

VERBYN PROSPECTIVE AREA WITH VERBYN PROMISING ACCUMULATION

Mineral: molybdenum ores.

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

Location: Olevsk district, Zhytomyr region, 33 km east of the Olevsk railway station .

Plot area: 289.8 ha

Geological summary. The Verbyn ore promising accumulation is a part of the Ustynivskyi contingent ore area. It is located within the North-Western edging of the Korosten pluton, and is confined to the Central_Korosten break zone in the eastern endocontact of the Ustynivsky granitoid massif, where it is combined with the western side of Ovruch and the northern closure of Bilokorovytska cavity. In the Verbyn area, groundwater belongs to the aquifers of the weathering zone and fractures of crystalline rocks of the crystalline basement and loose rocks stacked on top of sand, and at the bottom a flint with a sand filler. Molybdenum mineralization is associated with a small intrusion of granites of moderate depth, composed of granite porphyries in its apical part and medium-grained weakly porphyritic in the root part.

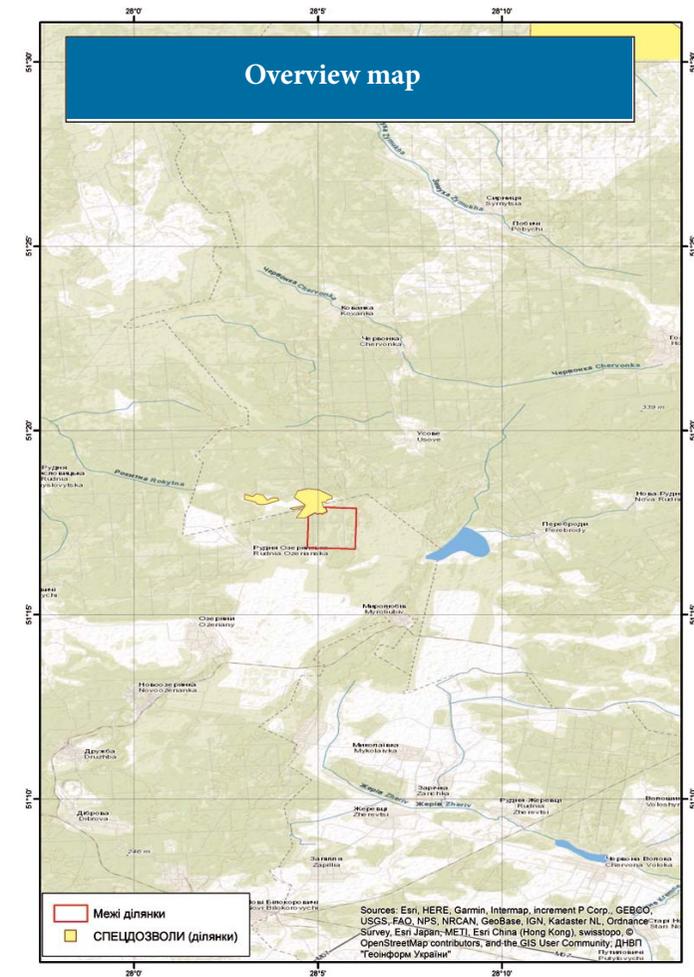
Available geological information. Distribution area of molybdenum mineralization in the Verbyn area is an area of 1x2 km (2 km²). Its concentration ranges from particles to 5-10%. Molybdenite is the leading ore mineral of ore-bearing granitoids of the Verbyn ore promising accumulation. In addition, a number of related components were identified - bismuth, silver, tin, lead and zinc, copper, fluorite. Within the ore promising accumulation, 7 blocks containing 16 ore bodies have been identified. The thickness of ore bodies is from 0.2 m to 18.6 m, 2.4 m on average. The molybdenum abundance is 0.13–2.0115%, the average is 0.3041%. Ore bodies are mostly steeply-dipping. The angle of inclination is from 28° to 75°, the average - 55°. Verbyn ore promising accumulation can be exploited both in open and underground ways. Though positive consequences of development are expected from the underground method of exploitation. Technical and economic indicators are determined by calculating stocks with a cutoff - 0.005%; 0.01%; 0.015%; 0.02%; 0.03% and 0.04%, with a ore coefficient for the open mining and with an cutoff of 0.04% for underground mining. The shape of ore bodies is mostly simple, plate-like, rarely complex with bulges up to 18.6 m with separate branching. The length of ore bodies downdip is from 40 to 285 m, the average - 160 m.

http://geoinf.kiev.ua/wp/geologichni_zviti.php?rep=fnd_shifr.rdf&schifr=59372

Resources/reserves assessment. As a result of the calculation (protocol STC NSRGE 'Pivnichgeologia' № 78 dated 25 December 2002) estimated reserves of molybdenum ore of category C2 are 1,792,878 tons, molybdenum - 5,678 tons. Deposits of molybdenum category P1 are: ore - 90,204 tons, metal - 2,745 tons. The calculation of related useful components was not performed.

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/>



NN	latitude	Pulkovo42	longitude	Pulkovo42	longitude	WGS84	latitude	WGS84
1	51° 17' 41.210" N		28° 4' 50.706" E		28° 4' 44.106" E		51° 17' 40.294" N	
2	51° 17' 47.000" N		28° 5' 1.000" E		28° 4' 54.400" E		51° 17' 46.085" N	
3	51° 17' 45.000" N		28° 5' 6.000" E		28° 4' 59.400" E		51° 17' 44.085" N	
4	51° 17' 46.000" N		28° 5' 10.000" E		28° 5' 3.400" E		51° 17' 45.085" N	
5	51° 17' 45.000" N		28° 5' 13.000" E		28° 5' 6.400" E		51° 17' 44.085" N	
6	51° 17' 49.000" N		28° 5' 21.000" E		28° 5' 14.400" E		51° 17' 48.085" N	
7	51° 17' 54.000" N		28° 5' 19.000" E		28° 5' 12.400" E		51° 17' 53.085" N	
8	51° 17' 56.000" N		28° 5' 15.000" E		28° 5' 8.400" E		51° 17' 55.085" N	
9	51° 17' 54.000" N		28° 6' 9.000" E		28° 6' 2.400" E		51° 17' 53.086" N	
10	51° 16' 48.000" N		28° 6' 7.000" E		28° 6' 0.403" E		51° 16' 47.085" N	
11	51° 16' 50.000" N		28° 4' 49.000" E		28° 4' 42.402" E		51° 16' 49.084" N	

VERBYN PROSPECTIVE AREA WITH VERBYN PROMISING ACCUMULATION

List of cadastral numbers of land plots, within the contour of the deposit



Information on land plots, in particular by cadastral number, can be obtained on the Public Cadastral Map of Ukraine:
<https://cutt.ly/Fx0CuBg>