

Mr. BROOKS: These companies cannot do business with any other business concern organization except the government; they must sell to the government?

The WITNESS: Yes. As is the case with gold, the companies must sell to the government.

The CHAIRMAN: Any further questions of Mr. Thunaes?

Next week there will be two papers given by departmental officers at the Canadian Institute of Mining and Metallurgy with your permission, I would like to indicate them as having been tabled today and distribute them when they are delivered next week in Edmonton. They are somewhat technical papers but, if I could indicate them as having been tabled at this meeting, it would be convenient.

If there are no further questions for Mr. Thunaes, I will call on Dr. Bell. Dr. Bell is the Director of the Geological Survey of Canada.

**Dr. W. A. Bell, Director, Geological Survey of Canada, Branch of Department of Mines and Technical Surveys, called:**

I might explain that Dr. Bell is also going to be away next week and I would like to finish his evidence today. I expect it will be brief.

The WITNESS: Mr. Chairman and gentlemen: Direct participation by the Geological Survey in the federal activities in the atomic energy field began in 1944 when the Eldorado Crown Company took over the assets of the Eldorado Gold Mining Company. But, prior to that year, the Survey made very important although indirect contributions to the discovery of radioactive minerals. I would like to mention a few of the contributions that were the initial starters of the activities in most of the known important camps today where uranium is found. The first of these contributions consisted only of notices in several of our survey reports beginning in 1863 of the discovery of uranium mineral by an American on the north shore of Lake Superior. The exact locality of this discovery was not known, but the notices in the survey reports led a prospector in 1948, when he was equipped with a geiger counter, to rediscover this locality and that led also to the discovery of other occurrences in the Sault Ste. Marie district. The second occurrence which is important in this connection was made by an exploratory geological party in 1900 in the Northwest Territories. In their report they noted the occurrence of Cobalt on the east shore of Great Bear Lake. Now, thirty years later, this 1900 report led Gilbert La Bine to visit this locality in the hope of finding silver because silver was known in many instances to be associated with cobalt, particularly in the Cobalt camp of Ontario. He succeeded not only in finding silver but also pitchblende. This led directly, of course, to the Eldorado Mine. Following that discovery, the Geological Survey made several geological maps in that region and these proved to be very important when uranium took on the dominant interest in that field.

Between the years 1920 and 1932, the Geological Survey published several reports of very comprehensive investigations that were made of radioactive minerals associated with rare earth minerals in Ontario. These investigations were made by the late H. V. Ellsworth of the Survey staff who became, on account of this work, internationally famous as a pioneer in this geological work on radioactive minerals.

In recent years some of the survey parties have reinvestigated these deposits in Ontario and while, at the present time, their commercial importance is open to some question, as Dr. Thunaes pointed out, on account of the difficulty of concentration of material, it is not unlikely that some of them may be of commercial importance in the future. It is still being investigated by private capital.