

The government does, however, have a clearly defined responsibility for research in its role as landlord. That responsibility is to determine by core drilling and by other geologic exploration methods the nature and the extent of the resource which lies below its lands.

As so many people have pointed out to me since these hearings began, it would be both uneconomical and ineffectual for the government to go beyond that and to attempt in its own right to develop a technology for the commercial production of oil shale and associated minerals. This Subcommittee has heard testimony on the variety of techniques which might be used to achieve commercial production. Further, it should be clear that the "pay dirt" in oil shale will not be hit through one "break through" but rather will require in all probability a number of break-throughs on a number of fronts. For any one company to successfully pursue any one technique will obviously require a continued research and development effort. Research, like education, never stops. It must always continue to keep pace in the competitive market place.

I think that it is also clear whenever new technology must be developed that the end product of that technology is of less importance than the presence of a sustained cadre of men and women dedicated both to the development of the technology and its application. The suggestion that the Federal government assume the role of a technological innovator completely overlooks this fact. Technology, without the presence of trained people, would be meaningless. It would be idle and wishful thinking to believe that the Federal government could produce all of the technological keys necessary for the unlocking of oil shale and then at some given point in time deliver over the keys to a private company adjudged "qualified" by the government. I submit that the results which I believe all of us seek could never be achieved in that fashion.

A review of the record developed by this Subcommittee reveals that it has been parties other than the Federal government which have so far brought the greatest progress to oil shale development. The excellent testimony of Professors Mead and Steele have been most constructive in developing an informed record before this Subcommittee. Those gentlemen have done their work completely outside the ambit of federal jurisdiction. Further, as I have tried to show in the record, the significance of dawsonite has only been brought to light through the efforts of private individuals who sought specifically to find value in the vast western oil shales other than the possible value of the known oil contained in those shales. The genius of these men is that they focused the attention of the world on a mineral which lay intermixed in federally owned oil shales but had been completely overlooked by the Federal government for the past 50 years. In addition, it has been a small and independent company which testified before this Subcommittee to the effect that it intended to be the first commercial producer of shale oil in this country.

In closing, Mr. Chairman, let me say that I sincerely hope that the loose talk over the value of this resource has been somewhat clarified. Arithmetical differences, which Senator Douglas and I obviously have, aside, let me quote Charles Stoddard, former Director of the Bureau of Land Management, in his testimony before you when he said "unless we have operating experience to show the difference between the costs of this resource and its market price it is impossible to determine a value." All values which have been broadly discussed before this Committee and in the newspapers across the land are but conjecture.

Senator Allott, much better than I, placed before this Subcommittee correct testimony concerning the "*possible*" value to the nation of this resource. I hope that those who would lead people to believe that our national debt could be dissolved in shale oil will desist from spreading such inaccuracies.

I deplore the references to "scandal" and "giveaway" which has appeared in both our congressional investigations and in editorial comment by certain newspapers across the land. To resort to such innuendo is, I believe, as scandalous a misuse of public debate as any alleged scandal which might be conjured up.

Mr. Chairman, your Subcommittee has performed a great service in sponsoring public debate on the oil shale question. This is a public issue. I also commend Secretary of the Interior Udall, and his Deputy Solicitor, Mr. Weinburg, for their candid comments with respect to the public nature of this issue.

Some have made the charge that the public has been "uninformed." My direct answer is that it is the responsibility of the politician and of our press to inform the people of this country. But this mandate gives us no license to "*misinform*." I hope that misinformation will not be resorted to in the future.