

ZHELEZNYAKY IRON ORE PROSPECTIVE AREA WITH ZHELEZNYAKY PROMISING ACCUMULATION OF POLYMETALLIC ORE FORMATION

Mineral: ores of copper, nickel, cobalt, related components - platinum, palladium.

Type and period of subsoil use: 20-years licenses for exploration, pilot development and productio.

Location: Zhytomyr district, Zhytomyr region.

Plot area: 290 ha.

Geological summary. This massif belongs to the chamber-differentiated type and is composed of Bukynskiy complex rocks. Within the Iron ore promising accumulation according to the test data, there are two ore intervals with a thickness of 3.5 and 2.0 m. The weighted average content of nickel is 0.66% of a total thickness of 5.5 m, copper - 0.063% and cobalt - 0.013%. The thickness of orebody is 5.0 m that is usually the average for deposits of this genetic type. The content of related components is actual (Pt 0.31 g/t and Pd 0.83 g/t) that is typical for ordinary sulfide copper-nickel ores. Predicted geological_industrial type of deposit - sulfide_copper_nickel. In terms of formation, the rocks compared with the intrusions of the nickel-bearing peridotite-pyroxenite-gabronorite formation. The iron ore massif has an irregular oval shape slightly elongated in the north-eastern direction. Its size is 1.0x1.8 km and in section it is an asymmetric funnel-shaped body with relatively sloping (45-50°) north-eastern and eastern contacts, which are immersed in intrusion and western, falling in the north-western direction towards the Bukynsky massif. Contacts of rocks of the massif with the accommodating migmatites of the Kirovograd-Zhytomyr complex are clear and intrusive. The array is composed of basic and ultrabasic rocks of the Bukin complex, clearly differentiated and stratified. The geological structure of the massif consists of peridotites, pyroxenites and gabbronorites.

Available geological information. Iron ore massif was found in the south-eastern exocontact zone of the Bukynskiy pluton as a result of deep geological mapping at a scale of 1:50000 in the period of 1985–1990. Within the iron ore massif copper-nickel promising accumulation was revealed that was explored by a single well #66. Ore formation is associated with olivine-containing pyroxenites (lercolites) developed in the northeastern part of the massif.

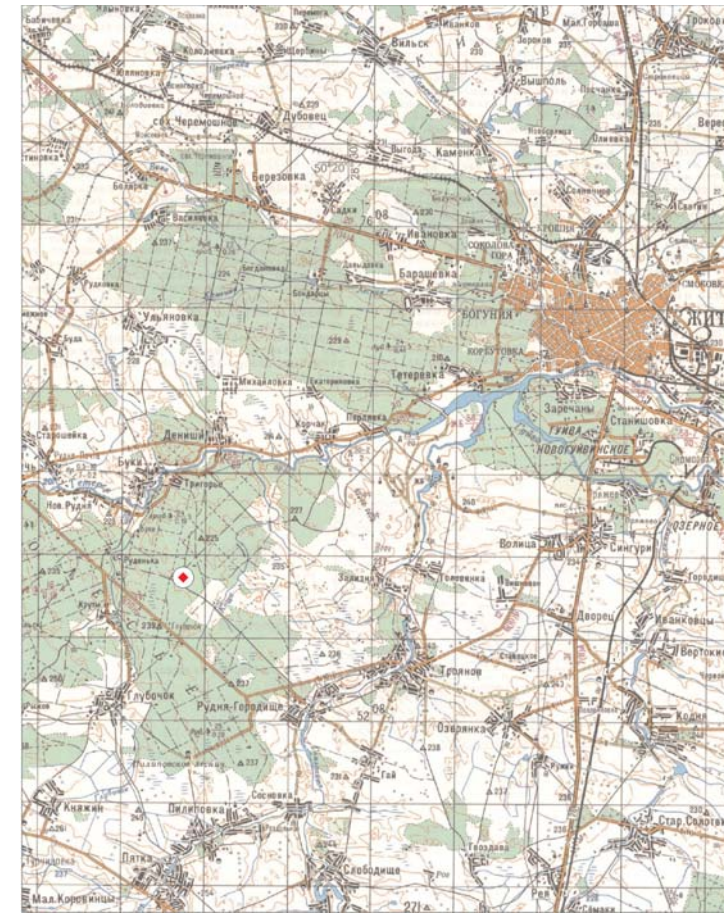
http://geoinf.kiev.ua/wp/geologichni_zviti.php?rep=fnd_shifr.rdf&schifr=55323

Resources/reserves assessment. Calculated forecast resources of metals with an average density of ultrabasites 3.05 t/m³ and reliability factor 0.5 by category P3. Iron ore promising accumulation consists of: nickel - 150.9 thousand tons; copper - 14.4 thousand tons; cobalt - 3.0 thousand tons. Predicted platinum and palladium resources have limited access.

Minimum work program

Provided by Mining terms Model agreements and defined in "Work Program" annex.

Model agreements are listed at the link: <https://www.geo.gov.ua/primirni-ugodi-pro-umovi-koristuvannya-nadrami/>



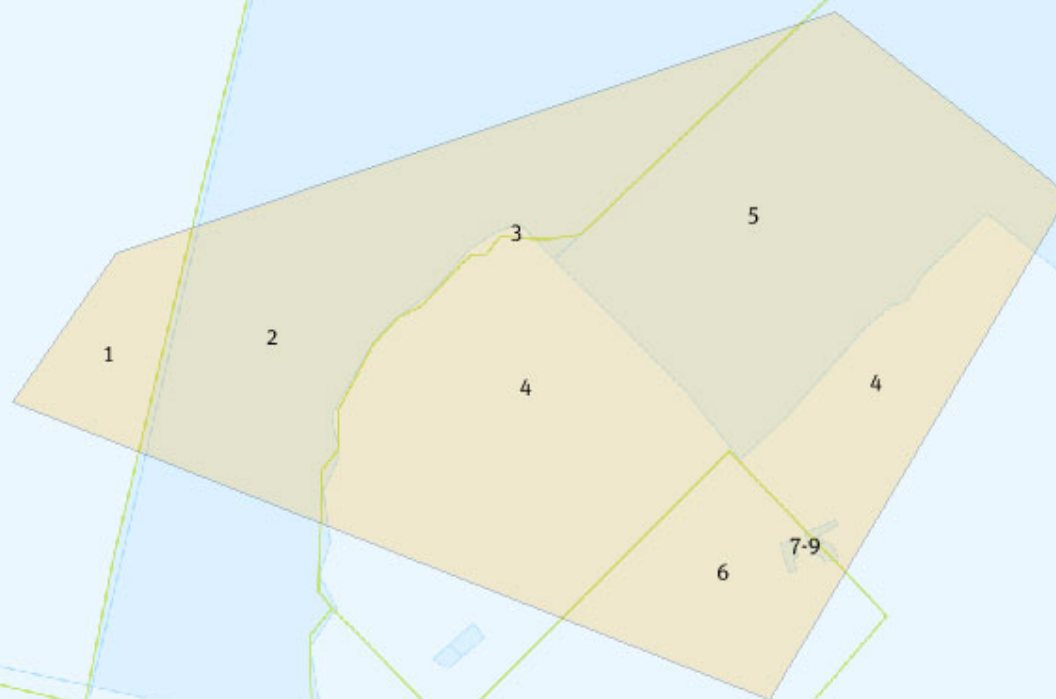
- 1 50°09'20" 28°21'58"
- 2 50°09'41" 28°23'36"
- 3 50°09'25" 28°24'08"
- 4 50°08'41" 28°23'27"
- 5 50°09'07" 28°21'44"

ZHELEZNYAKY IRON ORE PROSPECTIVE AREA WITH ZHELEZNYAKY PROMISING ACCUMULATION OF POLYMETALLIC ORE FORMATION



Information on land plots, in particular by cadastral number, can be obtained on the Public Cadastral Map of Ukraine:

<https://cutt.ly/Fx0CuBg>



- 1 1822080600:04:000:0043
- 2 1822082200:01:000:0007
- 3 1822087600:01:000:0850
- 4 1822087600:01:000:0001
- 5 1822082200:01:000:1287
- 6 1822086200:01:000:1603
- 7 1822386801:01:002:0021
- 8 1822386801:01:002:0022
- 9 1822386801:01:002:0023

- State / municipal property
- Private property
- Not specified