





## PROSPECTIVE AREA WITH OCCURRENCE OF ILMENITE-ZIRCONIUM ORE HAYDARIVSKY

Mineral: titanium ores, zirconium ores.

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

**Location:** Zmiiv district, Kharkiv region, on the southwestern outskirts of the village of Gaidary.

**Plot area:** 971,4 ha

## **Geological summary**

In the geological structure of the promising area take part rocks of Quaternary, Neogene and Paleogene deposits. Imenite-zirconium placers are confined to the lenses in the sands of Novopetrovsk and Berets deposits and belong to the alluvial and deep-sea marine facies. In terms of geomorphology, the prospective area is located mainly on the watershed, steep and gentle slopes in the northwestern, southwestern and western directions. As a result of tests the following mineralogical composition of placer is established: the content of ilmenite ranges from 3.00 to 84.32 kg / m3 (average 42.4 kg / m3, leukoxene from 1.06 to 44.78 kg / m3, rutile from 0.2 to 7.20 kg / m3 (average 6.8 kg / m3), zircon from 0.76 to 13.06 kg / m3 (average 8.3 kg / m3).

Preliminary accepted conditional ilmenite content of 42.4 kg / m3. The average thickness of the mineral is 11.0 m, the opening capacity is 27.5 m, and the opening ratio is 2.5 The opening thickness decreases in the northwestern direction.

## Available geological information

Promising accumulation was discovered during a group geological survey at a scale of 1: 50,000 during 1984–1986 on Pervomaiskaya Square. Prospective area was discovered in wells №№ 66, 244, 246, 248 and in four wells (№№ 34, 69, 70, 71) during previously work conducted by the Kharkiv Geological Exploration Expedition (1963). 521.5 m were drilled on the prospective area, 135 m - 30 samples were tested.

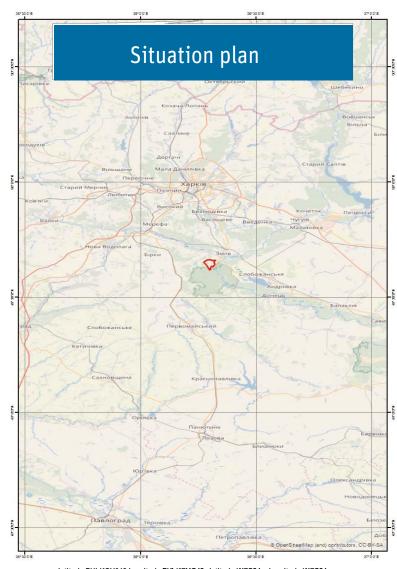
http://geoinf.kiev.ua/wp/geologichni\_zviti.php?rep=fnd\_shifr.rdf&schifr=50497

## Resources/reserves assessment

Estimated resources of titanium and zirconium ores in category P2. Resource information has 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/



	lati	tude PULKOV042 lor	gitude PULKOVO42	latitude WGS84	Iongitude WGS84
Ξ	1	49° 39' 6,141" N	36° 16' 21,911" E	49° 39' 5,577" N	36° 16' 15,860" E
Ξ	2	49° 39' 46,829" N	36° 17' 28,299" E	49° 39' 46,266" N	36° 17' 22,247" E
Ξ	3	49° 39' 33,442" N	36° 19' 34,646" E	49° 39' 32,882" N	36° 19' 28,597" E
Ξ	4	49° 39' 12,563" N	36° 19' 7,877" E	49° 39' 12,002" N	36° 19' 1,828" E
Ξ	5	49° 38' 39,531" N	36° 19' 17,405" E	49° 38' 38,969" N	36° 19' 11,358" E
Ξ	6	49° 38' 34,177" N	36° 19' 23,829" E	49° 38' 33,615" N	36° 19' 17,782" E
Ξ	7	49° 37' 55,550" N	36° 18' 59,146" E	49° 37' 54,987" N	36° 18' 53,100" E
Ξ	8	49° 38' 3,505" N	36° 18' 25,851" E	49° 38' 2,942" N	36° 18' 19,804" E
Ξ	9	49° 37' 40,275" N	36° 18' 15,571" E	49° 37' 39,711" N	36° 18' 9,525" E
Ξ	10	49° 37' 5,093" N	36° 18' 6,519" E	49° 37' 4,528" N	36° 18' 0,473" E