An Assessment of Oil Shale Technologies

June 1980

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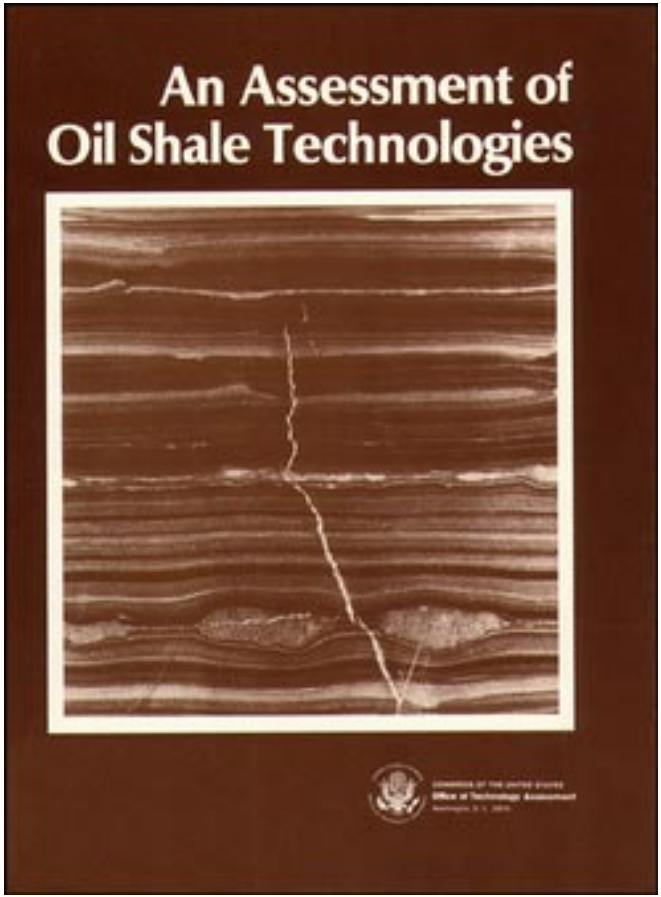

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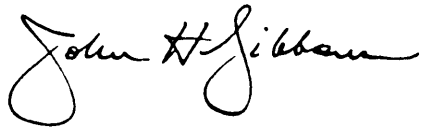
Foreword

For many decades, the oil shale resources of the Western United States have been considered possible contributors to the Nation's liquid fuel supply. This volume reviews several paths to development of these resources and the likely consequences of following these paths. A chapter providing background information about the nature of oil shale is followed by an evaluation of technologies for recovery of shale oil. The economics and finances of establishing an industry of various sizes are analyzed. The fact that much of the best shale is located on Federal land is examined in light of the desire to increase use of the resources. The consequences of shale development in terms of impact on the physical and social environments, and a discussion of the availability of water complete the report.

Policy options addressing barriers that could hinder the establishment of the industry are presented. These options, designed primarily for Congressional consideration, are limited to the obstacles OTA identified as currently existing. Other issues, of equal importance for the protection of the environment and the communities, but not constraints to development, are discussed in the body of the report. The assessment deals only with oil shale; no systematic attempt was made in this study to compare this energy source with liquid fuel sources other than conventional petroleum or with alternative energy strategies. Other OTA assessments are addressing many of these topics.

Volume II evaluates the Federal Prototype Oil Shale Leasing Program. Both volumes were prepared in response to requests from the Senate Committee on Energy and Natural Resources. We hope they will be of value to the entire Congress when considering domestic energy policies.



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NOTE: The Advisory Committee provided advice and comment throughout the assessment, but does not necessarily approve, disapprove, or endorse the report, for which OTA assumes full responsibility.

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