

approximate idea of the potential mineral resources of that area and to learn something of the earth structures. This is a first reconnaissance type of survey, it being done on a fairly small scale, approximately one inch on a map equalling four miles on the ground or perhaps even eight miles on the ground, so that the amount of detail is relatively small. We have known for a good many years, however, that there are numerous evidences of potential pools of petroleum and natural gas, but I do not think at the moment it is likely any metallic materials or industrial metals will be mined from the shelf area. It is possible that petroleum resources will in the foreseeable future be developed in the offshore areas of the island.

Mr. BOWER: Would you have any percentage figure of what proportion of the shelf, so far as Canada's part is concerned, is sedimentary basin and which is basement rock?

Mr. HARRISON: I am afraid I could not hazard a guess at that, sir. I think that the great part of it off Labrador, Baffinland, the general eastern Arctic, would be part of the basement complex. Elsewhere, however, I think it would be younger sedimentary rock.

Mr. BOWER: Would you then say the greater proportion is sedimentary?

Mr. HARRISON: I would guess so, yes.

The CHAIRMAN: Are there any further questions?

Mr. FULTON: When we talk of the polar shelf to what extent is there delineation between the areas comprised in the Northwest and Yukon Territories and the areas we are now talking about as the polar continental shelf, in the administrative view. Is this all an extension of the area which is administratively comprised in the Yukon and Northwest Territories, or do they have a northern limit and the polar continental shelf which may belong to Canada then extends beyond that? Which is the situation?

Mr. HARRISON: I am afraid I cannot speak for the Department of Northern Affairs and National Resources, but I think administratively everything north of 60 and the line from the northwest corner of Hudson Bay to the south end of Baffin Island, would be three administrative units; Yukon Territory, District of Mackenzie, District of Keewatin and the District of Franklin, the last three comprising the Northwest Territories.

Mr. FULTON: I am not trying to tie you down to a precise definition but, broadly speaking, do the boundaries of those territories, in the view which you as an administrator follow, extend to the northernmost limits of Canada's continental polar shelf, or do they stop somewhere and is this polar shelf then a separate area?

What I am trying to get at is are they looked at as part of the territories which you have just mentioned, or do the territories stop? Do the territories have a northernmost limit, and then does this extend north of that?

Mr. HARRISON: Well the polar continental shelf area is wholly confined within the District of Franklin, except for perhaps a small portion north of the Mackenzie River.

Mr. FULTON: I think I had better wait until I get your map on Thursday.