MINES AND MINERALS

production declined substantially to 276 MMcf in 1973, because of a substantial reduction in production from the Pointed Mountain field, the principal producing gas field in the Northwest Territories.

There were 101 wells drilled in northern Canada in 1973 for a total footage of 741,217 ft compared with 71 wells and 574,102 ft in 1972. All but six of these wells were classed as exploratory. Of the 95 exploratory wells drilled, seven were classified as potential gas finds, five being located in the Mackenzie Delta and the remainder in the Arctic islands. One oil discovery was drilled in the Mackenzie Delta in 1973. Some of these discoveries have subsequently been proven to be major discoveries. Late in 1973, the search for oil and gas was expanded to the off-shore areas from both the Mackenzie Delta and the Arctic islands. Off-shore from the Delta, drilling is now being conducted from man-made islands in the Beaufort Sea and at least one significant oil and gas discovery had been recorded there by year-end. In the Arctic islands, a successful step-out well was drilled eight miles from shore in 400 ft of water from a floating ice platform. This well substantially enlarged previous estimates of the size of the Hecla field on the east coast of Melville Island. The well is important from a technological as well as commercial point of view as it ushered in another major breakthrough in Arctic exploratory drilling technology.

Eastern Canada. Aggregate drilling in Ontario declined in 1973 by 6% to 219,808 ft. Exploratory drilling accounted for 46% of the total, down 35% from the previous year. No noteworthy discoveries were made. In the Gulf of St. Lawrence, two deep exploratory wells were drilled in 1973 and both were dry and abandoned.

Off-shore from the east coast, 30 wells were drilled for a total of 331,448 ft in 1973, compared with 18 wells and 191,210 ft in 1972. Drilling commenced in this region in 1966 and since then a total of 68 wells had been drilled of which four significant discoveries of oil and gas have been made. All of these were drilled in the vicinity of Sable Island. Seven offset wells were drilled around the first discovery well on Sable Island and six of these were successful, but with considerably reduced pay sections from the initial discovery. The results of this drilling suggest that it would be most difficult to develop this field on a commercial basis. Elsewhere off the east coast, the Bjarni H-81 well drilled on the Labrador Shelf penetrated a thick gas-bearing sandstone formation and the results of preliminary tests indicate that this might be the first major discovery in the off-shore east region.

12.2 Government aid to the mineral industry

12.2.1 Federal government aid

Federal assistance to the mining industry takes the form of the provision of detailed geological, geophysical, topographical, geodetic, geographical and marine data which are of fundamental importance to the discovery and development of the mineral resources of Canada; the provision, through laboratory and pilot-plant research, of technical information concerning the processing of ores, industrial minerals and fuels on a commercial scale; certain tax incentives; and financial and technical assistance to the gold-mining industry under the Emergency Gold Mining Assistance Act.

The Department of Energy, Mines and Resources. The federal Department of Energy, Mines and Resources was created by the Government Organization Act on October 1, 1966 (RSC 1970, c.E-6). Apart from its administrative establishments, the Department is made up of three Sectors – Science and Technology, Mineral Development and Energy Development – each headed by an Assistant Deputy Minister and each aiding the Canadian mineral industry according to its assigned responsibility.

The Science and Technology Sector contains the Canada Centre for Mineral and Energy Technology (the former Mines Branch), the Geological Survey of Canada, the Surveys and Mapping Branch, the Earth Physics Branch, the Polar Continental Shelf Project, the Canada Centre for Remote Sensing, and the Explosives Division.

The Canada Centre for Mineral and Energy Technology consists of a large laboratory and pilot-plant complex and conducts research into methods of extracting and processing minerals and fuels. Emphasis is placed on recovery techniques for ores and minerals with low-grade impurities or complex mineral composition. Fuels research includes a comprehensive