

to the refinery of North Star Oil Limited at St. Boniface, Man., by a 3.5-mile 8-inch line. So rapid was the increase in oil reserves in Alberta that before the main pipeline was completed pipeline officials announced that the number of pumping stations would be increased so that the capacity of the Edmonton-Regina part of the line would be brought up to 120,000 bbl. a day, and, east of Regina, from 70,000 to 100,000 bbl. a day. The pipeline was welded at the joints, mechanically cleaned of all scale and rust, coated against corrosion with an application of specially processed hot coal-tar enamel, and then wrapped by machines with a coating of fibre glass and a wrapper of coal-tar saturated asbestos felt before being lowered into a trench and covered.

Oil was started in the pipeline in October 1950, and moved through it at about four miles an hour. The initial transmission charge from Redwater to Regina was 31 cents, or 29 cents from Edmonton, against a rail haul rate at that time of \$1.37 a barrel. The estimated cost of the rail haul from Edmonton to Superior was \$2.43 a barrel as against a pipeline rate of 54 cents. Two large tankers, each with a capacity of 115,000 bbl., were put in operation on the Great Lakes by Imperial Oil Limited and a third was constructed in 1951. British American Oil Company also built a lake tanker of the same size in 1952 to supply the Clarkson refinery near Toronto, Ont.

Storage facilities for oil had to be provided at each of the terminals. Thus, the storage was 840,000 bbl. at Edmonton, Alta.; 50,000 bbl. at the Moose Jaw, Sask., terminal; 252,000 bbl. at Regina, Sask.; 28,000 bbl. at Brandon, Man.; 168,000 bbl. at Gretna, Man.; 155,000 bbl. at the Winnipeg refinery; and 1,800,000 bbl. at Superior, Wis. It was found in the winter of 1950 that the storage at Superior, provided by 12 tanks each with a capacity of 150,000 bbl., was insufficient and was therefore increased by the addition of 12 more 217,000-bbl. tanks.

In the summer of 1951, a refinery built at Superior, Wis., at the terminus of Interprovincial's pipeline went into operation at 4,000 bbl. a day. This was the first Alberta oil to be refined in the United States and constituted a milestone in the history of oil development in Canada made possible by pipeline construction.

In 1953, Interprovincial's pipeline will be extended 635 miles from Superior to Sarnia, Ont., by Lakehead Pipe Line Company, through the construction of a 30-inch pipeline, the estimated cost of which is \$76,000,000. This will give a carrying capacity of about 300,000 bbl. a day and, in order to get this volume of oil to Superior, the Interprovincial line will be further looped with a 24-inch line on the Regina-Gretna sector. When completed to Sarnia, the oil pipeline from Alberta will be 1,765 miles in length, the longest oil pipeline in the world.

In May 1950, Imperial Oil Limited opened a new \$5,500,000 gas-processing plant at Devon, Alta., in the Leduc field. This plant was built not only to recover the gasoline, propane and butane from the gas produced with the oil but also to make the gas available for use. A gas pipeline was built from Leduc to Edmonton to deliver 7,000 M cu. feet daily to the Edmonton City power plant. It was also tied in to the gas system of Northwestern Utilities Limited which supplies Edmonton. In addition, short branch lines were built to supply gas to the towns of Devon and Leduc.

In November 1950, a pipeline 17.5 miles long and 4.5 inches in diameter, constructed by Westcoast Transmission Company from the Pouce Coupe field in the Peace River area of Alberta near the British Columbia boundary to Dawson