The richest part of the section is approximately 200 feet thick. However, 600 to 800 feet of the Green River formation contains the two minerals. We believe that we——

Senator ALLOTT. The two what?

Mr. NIELSEN. The two minerals, nahcolite and dawsonite. And all of the 800 foot section would yield oil.

Senator ALLOTT. This is why, therefore, the forepart of Mr. Smith's statement went into the proposed research and separation of the three chief components you have spoken of today, soda ash, and alumina, and the extracts of the oil from the shale itself.

Mr. NIELSEN. That is right.

Senator ALLOTT. Now, Jim, I would like to ask you a question. You said on page 9 of your statement—and I do not think you need it for my purposes—that the proposal of the Secretary is the antithesis of research. Therefore I assume that what you are saying in one sense is first of all that you have got to have leases in order to develop the reserach to the place where you can get it strictly out of the laboratory.

Mr. SMITH. That is not exactly the point I was trying to get across when I said this is the antithesis of research.

Senator ALLOTT. No. You were referring to the leasing policy.

Mr. SMITH. No, we are concerned by the possibility of having the research directed or that we woud have to describe the process sought to be developed before we initiated the research. We think that that closes your mind to the various possibilities. We believe that when you are doing research you should approach the problem with a totally open mind, without any commitments as to what you are going to arrive at. If we had not behaved in that manner, we probably never would have gotten to the position we are with dawsonite today. For example, many people have been involved in doing research on oil shale for years. They have been looking at this mass of rock and they have found out a great deal about the oil shale in it because they set out to find out only about oil shale. What they did not find out, because they did not enter the project with an open enough mind, was the fact that there could be other minerals present that have great economic importance. These turned out to be dawsonite and nahcolite.

Senator ALLOTT. Then this leads us to the second point, necessarily, that you cannot do this research without having an opportunity to procure a lease for further research.

Mr. SMITH. That is true. We believe that from this point on the research and beginning of development would be an extremely expensive thing. We feel that the only way you could finance that, particularly a small company that does not have a going concern, that has a cash flow and is generating its own capital, that this company will have to have a lease that cannot be revoked except for failure to perform. In other words, we should not be asked to make this heavy capital investment, and in fact we would not be able to get a bank to bank it, unless we were assured of a lease and sufficient raw material to go ahead if our process is successful and to go ahead for a long enough period of time to amortise the capital investment.

Senator ALLOTT. Well, this brings us pretty close to the point I made a while ago with respect to the companies which are interested