

SINCLAIR OIL & GAS Co.,
Tulsa, Okla., February 14, 1967.

HON. STEWART L. UDALL,
Secretary, Department of the Interior,
Washington, D.C.

DEAR MR. SECRETARY: Sinclair has been very interested in the recent press releases and official statements of the Department of the Interior concerning the policy to be formulated on future disposition of government-owned oil shale lands in Colorado, Utah, and Wyoming and especially in the Piceance Basin. It appears that many of the proposed rules follow very closely the recommendations made in Mr. J. B. Kennedy's November 24, 1964 letter to Mr. Joseph L. Fisher of the Oil Shale Advisory Board, a copy of which is attached for your ready reference. We would like to expand on Sinclair recommendations as they may pertain to the proposed policy and respectfully submit the following:

1. In order to encourage the very large-scale research investments needed to develop commercial production techniques, companies will need assurance that they will be awarded sufficient commercial reserves to make adequate profit on the overall investment. We recommend that, upon presentation of research plans, each company be granted the right to use a development tract for research and an option on a specified commercial tract of its selection. The option would be exercisable by the commencement of operations on the commercial project. Time limitations on the option should be flexible enough to permit extension of serious research and development if needed.
2. If limitations should be established on the total amount of oil shale leases granted to one company, we recommend these take into consideration richness, thickness and process considerations instead of just surface acres. Some flexibility should be allowed to reward those companies who in the past have pursued and who in the future aggressively pursue oil shale research and production.
3. Raw shale oil is not a saleable commodity. It will require pour point reduction in order to be transportable through pipelines and hydrogenation in order to be used in a refinery. Large surface acreage will be needed for water storage, waste disposal, plant operation, etc. Therefore, we recommend that acreage be leased in one large block rather than a "checkerboard" approach of spreading out smaller amounts over a large area. The potential of acquiring larger blocks will do much to encourage research and production investment.
4. Our past research on underground retorting of oil shale and our current program in the Anvil Points cooperative research project lead us to believe that shale oil production will become economic in the foreseeable future. However, engineering and economic analyses made in connection with these projects indicate low potential return on investment. We are not in complete agreement with the idea that the current nuclear approach to the problem can reduce costs radically, even if the process works. Since there is little technical promise of substantial improvement in shale oil economics, we believe the government should be prepared to accept much smaller royalty rates than are used in conventional oil and gas leases and should encourage investment through an enlarged depletion allowance and investment tax credits.
5. In view of the dollar requirements of oil shale research and the risks involved, it may be necessary for several companies to pool their resources. We recommend that both the provisional development and the commercial leasing policy include provisions for joint operations through government-approved units.
6. Water availability and waste disposal will be important factors in the development of the shale oil industry. We urge the government to take early steps to provide for the development of water resources sufficient for a commercial shale oil program. Government and industry should actively begin formulation of pollution and waste disposal regulations that will both protect the beauty of the lands and promote commercial production of shale oil.

Dr. Rex T. Ellington has been appointed Oil Shale Project Manager for Sinclair. Please feel free to contact him for any assistance that we can provide in this important program. He can be contacted at the letterhead address of Sinclair Oil & Gas Company.

Respectfully submitted.

G. D. ALMEN, Jr., *President*