

**Northern regions.** Throughout the entire northern region drilling and exploration activity decreased in 1974. Well completions and footage drilled decreased by 35% and exploration expenditures for the region by 17%.

The \$281 million spent on this frontier in 1974 resulted in an important discovery at the Shell Niglintgak M-19 well drilled in the Mackenzie Delta. Data from this well put preliminary reserve estimates at 80 million bbl of oil and 1 MMMMcf of gas. Two other oil discoveries were recorded in the same area, Shell Kumak and Imperial Adgo. The full significance of these wells cannot be determined without additional drilling but they are considered highly encouraging. The industry is drilling specifically for oil in this area.

There were no indicated commercial discoveries in the Arctic islands in 1974 although a well on Cameron Island, Panarctic Bent Horn, had an encouraging show of oil. Successful development wells were drilled in the Drake Point and Hecla fields on Melville Island. Exploratory interest was moving from the eastern to the centre and western part of the Sverdrup basin with Elf Canada concentrating on Banks Island and Panarctic operating in the central basin. Because of the expensive and extreme logistical difficulties of Arctic island exploration Panarctic adopted a "diagnostic drilling" program. Only the larger structures indicated were to be probed during 1975 on the basis of available seismic data.

**Eastern off-shore region.** A total of 21 wells were drilled off-shore in 1974 compared to 31 completions in 1973. Only the wildcat drilled by the Eastcan group off Prince Edward Island showed oil traces. Further exploratory tests are likely in this area.

#### 13.2.2.2 Gas

Exploration and development drilling for gas continued the upward trend of 1973 in the western provinces. Well completions rose by 16.4% over 1973 to 1,927 wells. Of these, 1,294 or 67% were development wells drilled in the shallow gas zones of southeastern Alberta, where the gas is a dry sweet commodity not requiring processing. Of the 375 exploratory wells drilled in the western provinces, 318 were in Alberta and 68% of these were shallow zone exploratory wells.

Mississippian gas discoveries at Morley, Willson Creek, Stolbert and Obed, all in west central Alberta, were considered the major finds in western Canada during the year. In the same province, a number of gas discoveries and successful extensions to existing fields occurred, particularly in the Peace River area.

In Saskatchewan exploratory activity was largely confined to gas prospects in the western part of the province. There was development drilling in the Hoosier-Dodsland, Lloydminster and Estevan-Steelman oil-producing areas and in the Hatton shallow gas area.

In British Columbia two discoveries in the Grissly fields south of Dawson Creek may prove to be important. Successful development and stepout drilling took place at a number of other localities.

**Northern regions.** Shell's Niglintgak M-19 oil and gas well, completed at 13,206 ft, penetrated five gas-bearing zones which tested at a rate of 15,900 thousand cu ft a day (Mcf/d). Four other zones were predominantly oil-bearing, flowing at rates of up to 1,650 b/d. The gas reserves of this strike are estimated to be 1 MMMMcf. Development of the Kupik structure discovered in 1973, 55 miles north of Inuvik, commenced late in 1974. A stepout well was being drilled seaward of the original O-13 discovery. Most of the other delta activity was concentrated in development drilling of the Richards Island and the Beaufort Sea discoveries of the previous year. In the Arctic islands, activity centred on exploitation of earlier gas strikes at Drake Point, Hecla and King Christian. Panarctic were drilling from ice platforms off-shore at Drake Point and east of the Hecla field at the Chads Creek B-64 location. Initial depth of this well was to be 12,000 ft but was extended to 14,000 ft as a result of some interesting shows. On King Christian, in contrast to the earlier major gas find by Panarctic, Dome Petroleum experienced disappointing results with a lengthy and expensive test well, Dome Sutherland O-23. Interest in Banks Island prospects increased in 1974 when Columbia Gas drilled the Columbia Ikkaviktok M-64 and Panarctic moved in late in the season with the Castel Bay C-68 test. Previous wells have had interesting indications.

**Eastern off-shore region.** In east coast off-shore waters considerable excitement was generated by two gas discoveries on the Labrador shelf, Eastcan et al Bjarni and Eastcan et al