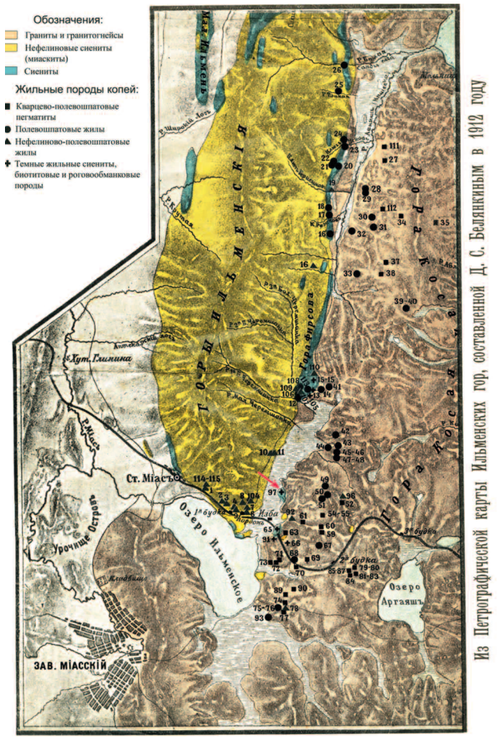
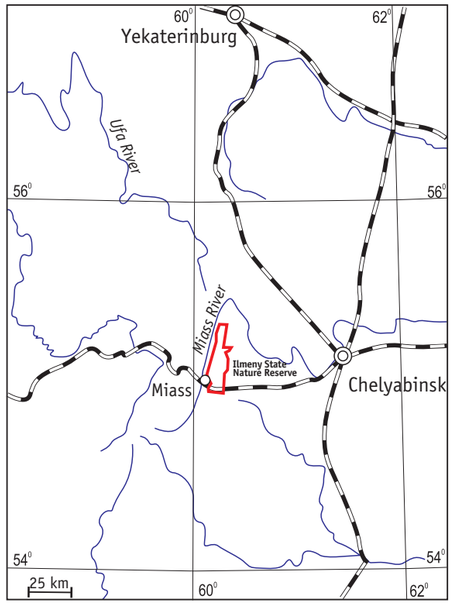


1. Historical petrographic map with the mines of the Ilmeny Mountains, after Dmitriy S. Belyankin (1912). Pit No. 97 is marked by arrow.

2. Location of the Ilmeny State Reserve, Ilmeny Mountains, Miass, Chelyabinsk region, South Urals, Russia.



3. Young geologists wash loose material from the dumps of the Polyakov prospecting hole of Pit No. 97. Photo: Sergei V. Kolisnichenko.

Famous Mineral Localities

UNIQUE CRYSTALS OF POLYAKOVITE-(Ce), A PRESENT OF NATURE FOR THE 100th ANNIVERSARY OF THE ILMENY STATE NATURE RESERVE

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In the summer of 2019 a small crew of young geologists supervised by Sergei V. Kolisnichenko cleaned-up the old Pit No. 97 in the Ilmeny State Nature Reserve (National Park) in South Urals, Russia (*Figs*. 1–5) to study the relationship between the ultramafic rocks and carbonatites (Kolisnichenko, Popov, 2019). During that work unique large crystals of the rare mineral polyakovite-(Ce) were found.

The pit, at present known under number 97, was founded for "brown sphene" by mining engineer Ivan I. Redikortsev in 1836 at the eastern margin of the North Ilmeny peat bog. Nobody apparently was interested in "brown sphene" so the pit was long forgotten.

In 1984, mineralogist Vladislav O. Polyakov (*Fig*. 6) opened a small body of ultramafics by a prospecting hole, drew a geological scheme of the pit district, and then initially described its minerals (Polyakov, Nedosekova, 1990). In the gray sand washed from loose material of the carbonatite's weathered crust, Polyakov found well-shaped and abundant in faces fine crystals of a probable new mineral that was first named a

4. View of Pit No. 97 (Ilmeny Ridge on back), 2006. Photo: Sergei V. Kolisnichenko.

5. One of the trenchs of Pit No. 97, 2019. Carbonatites (bluish) among alkali ultramafic rocks (brownish) and glimmerites (black) are seen. Photo: Sergei V. Kolisnichenko.