

The number of wells drilled annually in Western Canada in each of the past five years has been fairly constant, ranging from 2,450 to 2,650. In 1962, the number completed (excluding service wells) was 2,460, about the same as in 1961. A sharp increase in drilling in British Columbia counterbalanced declines in the other western provinces and the territories. The generally greater depth of wells brought about a small increase in the total footage; nearly 13,600,000 feet were drilled compared with 13,470,000 feet in 1961. There was a notable increase in the proportion of exploratory drilling in 1962; of the total drilled footage, 36 p.c. was exploratory, compared with 29 p.c. in 1961 and 31 p.c. in 1960, partly accounting for the significantly greater number of dry holes, of which there were 879. Gas well completions totalled 344 and there were 1,237 new oil wells.

The decline in geophysical activity, in terms of crew-months, which had been evident since 1952, was arrested. A month-by-month comparison of 1961 and 1962 shows geophysical work approximately the same for both years. In Alberta, where seismic survey crews were more active in 1962 than in the previous year, much ground was being resurveyed. Oil companies realized that small- and medium-sized oil pools could have been overlooked by earlier surveys because of less advanced methods of field work and interpretation and also because of a preoccupation with finding large reef fields.

Alberta.—In 1962, the total footage drilled in the search for and development of petroleum and natural gas reserves amounted to 9,100,000 feet, a decrease of more than 800,000 feet compared with 1961. Despite this total decrease, exploratory drilling increased by 200,000 feet to nearly 3,200,000 feet. Development of known pools and fields decreased very sharply as a consequence of a lack of large new fields. No major fields have been found since the Swan Hills discoveries of 1957, and the fields of that region are now almost fully developed. The 684 oil wells completed in 1962 represent a decrease of 100 wells from the preceding year. Gas-well completions decreased sharply for the first time in several years, with 272 gas wells drilled. The net result of 1962 drilling was to increase the province's total of new oil wells capable of production from 10,529 to 10,796, and gas wells from 1,088 to 1,240. These figures take into account abandonments and some conversions to service wells.

Although oil and gas finds in 1962 did not indicate the discovery of any major fields, several appear likely to lead to the development of some medium-sized fields. The most interesting exploratory activities took place late in the year at Snipe Lake, 35 miles southwest of Lesser Slave Lake. An oil discovery in reef formation led to an important land play involving several large oil companies. Although several subsequent wells found oil and much ground remains to be tested, the field does not appear to be in the size category of such fields as Swan Hills. High prices were paid for land in the Edson region, 125 miles west of Edmonton, following discovery of significant amounts of gas in Mississippian strata and of oil in the Cardium formation. In March 1962, a very productive oil well was drilled at Loon Lake near the Red Earth oil field, 80 miles north of Lesser Slave Lake. At Panther River, 70 miles northwest of Calgary, large reserves of sulphur were indicated by a gas well which had a high content of hydrogen sulphide in its output. A good natural gas discovery was made 13 miles to the southwest of this sulphur well. In the more settled regions in the southern half of Alberta, various small- and medium-sized oil and gas discoveries were made, one of the more notable locales being at Sylvan Lake near Red Deer, where both oil and gas were found in several geological horizons in a series of wells.

A major step toward the eventual large-scale production of crude oil from the Athabasca oil sands was taken in 1962 when the Alberta Oil and Gas Conservation Board gave approval to a project which is to extract crude oil from the sands at a rate of 31,500 bbl. a day. This will be the first commercial extraction of oil from the sands, and actual production of marketable crude is scheduled for the end of 1966. Although this is only a moderate-sized project, two applications for large projects are before the Board, each of which calls for the extraction of 100,000 bbl. daily from the oil sands.