

from him there; I think it is very important to ascertain whether or not operations can be conducted in winter weather at that plant.

Mr. MacNICOL: Of course I agree, but I say it had not been done.

Mr. CRERAR: It was not done in the past, but in the new set-up it is intended to carry on these duties throughout the year. The margin for profitable operation in any event will, I think, be very, very small, even if all the difficulties are overcome. It is quite possible that if you get large-scale operations, day and night, 365 days in the year, the overhead expense can be cut to the point where it can be made a commercial proposition.

Therefore the expenditure in this plant is designed to provide that test. Whether it will, I cannot say, but I can assure the members of the committee and the hon. member for Davenport, for whom I have the highest respect, because he is one member of the House of Commons who has endeavoured to inform himself on these matters, that what we aim at is to get the most complete test we can, since it is only on that basis of known facts that commercial operation for the future is possible.

Mr. MacNICOL: May I make one correction in regard to the amount of oil produced in 1941? I find that everyone has different figures. It is so hard to get figures that fit in with other estimates. Doctor Ells knows all about Abasand; he knows what is produced there and in the June, 1942, issue of the *Canadian Geographical Journal* he states:

Nevertheless, production during the period May 19–September 30, 1941, amounted to approximately 17,000 barrels of crude.

I had said 30,000 barrels because my recollection was that was the figure sent to me by the Abasand company. Doctor Ells states it is 17,000 and now the minister quotes a figure a few thousand less. That is our trouble. We never get correct figures that agree. As regards the McClave system, I thoroughly understand it. It was in operation in 1941 and 1942 in both plants. I did not see any difference as between 1941 and 1942. It works very simply. It is a system such as you would see in a gold mining plant. It has a flotation tank. It takes the emulsion of hot water and oil that flows out of the large revolving tank in which the sand is placed first, and when it flows out of the separation tank it goes into the McClave stationary flotation tank in which the sand in time goes to the bottom and at the top the oil is fluffed off from one corner into the sedimentation tanks. Shortly after, it receives a dilutant and then it goes from the sedimentation tank to the refinery. The

trouble at the Abasand plant was that the refinery was too small for the amount of oil produced. What amazes me is that the separation plant was pulled down. It was equipped with McClave's own apparatus. I may observe in passing that the last time I was there McClave slept, not in the same bed but in the same room with me. I found him a very capable man. What I want to know is whether the new plant will have the McClave process installed and the same revolving emulsion tank?

Mr. CRERAR: We do not differ on the process. The difficulty was not in the process of treatment. There is no criticism of the Abasand company's process in their operations in 1941 and 1942. It was rather in connection with the lay-out of their plant, the general design of it and the construction, which was not such as to give the most effective and economical operation. I may tell the hon. member that this data I have is taken from the reports of the Abasand company, and in 1941 the total virgin crude produced, namely, the bitumen as it comes from the sands, was 20,282 barrels.

Mr. MacNICOL: I thought the minister said a few moments ago 11,000.

Mr. CRERAR: No; I was speaking of 1942. This is 1941. In 1941 the total virgin crude produced was 20,282 barrels.

Mr. MacNICOL: In 1941?

Mr. CRERAR: Yes. In 1942, after they had the new plant going, it was 9,958 barrels.

Mr. MacNICOL: I total the figures in the report as about 11,000 barrels.

Mr. CRERAR: I do not know that it is of a great deal of importance. This is contained—

Mr. MacNICOL: In a report.

Mr. CRERAR: Yes. The information is contained in the report made by the Consolidated Mining and Smelting Company of Canada, which was tabled in the house.

Mr. ROWE: How much was produced in 1943?

Mr. CRERAR: They were not operating in 1943.

Mr. ROWE: It is getting less every year.

Mr. CRERAR: The revamping of the plant was taking place and that is going on now. The plant will come into operation again this year and we hope there will be continuous operation throughout the winter season.

Mr. DECHENE: I am sure the committee will agree with me when I say that I have not wasted the time of parliament during the