COMPETITORS OF SHALE OIL

The importation of overseas oil is the most serious competitor of a shale oil industry as well as the domestic producer. Shale oil can no where near attain the present dollar cost of a barrel of imported Persian Gulf oil nor can any oil being found in North America today. I need not dwell on this point in a talk to oil men but it is worth mentioning in the following context.

There is, in my opinion, an urgency to bring oil shale, coal and tar sands into production as suppliers of a part of our North American oil needs. First, we must protect against interruption of overseas supplies. The current Egyptian-Israel controversy is another example of the constant threat to mid-east oil. Second, but not less important, we should keep a strong bargaining position in the market for world oil. We may find Arabian oil much more expensive when we no longer have productive capacity in excess of normal demand. I would advance the thought that we should keep some of our shut-in capacity available for emergencies and use oil shale, coal and tar sands as a part of the "baseload" supply.

In respect to coal and tar sands, it seems to me that all will fit into our future oil supply, first as regional sources, later in the national oil mix of Canada and the United States. The technologies are remarkably similar, in that mining and materials handling and the up-grading of hydrogen-deficient hydrocarbons are involved in each. There is no reason that favorably situated "high-grade" deposits of all three sources—oil shale, tar sands and coal—will not be competitive with each other and with conventional petroleum.

OTHER MINERALS

The discovery of other potentially valuable minerals in some of the oil shale formations, while adding to the legal and administrative problems of the Federal government, already has had a beneficial influence. The minerals to which I refer are pabcolite (sodium bicarbonate), dawsonite (a sodium aluminium carbonate) and halite (sodium chloride). The more interesting of these may be dawsonite since if economically recoverable it could be a new source of aluminum. Bauxite, 90% of which is imported, is now our sole raw material for this strategically important commodity.

Will these other minerals be economically recoverable? How will they influence the shale oil future? These and other questions must await the detailed evaluation always necessary for nearly discovered minerals. Like oil shale itself there is no question but what the quantities are large—zones several hundred feet thick covering thousands of acres—but also like oil shale the economics of recovery must be established. At this time the potential is exceedingly interesting but no definite answer can be given. A number of companies, including chemical and aluminum companies, are making evaluations and will accelerate their efforts if lands containing these minerals can be obtained on a reasonable basis from the Federal government.

THE FEDERAL OIL SHALE LEASING POLICY

I was tempted, because this topic is in the news, to devote my whole presentation to it. The reason I have refrained is that its importance can be overstated.

There is no assurance at the present time, although we are hopeful, that the leasing regulations will be acceptable to industry when issued in final form. Certainly they are not workable in their present form. Another thing, an important fact that often escapes notice, is that shale development is proceeding on private lands, will continue to do so, and may even accelerate if development on public lands is discouraged by oppressive regulation.

I sincerely hope that Secretary Udall will modify his proposed leasing regulation to the extent that a healthy, competitive and ultimately profitable private industry can be developed on the public oil shale lands. This is his stated aim but in my opinion the regulations as written will not achieve the objectives he seeks.

While there are other questionable provisions of the regulations, it is basically unsound to require that a lessee make public all the know-how, and give up title to any patents, resulting from his research on public lands. Not only is this stipulation likely to discourage qualified applicants for leases but if followed would surely result in a mediocre technology. I cannot visualize a company using its always limited research budget and its top personnel to do research on this basis when there are always more opportunities than resources available for proprietary research.