

SUMMARY

Juodupė–Onuškis land subsurface structure and Tumasoniai magnetic anomaly

/JUODUPE. ONUŠKIS

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The magnetic anomaly of Tumasoniai was established by means of Juodupė–Onuškis land magnetometric research in 1935–1938. In 1949–1960 the gravimetric investigations were carried out. After World War II the borings of Butkūnai-241 (862.7 m), Garsenė-2, -2a (942.3 m) and tens of shallower boreholes were drilled.

The land geological cross-section is made up of the Palaeoproterozoic crystalline basement rocks and of the sediments lying over the Neoproterozoic Vendian, the Palaeozoic Cambrian, the Ordovician, the Silurian, the Devonian and the Cenozoic quartz. The magnetic anomaly of Tumasoniai is of 12 x 3 km area. The ore deposit in Garsenė-2a borehole is lying in the depth of 1,000.5–117.8 m. It is made up of quartz magnetite. The stratum thickness is 200 m. The iron quantity in it is 38.77–55.12%. The prognosticated resources are 2.16 billion tons. The Ordovician facies cross section is worth mentioning. Some of the strata complexes (suites, members) are called after the land place names (Armoniai, Juodupė, Vaidlėnai, Vyžūnai, Alksniai and others), they are recognized as stratotypes and introduced into the Baltic and European platform stratigraphic schemes.