Oil shale development from the perspective of NETL’s Unconventional Oil Resource Repository

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Research on recovering oil from oil shale has been conducted for more than a century. The United States is endowed with 62% of the world’s potentially recoverable oil shale resources. In spite of this some experts believe that the United States is still decades from having a fully developed, commercial-scale industry of liquid fuels from shale. Potentially recoverable oil amounts to 500 billion to 1.1 trillion barrels, which is more than triple the proven crude oil reserves of Saudi Arabia and nearly 60% of this total is concentrated in the relatively rich Green River formation of Colorado, Utah, and Wyoming. A number of factors have hindered the development of oil shale. These technical, political, and economic factors have brought about R&D boom-bust cycles. It is not surprising that these cycles are strongly correlated to market crude oil prices. However, it may be possible to influence some of the other factors through a sustained, yet measured, approach to R&D in both the public and private sectors. At the very least, properly recognizing and responding to the current upward swing in the R&D cycle may dampen the impact of inevitable fluctuations in future crude oil prices. In this paper, the authors look at the history of oil shale development and outline the National Energy Technology Laboratory’s efforts to gathering relevant research literature in its Unconventional Oil Resource Repository.