

minister, if he desires, bring in an estimate for five million dollars or ten million dollars to support a plant to produce 30,000 barrels of oil a day. That would be a commercial plant which would be able to supply a refinery at Edmonton with oil required to make gasoline for farmers on the prairies.

Mr. CRERAR: Perhaps I might be permitted to give some information on some of the points my hon. friend has raised in his speech.

He inquired as to the total amount of money that had been spent over the years in an effort to develop these sands commercially. I do not know what has been spent by private companies, but government expenditures up to 1932 amounted to a total of \$105,000. That was spent largely in surveys and in putting in a few test pits and that sort of thing. The amount spent under the arrangement made between the Department of Munitions and Supply and Consolidated Mining and Smelting company for the purposes I indicated a short time ago was \$132,000. The amount that has been advanced to the Abasand company since the agreement was made between them and the government was \$850,000, and of that I understand the Abasand company has expended \$766,000.

My hon. friend rather criticized the administration for going into this thing, and stated that he was opposed to government operation. I wholly agree; I do not think that government can operate a business of this kind—

Mr. ROWE: There has not been much oil come out since you went in.

Mr. CRERAR: That is very true. I do not believe that government can operate a business of this kind as efficiently as private enterprise. The reason why the government made the arrangement with the Consolidated Mining and Smelting company has been stated at various times. It was embodied in the various orders in council that have been tabled. The arrangement was made because oil was needed for war purposes. That was the sole reason. Oil was desperately needed wherever it could be found. There may be a difference of opinion on the government's part in these operations. It may be said, perhaps with some force, that there was insufficient knowledge of the possibilities of getting oil out of these sands, that the time that would elapse before oil could be secured was too long to warrant the government going into it. That is a matter of opinion, and there will be a final judgment of history upon that question.

Mr. GRAYDON: That is a long time to wait.

Mr. CRERAR: We are getting the judgment of the hon. member for Davenport to-day.

Mr. GRAYDON: He said it was monkey business.

Mr. CRERAR: Does my hon. friend agree with him?

Mr. GRAYDON: I do not know. I am trying to find out who is right, and up to the present I think he is.

Mr. CRERAR: Well, I hope to add to my hon. friend's knowledge of the matter.

Mr. GRAYDON: Thank you.

Mr. CRERAR: The utmost that the Abasand company produced in 1942 was not 30,000 barrels, as the hon. member for Davenport stated, but under 10,000 barrels, according to the actual data supplied to the Department of Mines and Resources.

My hon. friend also criticized the administration on the ground that we had dispensed with competent men who were in the employ of the Abasand company giving direction to the enterprise. I have to differ directly with my hon. friend on that point. I have met Mr. Max Ball. He was an oil geologist, with a considerable reputation. But he was not an engineer. He had never had experience in designing plants, and I think that if Mr. Ball and those associated with him had got some practical men in 1935, when they went into this thing, they would have met with a great deal more success.

At this point I wish to read—and to avoid misunderstanding let me state that this is only an extract—a portion of a letter which was written by J. M. McClave to Doctor Ells about the middle of February this year. I have not the complete letter here, but the extracts bear on this particular matter, and if I may read them without being asked a moment later to table the letter I should like to do so. Mr. McClave is an oil engineer of considerable experience and reputation. He worked out what was known as the McClave process in connection with these tar sands, and the method which was being used by the Abasand company was based. I am informed, both on the experimental work done by the university of Alberta and the work done by Mr. McClave. He was associated in some capacity with the Abasand company.

Mr. MacNICOL: They were using his equipment for separating the oil from the sand after it passed through the separation or emulsion tank.