

Specific feature of Underground Oil and Fuel Storage „Góra” construction and exploitation, Poland

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Abstract

Paper briefly presents construction and exploitation of the Underground Oil and Fuel Storage "Góra", located in central Poland, focusing on its specific feature.

Specific feature, on the one hand, is that storage caverns for oil and fuels have been converted from depleted brine production caverns. The main idea of a conversion process was tightness achieving, long-term geotechnic cavern stability as well obtaining required storage parameters. A convenient geographical location according to oil and fuel pipelines, favourable geological conditions and long-lasting careful exploitation of brine production caverns made their conversion into storage ones possible. Considering mentioned advantages, a relatively low cost of underground storage with final capacity approx. 3,5 mln. tons of oil and approx 0,75 mln tons of fuels had been constructed in a very short time.

Specific feature, on the other hand, is underground storage co-operation with a rock salt mine, operating on the same salt dome "Góra". The necessity for that kind of cooperation demands the specific underground storage operation technology. At the same time the entire amount of salt is used in chemical industry. Inowrocław Salt Mines "Solino" S.A. as a member of a Capital Group "Orlen" (the biggest Polish oil concern) is the owner of the Underground Oil and Fuel Storage. Nowadays the last stage of the underground storage construction is being realized.