The proposed projects of Cities Service Athabasca Inc. and Shell Canada Limited to produce oil from Athabasca bituminous sands were deferred by the Alberta Oil and Gas Conservation Board on the grounds that such large-volume production would disrupt the conventional oil industry. In February 1964, the Conservation Board approved the application of Great Canadian Oil Sands Limited, with the backing of Sun Oil Company, to have their 31,500 bbl.-a-day Athabasca oil sands production permit revised upward to 45,000 bbl. a day.

Alberta's reserves of recoverable crude oil will be increased by more than 1,000,000,000,000 bbl. by several secondary recovery or pressure maintenance projects begun in 1962 and 1963. Waterflood is the main recovery mechanism used and the largest projects are in the Swan Hills area.

British Columbia.—A high rate of drilling in 1961 and 1962 was the result of rapid development of existing oil fields to supply the new oil pipeline serving the Vancouver refinery area. By the beginning of 1963, however, a major proportion of Boundary Lake oil-field development was completed and drilling declined; only 898,700 feet of drilling was carried out, a 42-p.c. decrease from 1962. Development drilling comprised 64 p.c. of all drilling in 1962 compared with 42 p.c. in 1963, reflecting a swing back to the pre-1961 emphasis on exploratory drilling in this province. No significant oil discoveries were made in 1963 but important natural gas finds continued to be made in the Fort Nelson region, confirming this as one of Canada's major gas-reserve tracts although, as yet, no pipeline serves the area.

Saskatchewan.—The trend of declining drilling was sharply reversed in 1963, when both exploratory and development drilling increased substantially. A total of 3,220,400 feet was drilled, 40 p.c. more than in 1962. Of the 951 wells completed, 572 were oil wells, 41 were gas wells and 338 were dry. No major oil discoveries were made but two important secondary recovery projects are being developed which will add greatly to provincial oil reserves—the Midale field waterflood plan was instituted late in 1962 and a huge waterflood program was initiated in the Weyburn field in the latter half of 1963.

Manitoba.—An aggregate of 142,563 feet was drilled in 1963, more than double the 1962 total, some incentive being provided by an oil discovery, late in 1962, near Hartney. However, no important discoveries were made during the year and the number of commercial wells in operation in the province decreased from 852 to 839.

Yukon and Northwest Territories.—Six wells, totalling 62,643 feet, were completed in the Territories. An exploratory well drilled on Cornwallis Island in the Arctic islands was abandoned in December after failing to find any significant amounts of oil or gas. Similarly, the deep well on adjacent Bathurst Island, completed in February 1964, was dry. These two Arctic drilling projects had been preceded by an exploratory well on Melville Island in 1962 which was also abandoned.

Eastern Canada.—In Ontario, a greater footage was drilled in 1963 despite a reduction in the number of wells completed. The 202 wells (excluding service wells) totalled 392,753 feet, an average of 1,940 feet per well compared with 1,815 feet per well in 1962. This trend toward deeper wells is largely the result of discoveries made at depth in 1960 and 1962. A major 'oil play' developed in the neighbouring State of Ohio in 1963 following some important oil discoveries and this, too, is providing further incentive for deeper exploration in Ontario.

In Quebec, 13 exploratory wells were drilled. Two of these wells, drilled on a gravity anomaly 10 miles southwest of Trois Rivières, yielded significant quantities of natural gas but the wells have not yet been classed as commercial. Three exploratory dry wells were completed on Anticosti Island and three development wells were drilled at the Pointe du Lac shallow gas field near Trois Rivières.