

marketable gas, the reserves-to-production ratio is 23.7 years. Gas reserves rose 2.6 MMMMcF (74 billion m³) in 1975 compared to a year earlier but included gas formerly considered uneconomic and was not attributable to new discoveries. These new reserves, all in Alberta, have been added to the proven and recoverable category as a direct result of increases in Alberta wellhead and plant-gate gas prices.

Exploration and development

13.2.2

Oil

13.2.2.1

The level of exploratory drilling activity in the conventional producing areas of western Canada in 1975 was down slightly from that of 1974 but a marked increase was evident in 1976. Preliminary estimates indicate that some 1,600 exploratory wells were drilled in 1975 compared with 1,650 in 1974, a decline of 3%. Exploratory drilling in the frontier regions continued to decline in 1975, following peak activity in 1973. In the North, 44 wells were drilled including 12 delineation wells, down from a total of 60 in 1974. By the end of September 1976, an additional 25 wells had been drilled.

Off the east coast, nine wells were drilled compared with 21 in 1974, with only five area wells finalized in the first three quarters of 1976. There was no drilling activity off the west coast or in Hudson Bay in 1975, nor were any such operations planned for 1976. Details of drilling activity appear in Table 13.6.

Western provinces. In spite of the Alberta incentive programs, exploratory drilling in 1975 did not increase significantly. Development drilling increased 7.4% reflecting increased interest in the shallow gas fields of southeastern Alberta and the net increase in drilling activities in that province was 5.3%. In Saskatchewan, 262 wells were drilled in 1975. Exploratory drilling decreased by 15% and development drilling increased slightly. British Columbia registered a sharp decline of 44.5%. Activity in Manitoba was nominal and no significant developments were indicated. It was not until the early months of 1976 that renewed drilling activity in western Canada became apparent, with the emphasis being on gas exploration and development in Alberta and British Columbia.

Northern regions. Drilling and onshore geophysical activity in the North declined in 1975 compared with 1974, while marine seismic activity showed a slight increase; this trend continued into 1976. Footage drilled in 1975 decreased by 28% and exploration expenditures by 14%, with an estimated \$215 million spent.

In the Mackenzie Delta region, one new oil and gas discovery, the Sun et al Garry P-04, was recorded late in 1975. Early in 1976 a gas find was made at the Imperial Netserk F-40 site and an oil and gas find at the Gulf-Mobil Kamik D-48 site. Further drilling will be needed to determine the commercial significance of these three discoveries. The Garry and Netserk wells were drilled from artificial islands in shallow waters of the Beaufort Sea off the Delta; 15 such islands have been constructed of dredged silt, sand and/or gravel, and significant hydrocarbons have been encountered in drilling from four of them. A new phase of exploratory activity began in 1976 with the first drilling in the deeper waters of the Beaufort Sea north of the Delta, using ice-strengthened but conventional floating drilling equipment.

Single successful delineation wells were drilled during 1975 in the Parsons Lake, Adgo, Kumak and Niglintgak fields, the first of gas and the latter three of both oil and gas. To the end of September 1976, one additional oil and gas success had been put down at Niglintgak, while the Gulf-Mobil group had drilled four new delineation gas wells in the Parsons Lake field.

In the Arctic islands, one oil discovery in 1975 in the Panarctic Bent Horn F-72 A well on Cameron Island, a one-mile (1.6 km) southwest stepout to the N-72 well produced an encouraging show of oil in 1974. The F-72 A well flowed 10,000 bbl (1 600 m³) of 43° API oil a day on production tests of the same Middle