

BALKA SHYROKA GOLD ORE BLOCK

Mineral: gold ore.

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

Location: Nikopol district of Dnipropetrovsk region, 2 km east of Tavriya village and 18 km north of Nikopol city. The nearest asphalt road Nikopol - Chkalove - Nikolaevka (T 0432) passes at a distance of 1 km west of the prospective area.

Plot area: 206.6 ha.

Geological summary. According to the mineral associations within Banka Shyroka prospective area, five mineral types of ores are distinguished: gold-quartz, gold-sulfide-quartz, gold-pyrite, gold-quartz-pyrite-arsenopyrite, gold-silver-polymetallic. Gold-quartz type of ore is characterized by free gold and sulfide content that is not exceeding 5%. Within the prospective area 76% of ores belong to this type. The content of gold in ores of this type varies from 0.5-6.9 g / t to 1023 g / t, silver - from 0.5 to 19 g / t. Gold-sulfide-quartz type is characterized by a sulfide content of 5-25% and the presence of both free and bound gold. This type of ore includes about 19% of ores of the prospective area. The gold content in gold-sulphide-quartz ores is 0.5-32 g/t, silver - 0.5-13 g/t. 2.5% of the ore of the prospective area belongs to the gold-pyrite type. The content of sulfides in this type of ore is more than 25%. Native gold is quite common in the form of impregnation in pyrite and very rarely in quartz. Gold-quartz-pyrite-arsenopyrite type is uncommon and most often it is combined with gold-sulfide-quartz and gold-silver-polymetallic types of ores. The gold content of this mineral type of ore is insignificant amount. Amount of gold-silver-polymetallic type of ore is 2.5%. The content of sulfides in ores of this type ranges from 8-10% to 50-60%. The main mineral-concentrator of silver is freibergite. This type is a complex ore that consists of gold (up to 20 g/t), silver (up to 434 g / t), lead (up to 5%), zinc (up to 1%), copper (up to 0.1%) and cadmium (up to 300 g/t). Hydrogeological conditions of the prospective area are favorable. The most water-enriched horizon associated with the upper fractured part of crystalline rocks and gravelly residuum. The maximum water inflow when drilling a mine shaft in the most fractured interval of crystalline rocks is 17 m³/h. The projected inflow of water into the underground mine during mining will be 366.6 m³ / h. Mining and geological conditions of the prospective area determine the underground method of ore mining.

Available geological information. The prospective area was found in 1989 during prospection within the Chortomlyk greenstone structure. In 1990-1991, greenfield exploration was performed. In 1992-2000, mining and exploration was conducted, which was not completed due to lack of funding. A total of 285 inclined appraisal and exploration wells with a total volume of 92480 m were drilled. The most explored part of the prospective area is the south-western one where the network of wells has been brought to 50x50 m and the mine shaft of industrial cross-section has been passed to a depth of 168.4 m. Currently, the mine shaft is in a state of wet preservation.

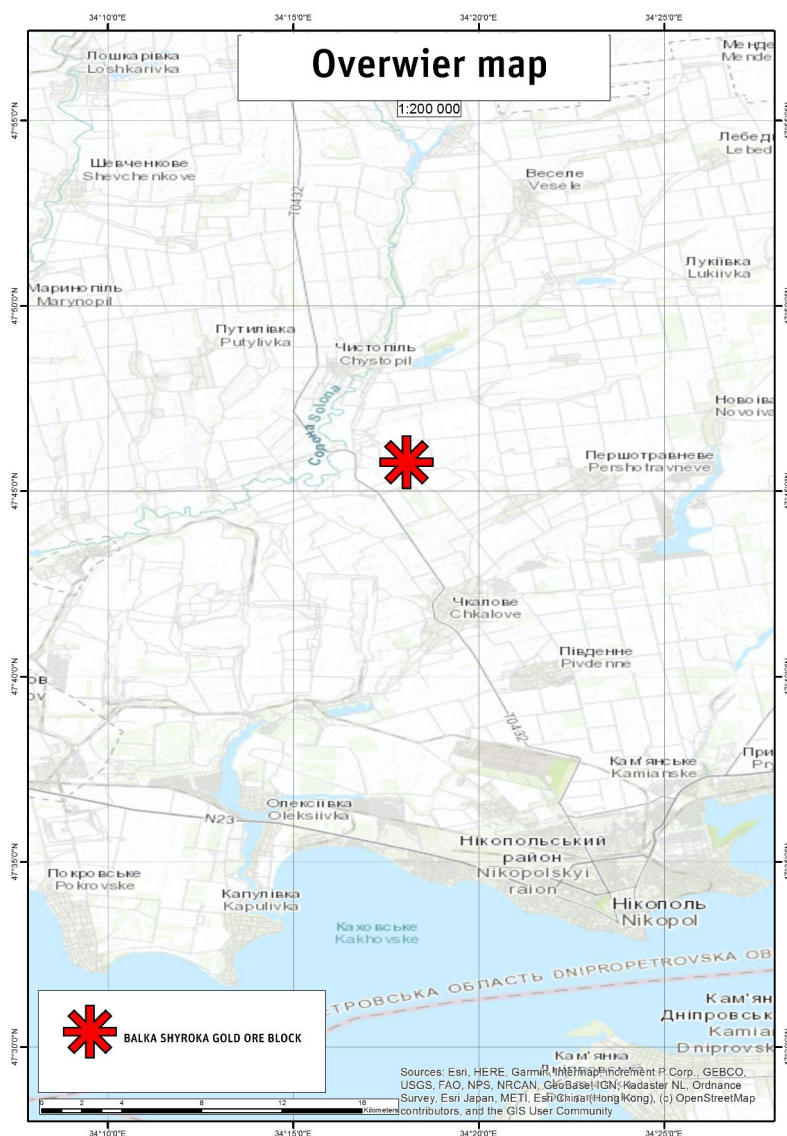
Resources/reserves assessment. Contingent resources of gold with a minimum industrial content in the blocks 3.9 g/t are estimated in the amount of: category P1 - 12549.65 kg, category P2 - 15133.05 kg; the weighted average content of gold in blocks is 7.1 g/t. The resources of accompanying minerals were not evaluated. Recommended to investigate the possibility of extracting of silver first of all as well as other components presented in the gold-silver-polymetallic type of ore.

Geological information package.

Available geological reports in the geological funds of Kirovgeologiya SE.
http://geoinf.kiev.ua/wp/geologichni-zviti.php?rep=fnd_shifr.rdf&schifr=58199

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/primirmi-ugodi-pro-umovi-koristuvannya-nadrami/>



Situation plan

1:100 000

T-04-32

Tavriiske
Таврійське

Mar'ivka
Мар'івка

Chystopil'
Чистопіль

Putylivka
Путилівка

Novoselivka
Новоселівка

Pershotravneve
Першотравневе

Zahidne
Західне

Chkalove
Чкалове

NN	latitude WGS84	longitude WGS84	latitude Pulkovo42	longitude Pulkovo42
1	47° 45' 57,221" N	34° 17' 14,084" E	47° 45' 58,000" N	34° 17' 20,000" E
2	47° 46' 22,222" N	34° 17' 45,084" E	47° 46' 23,000" N	34° 17' 51,000" E
3	47° 45' 38,222" N	34° 18' 59,086" E	47° 45' 39,000" N	34° 19' 5,000" E
4	47° 45' 13,221" N	34° 18' 28,087" E	47° 45' 14,000" N	34° 18' 34,000" E

- Land corners
- Block contour

0 1 2 4 6 8 Kilometers

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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>



- 1 1222982200:01:006:0831
- 2 1222982200:01:006:0711
- 3 1222982200:01:006:0082
- 4 1222982200:01:006:0832
- 5 1222982200:01:006:0770
- 6 1222982200:01:006:0833
- 7 1222982200:01:006:0715
- 8 1222982200:01:006:0716
- 9 1222982200:01:006:0713
- 10 1222982200:01:006:0771
- 11 1222982200:01:006:0772
- 12 1222982200:01:006:0911
- 13 1222982200:01:006:0908
- 14 1222982200:01:006:0773
- 15 1222982200:01:006:0005
- 16 1222982200:01:006:0714
- 17 1222982200:01:006:0079
- 18 1222982200:01:006:0779
- 19 1222982200:01:008:0780
- 20 1222982200:01:006:0011
- 21 1222982200:01:006:0900
- 22 1222982200:01:006:0781
- 23 1222982200:01:006:0841
- 24 1222982200:01:006:0717
- 25 1222982200:01:006:0782
- 26 1222982200:01:006:0043
- 27 1222982200:01:006:0840
- 28 1222982200:01:006:0042
- 29 1222982200:01:006:0137
- 30 1222982200:01:006:0806
- 31 1222982200:01:006:0409
- 32 1222982200:01:006:0783
- 33 1222982200:01:006:0784
- 34 1222982200:01:006:0777
- 35 1222982200:01:006:0139
- 36 1222982200:01:006:0410
- 37 1222982200:01:006:0411
- 38 1222982200:01:006:0026
- 39 1222982200:01:006:0412
- 40 1222982200:01:006:0836

- State / municipal property
- Private property
- Not specified