

Since Leduc began to produce there has been an ever-increasing tempo to exploration activity both in the number of geological and geophysical surveys followed by drilling and in the extent of the areas under active development. Exploration activity necessarily slows down during the winter but, so far, each seasonal decline has been succeeded by a period of even greater activity than at any previous time. This has resulted in larger sums of money being risked in the drilling of more wildcat wells and in more discoveries being made in a region now extending across the whole of the prairies and northwestward into northeastern British Columbia and into the southern part of the Northwest Territories, south and west of Great Slave Lake.

Although Leduc was the first major discovery in the present surge of exploration, the area surrounding it continues to be quite active. The Woodbend field, discovered late in 1947 on the north side of the North Saskatchewan River opposite the Leduc field, has been found to be a continuation of that field, and a northward trend for the productive Devonian reef formation was indicated by the discovery in 1950 of the Acheson field, west of Edmonton. To the south of the Leduc field a number of small isolated Devonian reef fields have been found but the trend of the reef, slightly southwest from Leduc, was indicated by the discovery of the Wizard Lake field in 1951 and the Bonnie Glen field, a few miles farther south, late in the same year. This trend was confirmed by more drilling at Bonnie Glen in 1952 and by developments to the southwest in the Pigeon Lake area. Early in 1953 the trend was extended still farther to Homeglen, 30 miles from the southern part of the Leduc field and 14 miles south and slightly west of the Pigeon Lake area.

Thus, this trend has now been extended for a length of more than 60 miles and the oil contained within the various fields that comprise it amounts to several hundred million barrels. In fact, the Bonnie Glen-Pigeon Lake discoveries in 1952 added about 250,000,000 bbl. of recoverable reserves to 50,000,000 bbl. in the Wizard Lake field, 230,000,000 bbl. in the Leduc field, and 66,000,000 bbl. in the Stony Plain-Acheson field, placing the total so far discovered on this trend at some 600,000,000 bbl. This is about 100,000,000 bbl. less than the original recoverable reserves in the Redwater field, 30 miles northeast of Edmonton, found in 1948 and now almost wholly drilled on 40-acre spacing. The Redwater oil field, so far the largest found in Western Canada, comprises more than 37,000 acres and has about 925 wells producing or capable of production.

The other major reef trend in Alberta under active development extends from south of Camrose through Stettler, Caprona, and Big Valley to Drumheller on Red Deer River, a distance of about 100 miles. To the north and slightly west of Camrose is the Camrose-Armena field and, about 10 to 15 miles farther north, the Joseph Lake field. Both of these produce oil from the Upper Cretaceous Viking sand rather than from the deeper Devonian reef limestone. This shallower productive sand has been particularly prolific in natural gas yield in other areas, as in the Viking-Kinsella field which supplies Edmonton and other cities and towns as far south as Red Deer. In 1952 there were several important discoveries on the Stettler-Big Valley reef trend, including Malmo at Red Deer Lake, perhaps the most significant being the gas-distillate field at Nevis, 12 miles west of Stettler. There are now several wells of high potential yield in this area and the natural gas reserves are expected to be large. There is also some oil in the field but the wells are shut in pending the development of a market for the gas.