

the south eastern border of Saskatchewan. These various wells are located in a line that is more or less parallel to the Rocky Mountains or to the pre-cambrian contact.

I have with me here today two of my associates, Mr. M. F. Goudge, and Mr. L. H. Cole of our Mineral Resources Division of the Bureau of Mines. These gentlemen have been following the development of potash and phosphate very closely and will be able to answer any questions much better than I can. Before I sit down I might say that the Department of Mines is very interested in the problem of finding raw resources in Canada. We realize that as far as phosphates and potash salts are concerned, our supply of them comes entirely from the United States at the present time. The phosphates come mainly from Florida and Montana, and the potash from New Mexico and California.

I might say that some years ago when the Consolidated Mining and Smelting Company were looking into the question of controlling the fumes from their smelter stacks at Trail they were looking for an outlet for the sulphuric acid that would be produced from that operation, and they made a considerable search of raw materials that could be used in connection with this sulphuric acid production. In the Rocky Mountains they found phosphate beds, but these beds were of too low grade to be of economic interest. They did a tremendous amount of work, and so did we in the Bureau of Mines, in trying to beneficiate these phosphates to bring them up to grade so they could be used, but so far that has not been accomplished. As you know, the plant at Trail is importing from the state of Montana, where there are high-grade phosphate deposits.

In connection with potash, we have these recent drill holes in Saskatchewan. Potash salts have been encountered (in a few drill holes that have been put down). The shallowest depth in the holes that have shown any results so far is around 3,700 feet.

Hon. Mr. DAVIES: Is the potash there in quantity?

Mr. TIMM: We do not know. That is the problem. A great many drill holes will have to be put down before we can tell the extent of the deposit and whether we have the highest grade there.

Hon. Mr. HORNER: Do you know what depth they go in Montana?

Mr. TIMM: That is for phosphates, but now we are talking about potash.

Hon. Mr. WHITE: It would have to be a fairly substantial bed to mine profitably, would it not?

Mr. TIMM: It would have to be a substantial bed to mine profitably at a depth of 3,700 feet. I believe the beds in the state of New Mexico are much shallower, probably from 1,000 to 1,500 or 1,600 feet.

Hon. Mr. HAYDEN: How do they mine there, in open pits?

Mr. TIMM: No; they mine through a shaft; it is underground mining.

Hon. Mr. HORNER: I understand a company has been formed to operate in Saskatchewan.

Mr. TIMM: So far as I know, no company has been formed as yet. A company has been formed to operate on a couple of wells near the town of Unity, for salt. I understand that the province of Saskatchewan has reserved the rights to any potash that is in those wells.

Hon. Mr. VAILLANCOURT: Have you any information about the Buckingham area?

Mr. TIMM: As honourable members know, some years ago—I think from 1870 or so to 1892—we had a phosphate industry centered in the Gatineau district, and there were certain properties also in this eastern part of Ontario. Considerable potash was mined and produced, but these mines have not been commercial since the discovery of the Florida phosphates.