-shaped steeply inclined (70 — 85°) ore bodies. The length of these bodies ranges from 1 to 3 km, the thickness fluctuates from 10 to 115 m, and the depth of occurrence varies from 25 to 1000 m.

The iron ore is represented by amphibole-magnetite quartzites with 31.5—36% general iron content, and 26.2 — 30.1% magnetite - associated iron content.

As regards the admixture inclusions, the ores are practically sterile and contain 0.046 — 0.073% of TiO_2, 0.038 — 0.053% of Mn_2O, 0.08% of SO,, and 0.07 % of P_2O_5.

Ore reserves (calculated to the depth of 800 m) total 291.5 million tons, whereas nominal reserves amount to 66.5 million tons.

Technological testing has corroborated that ores can be easily dressed, if, after comminution , 98% of mass consists of 0.074 mm size particles. In this case, the output of ordinary concentrate amounts to 30 — 46% with 69.4 — 70.3% iron mass share. The iron extraction to the concentrate ranges from 65 to 88%. Such concentrates comply in every respect with the requirements typical for:

— blast furnace feedstock;

— pelletizing mill feedstock which is used for manufacturing iron ore fluxed pellets.

Other concentrates may also be manufactured, i.e.:

— concentrates with 71% iron content for producing metallized pellets and floatation superconcentrates;

— concentrates with 71.9 % iron and 0.18 % silica content for producing iron powders.

Engineering feasibility studies and economic evaluation have proved:

— advisability of exploitation by way of underground mining, due to steeply inclined ore bodies of considerable length with relatively small thickness; in this case, the mining complex could produce annually 7 million tons of crude ore, 2.63 million tons of

concentrates, and 2.52 million tons of pellets; additionally, 285 thousand cubic meters of rock debris and 448 thousand cubic meters of sand could be produced from benefication tailings;

— advisability of wet magnetic separation for dressing recovered ore; alternative versions may also be considered.

The nearest railroad is located at a distance. of 6 km from the deposit, there is a well developed motorway network.

At the distance of 35 km to the West of the deposit there is a water storage basin which may be used as a source of drinking water. Mine wastewaters, drainage waters, and, if necessary, waters from the above mentioned storage basin may be used for technical purposes.

The labour employment problem is easily solved on the spot. Specialists may be invited from other regions. A construction of benefication mill with all related facilities is envisaged as well as a construction of social and cultural objects.

In order to maintain environmental safety and stability, a number of provisions is contemplated:

— removal of fertile soil in the zone of mining operations,

— changing the course of the local river,

— commissioning of water purification, gas catching and air purifying installations.

Potential value of iron ores as assessed on the basis of world market actual sales prices, may amount to 3,055 million US Dollars.

High quality of iron concentrates, easiness of dressing, favourable mining , engineering, economic and geographic conditions contribute to the competitiveness of the deposit exploitation.

Our address is:

Ukraine, 252601, Kiev - 34,
Volodymirska street, 34
Telephones: 228-60-51
228-32-43
Telex: 131419 TOPAZ SU
Fax: (044) 228-62-21