

the Federal Government would destroy one of the most powerful competitive forces that could be brought into the oil shale development.

The lessee should be required to make available to the Federal Government only such data and information as is necessary to assure that the lessee is conducting a prudent and efficient operation. All technical information so acquired should be held confidential by the government during the research term.

8. 3172.10. *Antitrust Consultation*. This regulation is unnecessary because of the limitations contained in the Mineral Leasing Act and should be deleted.

9. 2244.1-7. *Exchange of Oil Shale Lands*. Subparagraph (b) (1) is too restrictive in requiring that the oil shale lands to be exchanged have similar geologic and physical characteristics. The criterion should be that the offered oil shale lands be of a value approximately equal to or exceeding the value of the selected public land.

#### *X. Marathon Oil Company—August 11, 1967*

A. Marathon concurs with the basic purpose of the proposed regulations which make available a limited portion of the public domain for research and the development of oil shale technology. The development of techniques for commercial production of oil from oil shale is a necessary prerequisite to the determination of the need for statutory changes and the promulgation of regulations relating to commercial production. The development of such technology through the competitive research efforts of the private enterprise system is the best method to accomplish this objective.

Many of the detailed provisions of the proposed regulations inhibit rather than encourage industry participation in shale oil technological development. The proposed regulations are too preoccupied with government controls and with provisions to insure revenue to the government from the research efforts.

Marathon favors regulations which require a company that acquires a tract for research to invest sums sufficient to demonstrate a bonafide intent to make a meaningful effort to develop oil shale technology; they further favor a requirement that such company meet certain work progress requirements.

As previously indicated, many of the proposed regulations will discourage rather than encourage industry participation.

#### B. Specific Comments:

1. *Royalty*.—The regulations pertaining to royalty are not realistic. In order to encourage company participation no royalty should be required until at least five years after commercial production; thereafter the royalty should be modest—i.e., five percent of the production at the mine or wellhead.

2. *Patents*.—The provision in the proposed regulations that the United States acquires title to all inventions will discourage participation. As an incentive the participant should have the right to retain title to all inventions subject only to the requirement that they be licensed to others on a nondiscriminatory reasonable royalty basis.

3. *Term*.—The lease should be for a fixed term of years and as long thereafter as oil shale is commercially produced. Provision should be made for an extension of the fixed term on a showing that research has proceeded diligently and that there is a reasonable possibility that such research will prove successful or that commercial production can be obtained during the extended term. The uncertainties contained in the proposed regulations with respect to the lease term should be eliminated.

4. *Acreage*.—The proposed regulations indicate that a reduction in acreage may be required if commercial production is attained. Few companies will be willing to undertake a research project of this nature without knowing in advance the number of acres that it will be entitled to hold during both the research and commercial phase of the lease. It should be recognized that one of the most important facts to be developed through research is a determination of the optimum-sized tract for oil shale development. The acreage allowed a participant should be large enough to permit research and experimentation in this regard.

5. *Need*.—The proposed regulations provide that one of the bases for evaluating applications for leases is the applicant's need for lands to conduct research. It is submitted that this is a poor criterion. Applications should be granted to any applicant that indicates it has the financial and technical ability to conduct a good research program.

6. *Multiple Resources*.—It is not clear from the proposed regulations whether nacholite and dawsonite are included in the definition of oil shale. This should