

PART VI.—OIL AND GAS PIPELINES*

A special article covering the history and development of pipeline construction in Canada appears in the 1954 Year Book at pp. 861-869. Additional information has been carried in each succeeding edition and the following write-up brings pipeline development up to the end of 1963.

Oil Pipelines.—At the end of 1963, approximately 10,500 miles of oil pipelines, predominantly crude oil lines, were in operation. Nearly 1,100 miles were laid in 1963, of which about 400 miles came into operation by the end of the year and the remainder early in 1964. More than half of the 1963 pipeline construction was accounted for by one project—the 577-mile, 6-inch natural gas liquids pipeline from the Alberta-Saskatchewan boundary to Winnipeg. This line, owned by Pacific Petroleum, Ltd., parallels the Trans-Canada gas pipeline and is the longest Canadian pipeline built for the sole purpose of transporting natural gas liquids (NGL). The NGL—propane, butane and natural gasoline—will be extracted from the Trans-Canada pipeline stream at a new gas reprocessing plant about 25 miles south of Empress, Alta.

In Manitoba, Interprovincial Pipe Line Company continued its looping program, adding four sections of 34-inch pipe, totalling 41 miles. The Company's wholly-owned subsidiary in the United States, Lakehead Pipe Line Company, Inc., added 126 miles of 34-inch loop between the Manitoba boundary and Superior, Wis., U.S.A. Capacity increases were effected in 1963 in four of the seven sections of the Interprovincial-Lakehead system; the section between Cromer and Gretna, Man., was increased to 494,000 bbl. a day, the highest capacity in the line. First deliveries of crude through the new lateral to Buffalo, N.Y., were made in May 1963. However, deliveries of Canadian crude to the United States by Interprovincial increased only 3 p.c. in 1963. For the first time on a year-round basis, Interprovincial delivered North Dakota crude, received from the Portal pipeline at Clearbrook, Minn., to refineries in Minnesota and Wisconsin; in fact, 55 p.c. of Interprovincial's increase in deliveries consisted of North Dakota crude.

In Alberta, Peace River Oil Pipe Line Co. Ltd. laid a 25-mile, 8-inch line to the Snipe Lake field from its existing system south of Sturgeon Lake, and a 6-inch extension from Snipe Lake to the Red Earth field, a distance of 120 miles, was completed in early 1964; this extension is the most northerly crude oil pipeline in the province. Imperial Oil Limited completed a 6-inch natural gas liquids pipeline, 116 miles long, from the Judy Creek casing-head gas plant to the gas conservation plant at Devon, south of Edmonton. Hudson's Bay Oil and Gas Company Limited laid a short NGL pipeline from the Lookout Butte gas cycling plant in southwestern Alberta to connect with the NGL pipeline to Montana. An important step toward much greater utilization of heavy asphaltic crude oil from the Lloydminster area was achieved in 1963 by the successful application of a new pipelining method that renders Lloydminster viscous crude amenable to pipeline transportation. In the Pembina area, Pembina Pipe Line Ltd. added 30 miles to its gathering system, including a five-mile extension to serve the Cyn-Pem field. Federated Pipe Lines Ltd. extended its gathering facilities in the Swan Hills area.

In Saskatchewan, Producers Pipelines Ltd. completed 14 miles of loops in the Steelman and Pinto fields and 76 miles of gathering lines, including 50 miles in the new areas of Lost Horse Hills, Fletewode, Storthoaks and South Hastings. In British Columbia, there was no major pipeline construction. Deliveries by Trans Mountain Pipe Line Company decreased slightly and deliveries by the company to the Kamloops refinery ceased. That refinery was supplied solely with British Columbia crude from the pipeline of Western Pacific Products & Crude Oil Pipelines Ltd. Deliveries by Western Pacific to Trans Mountain at Kamloops increased from 20,517 bbl. a day in 1962 to 28,739 in 1963. In Ontario, the flow of the Brockville-Toronto section of the Trans-Northern Pipe Line Company's petroleum products pipeline was reversed to a west-to-east direction in November 1963.

* Prepared in the Mineral Resources Division, Department of Mines and Technical Surveys, Ottawa, under the authority of Dr. W. E. van Steenburgh, Deputy Minister.