

I would like to close with a statement on our present activity. We are awaiting reply to our application for leases. We have used up practically all of the dawsonite from our cores in experimental work, and expect now to continue the work on dawsonite obtained from deposits outside the United States, until such time as we receive the necessary authority to proceed on the Federal lands. We are also working on water and power supplies; on community planning and, with the State, on conservation and pollution control.

I appreciate this opportunity to appear before your committee and would be glad to answer any questions.

Senator Moss. Thank you, Mr. Smith, for a very fine statement. It reveals to me, at least, the extent of work that your company has been doing in this area.

I take it that you have applied for mineral leases in this area, but you have also made mineral entries on the same land in order to cover that claim, too, if it is necessary to go the mineral entry route, is that right?

Mr. SMITH. That is correct, sir.

Senator Moss. And what is nahcolite? Can you describe that a little and what it is useful for? I know something about dawsonite, but I do not know about nahcolite.

Mr. SMITH. I will turn that over to Mr. Nielson, who is our chief geologist.

Senator Moss. Will you enlighten me a little?

Mr. NIELSEN. Yes. It is a sodium bicarbonate, more commonly known as baking soda, and it is useful in making soda ash, which is a basic chemical used in industry—in the glass industry, pulp and paper and ore refining industries, et cetera.

Senator Moss. When I take some baking soda, I now know I will be taking nahcolite.

Mr. NIELSEN. I would like to make one more comment. Dawsonite is more familiarly known as Roloids.

Senator Moss. You mean it is a choice between Tums and Roloids? The method of recovery of oil from the oil shale that your company has concentrated on would be the removal of rock and retorting rather than looking toward this *in situ* process that we have been talking about, is that correct?

Mr. NIELSEN. Yes. We would start out hopefully in the optimum combination of dawsonite-nahcolite and oil in an underground mining section.

Senator Moss. And would the process you contemplate permit total recovery or what percentage of recovery of the kerogen from the rock?

Mr. NIELSEN. As I visualize it, Senator, we would use a very small section of the oil shale section during the first one or two generations. The deposits are immense and at a small interval would last a very large-scale plant a long period of time.

Eventually, many years after the initial industry is started, I think some complete recovery method would be instituted such as the Bingham pit or the block caving system or whatever else might be devised.

Senator Moss. Your company is not actually engaged in production now. You are still in the research and development stages. Is that right?

Mr. NIELSEN. That is correct.