They appear to reflect only the common effort to find a national security justification for action that individuals or groups would find in their economic interest.

(7) There is strong pressure to develop an oil shale industry in the states involved for the beneficial effect on local incomes, employment and property values.

(8) The major oil companies are naturally concerned with protecting their position in the event of the development of an oil shale industry by buying or controlling oil shale acreage. However with one or two exceptions they seem not now inclined to incur substantial development costs to produce shale oil. Certainly for companies with alternative sources of petroleum the economic attraction of oil shale is not high. The incentive to control oil-bearing acreage is thus, for the time being, much greater than the incentive to produce from it. This incentive, however, is very strong and strongly indicated by present efforts to obtain acreage in the area. The Shell oil company has proposed that it be granted leases of 50,000 acres of the oil shale lands in the central area of the Piceance Basin. These are estimated to contain 150 billion barrels of oil. This would suffice to cover *all* of the Shell's oil requirements at the present rate of refining for an estimated 660 years. It is the equivalent of roughly five times the total of *all* proved petroleum resources in the United States. Sinclair has made requests that would suffice that company on the same basis for an estimated 226 years. Modest requests from Humble and Continental for approximately 5,000 acres would cover the total present production of each company for 54 and 27 years respectively. We believe that much of the current interest in leasing is related not to a desire for development but to a desire to control land. We stress again the richness of seemingly small areas well below what many might characterize as a "commercial scale" lease. The Department of the Interior estimates that some 1,000 acre tracts in the heart of the basin contain as much as 3 billion barrels of oil, the equivalent of a year's consumption at current rates for the United States as a whole. As noted, 5,120 acre tracts in this area contain as much as 18 billion barrels of oil, the equivalent of 55 per cent of the nation's total proved reserves of petroleum.

(9) Part of the oil shale lands belong to a Naval oil reserve. This and the very large quantities of oil in small acreages, and subject to requests such as the above, would seem certain to stimulate recollections of past experience with Teapot Dome and Elk Hills. This suggests that public policy toward these lands should be even more than normally circumspect.

CONCLUSIONS

(1) We agree that it is not sound policy to lock up important resources. We gain in wealth by using our natural wealth and doubtless will continue to do so. There is good reason, accordingly, to seek the development of effective and economical processes for recovering oil from shale.

(2) Alternative fuel supplies are, however, wholly sufficient to permit orderly and equitable development of shale oil resources. Extravagant, windfall or unknown rewards need not be paid for hurried development. There need be no irrational or helter skelter alienation of this public resource. All who believe in conservation must resist such course.

(3) The interest of the people of the immediate area in development is understandable. But the resource in question belongs to all the people of the United States. Their interest is paramount.

(4) In the early deliberations of the Board it was urged that development was being held up by the unavailability of public lands. On examination this contention fails to stand up and little was heard of it in our later deliberations. Development is *not*, in fact, now being restricted or curtailed by the fact that the larger part of the reserves are in public hands. Oil companies that are as competent as any in the country for development now own in fee simple shale resources far beyond any conceivable requirement for long term development. They are being deterred not by government ownership of other land, not by fear of what the government may do with these lands, but because of the costs of development and because the further economics of production, as compared with alternative costs of crude oil, are either unclear or unattractive. We conclude that the charge that government ownership is holding up development is based on either ignorance of the size and richness of present private oil company holdings or an effort to turn local pressure for development into pressure on the Secretary of the Interior to lease the lands.