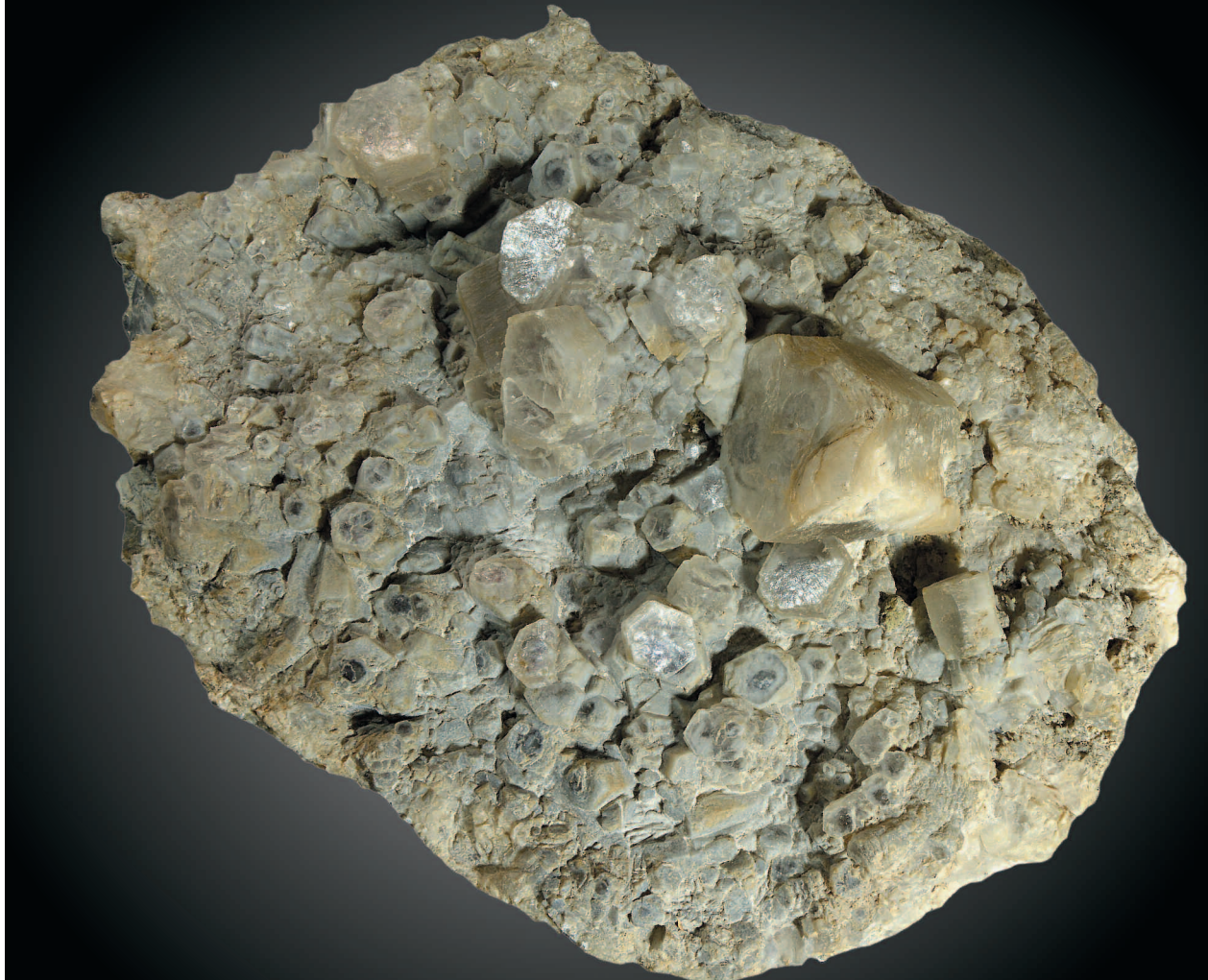


10a

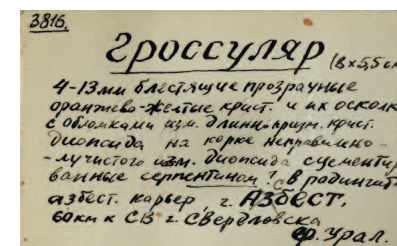


10. Large (41 x 43 cm) specimen with prismatic **brucite** crystals. Specimen: Ural Geological Museum of Ural State Mining University. (a) General view, (b) fragment, image size 7.5 x 2.5 cm, (c) fragment, image size 5.0 x 4.5 cm.

**All specimens:**  
**Bazhenovskoe chrysotile asbestos deposit, Asbest, Sverdlovsk oblast, Central Urals, Russia**

**Photo: Michael B. Leybov,**  
**unless otherwise mentioned**

11. **Grossular** (crystals up to 1.5 cm) on crystal crust of diopside, 8 x 5.5 cm. Specimen: Fersman Mineralogical Museum, RAS, #ST3816, Victor I. Stepanov collection, 1980.



10b



10c



## PART 1. HISTORY OF STUDIES

**S**erpentinites cut by asbestos veinlets in the area of the future deposit were mentioned by A.N. Chaikovsky in 1830 in the course of geognostic works within the Yekaterinburg district. A. P. Karpinsky who twice crossed Bazhenovskiy ultramafic massif in 1877 and 1879 during geological investigations of the Eastern Urals Slope also reported peridotite, serpentinites, and chrysotile asbestos in this district. The description of his geological routes published in 1949 provides brief information about these rocks (Deposits..., 1967). In 1885, Ladyzhensky, surveyor of the Urals Mining Administration, discovered Bazhenovskoe chrysotile asbestos deposit.

According to V.I. Kryzhanovsky (1907), the deposit was known since 1883. However, applications for operation of asbestos bodies were submitted only in 1885. In any case, at present, 1885 is considered to be official time for discovery of Bazhenovskoe deposit and it became operational in 1889 when the Mining Department of the Russian Empire authorized the asbestos production here. Since then exploration and geological surveys have been continuous, and the rocks of the deposit and the commercial mineral itself have been studied. A.A. Semchenko, mining engineer, published in Mining Journal in 1902 an article about exploration in the southern part of the district. Kryzhanovsky (1907) provided the first information about mineralogy of serpentinites and rodingites and described the geology of the district and deposit. He found and examined garnet, native copper, antigorite, vesuvianite, aragonite, magnesite, opal, and some other minerals.

Mikheev (1909) described the geology of the deposit, generated its first sketch geological map, and highlighted the relation of asbestos to "porphyry" veins. In

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