according to United States engineers' estimates—250 billion barrels, five times the estimated reserves of all the oil fields of the world. It was strong statements such as this, sent out by the department itself, that resulted in the investment of millions in that part of the country. This investment is also in large part the result of investigations carried on ever since 1913. I congratulate all the departments on what they did in the way of investigation, but I am not a bit satisfied with what is being done now, and I shall give my reasons as I go on.

The minister said that \$132,000 had been paid to the Consolidated Mining and Smelting company for their investigation. I do not know whether that was in 1942 or 1943—

Mr. CRERAR: Some was in 1942 and some in 1943.

Mr. MacNICOL: That is the total? The Minister of Munitions and Supply said that to the end of last year the amount spent by the Consolidated company was \$112,000. Therefore the minister's figures carry over into 1944.

The minister referred to an investigation made in England back in 1922. I know nothing about that investigation, but I did hear that one was made, and I saw a report of an investigation said to have been made some time in the thirties. I have not been able to find out the exact year; whether it was 1934, 1935, or 1936 I do not know. Doctor Ells, testifying before the reconstruction committee on November 30, 1943, stated that it might have been about that time, and that he personally had dispatched two carloads of tar sands to Wales for testing. I spoke to an engineer and the impression I got was that those sands had been sent to Freeman at Cardiff; whether that is true or not I do not know. Freeman, who is a great scientist in this business, is said to have made a test and discovered that out of each ton of tar sands 36.7 gallons of crude oil were produced. Doctor Ells stated to the committee on November 30, 1943, that his memory was that the test, whether Freeman's or some other, cost about \$500,000.

Mr. CRERAR: I might tell my hon. friend that it did not cost the government anything more than the cost of transporting the sands to Edmonton.

Mr. MacNICOL: I do not know that the two incidents are the same. Are they the same? Evidently Doctor Ells did not know or had forgotten on November 30 last that the test was made many years prior to 1930, because I stated before the committee that my

information was that the sands were sent over in the middle thirties. I was given that information by an engineer, but I cannot recall his name at the moment. However, it is neither here nor there. Doctor Ells' statement was that it had cost \$500,000.

Mr. CRERAR: I understand Doctor Ells stated somewhere that the cost to this company in Britain was \$500,000.

Mr. MacNICOL: No. I have his statement here. He did not say who paid the money. I got the impressison that it cost the government \$500,000. I may be wrong in that. If I am, I am subject to corection. When the Minister of Munitions and Supply was speaking earlier in the year, I believe on March 21, as recorded on page 1728 of Hansard, he said that the government, up to that time, had spent \$900,000 on the work going on at Fort McMurray. That is probably correct, according to the minister's own figures to-day. Then we have this vote of \$500,000, which I am going to support. Therefore in the aggregate many millions of dollars have been spent in connection with the Alberta oil or tar sands, or bitumen sands-they are called all three.

How did the government get into this business? That is the question I ask myself. Then I look back into the records, and what do I find? I find that the minister himself said to-day-and it was quite correct-that the shortage of gasoline and the necessities of the war had encouraged the government to go into the business of producing oil at Fort McMurray. I may say right here that I am wholly opposed to government plants of this nature, for the very good reason that no government plants can be operated as economically as a private plant. It cannot be done, because it just runs itself. There is no necessity for anybody to exert himself to do anything in a government-operated plant. When I hear people talk about industries being operated by the government I think back over my thirty years' experience or more in industry and I feel sorry when I hear such a statement. Here is an example of a government operation that has now cost away beyond anything that it should have for the reasons that are associated with government-operated plants.

How did the government get into the business? Mr. Haanel, testifying before the committee on November 30, 1943, stated that:

Up to 1930 the rate of discovery of new oilfields was capable of keeping pace with the mounting demand. But since that year has greatly declined. In the United States, for example, the rate of discovery of new oil reserves has for several years been scarcely one-third of the rate of consumption.