

and this drew immediate attention to a new field situated about 18 miles south of Edmonton and 10 miles west of the town of Leduc. From the first this well showed signs of being a major producer, and it was immediately followed by three other wells in the same area which also proved to be in the major production class. As at June 15, 1947, four more wells were being drilled in the proven area, all of which appear to be assured of high production. While, of course, time and the results of large-scale drilling programs alone will tell the actual significance of the new field, results to date are very promising.

The work of exploration for new Alberta oil fields is continuing by the application of scientific research and the drilling of test wells. Many new structures are being explored, among which that of the Smoky River area between Entrance and Grande Prairie is of special interest.

30.—Production of Petroleum from Alberta Wells, 1914-45

Year	Quantity	Year	Quantity	Year	Quantity	Year	Quantity
	bbl.		bbl.		bbl.		bbl.
1914-21.....	56,675	1928.....	489,532	1935.....	1,263,968	1942.....	10,136,296
1922.....	15,796	1929.....	999,523	1936.....	1,320,428	1943.....	9,674,548
1923.....	10,003	1930.....	1,436,259	1937.....	2,796,874	1944.....	8,788,726
1924.....	17,749	1931.....	1,454,816	1938.....	6,743,101	1945.....	8,055,440
1925.....	180,885	1932.....	918,154	1939.....	7,593,492	1946.....	7,137,693
1926.....	219,598	1933.....	1,012,784	1940.....	8,495,207		
1927.....	332,312	1934.....	1,266,049	1941.....	9,908,643	Total.....	90,324,551

The Tar Sands and Bituminous Developments.—Alberta, in its bituminous sands deposit at McMurray, has the greatest known oil reserve on the face of the earth. Estimates vary between that of Canadian geologists at 100,000,000,000 tons and that of the United States Bureau of Mines at 250,000,000,000 tons. The yield at present is about one barrel of oil per ton of sands.

At Bitumount, 50 miles north of McMurray on the Athabaska River, an Oil Sands Limited plant has been erected and experimentation regarding processing of the sand in that area is being carried out. Overburden covering the outcrop is very light at Bitumount and the product, being soft, lends itself more readily to separation than the harder outcrop in other parts of the reserve.

Another feature of the Bitumount area is the question of usage of the separated sand for glass manufacture. The sand analysed for such purpose has been favourably reported on, and quantities have been transported to points of manufacture.

A rich deposit of 'liquid bitumen' has been uncovered by Dominion Government geologists on the west side of the Mildred-Ruth Lakes Area, opposite the mouth of Steepbank River, 20 miles north of Fort McMurray in northeastern Alberta. The estimate of bitumen content per acre ranges as high as 350,000 bbl. The deposit is located within 20 miles of the north terminus of the Northern Alberta Railway at Waterways, and is about 250 miles north and east of Edmonton.

Within the area of best-grade material in the deposit, the 18 holes assayed thus far give a good indication of the quality and size of the deposit and, while they are quite insufficient for any precise estimates, the presence of a deposit large enough to warrant consideration of commercial development is indicated.