

OIL SHALE IN JORDAN: OCCURRENCES AND INVESTMENT OPPORTUNITIES

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Jordan is rich in oil shale deposits that are likely to play a major role in the future of Jordan's energy supply. Jordan's oil shale is chalk, chalky marl, chalky limestone and limestone, brown to dark-grey in color, soft to moderate. The mineralogical composition is homogeneous and mainly of calcite and quartz with moderate amounts of dolomitic limestone, apatite, quartz and kaolinite. Oil shale data base is coming from drilling results of 365 wells. The overburden is soft to moderate with stripping ratio (1:1), which means that the ore could be extracted with efficient, low-cost surface mining.

The results of oil shale studies indicate that the major deposits of commercial scale interest are located in Central Jordan within the Upper Cretaceous (Maastrichtian) Chalk Marl. There are more than 18 near surface deposits (ten of which were investigated at different levels) with an excess of 40 billion tons of oil shale with an average of 10 % oil, which means that Jordan is ranked as 8th country among 37 countries in the world shale oil reserves.

Over the last three decades, the Natural Resources Authority (NRA) had carried out extensive geological studies to determine the oil shale resources "Quantity and Quality". Moreover, NRA in cooperation with many foreign companies and institutes from many countries in the world carried out technical and pre-feasibility studies on oil shale for oil extraction and power generation.

Six International companies have signed Memoranda of Understanding with NRA for oil shale investment in Jordan so far. Investment of oil shale is based on negotiation with NRA under an Oil Shale Concession Agreement. There is a great opportunity to invest in oil shale as a source of energy whether to produce oil or to generate electricity.