daily. In addition to taking deliveries of crude at Edmonton, it takes crude from the Peace River pipeline which serves the Sturgeon Lake, Sturgeon Lake South and Kaybob fields. Five refineries in British Columbia and three in the State of Washington are connected to the pipeline.

Federated Pipeline.—The Federated pipeline was largely completed in 1958 but first deliveries of crude oil to Edmonton were not made until late in January 1959. The main trunk line from the Swan Hills field is of $10\frac{3}{4}$ -inch pipe except for eight miles near Edmonton where $12\frac{3}{4}$ -inch pipe is needed. The line operates solely by gravity and can deliver up to 20,000 bbl. daily by this method. Pumps would raise the capacity to 78,000 bbl. daily. A lateral carries crude from the Virginia Hills, Judy Creek and Sarah Lake fields to the main line.

Pipeline Tariffs.—The cost of transporting oil by pipeline is considerably cheaper than by rail or truck. Some examples of costs follow.

Route	Transmission Distance	Tariff
	miles	cts. per bbl.
Edmonton, Alta., to— Regina. Sask	. 438	231
Winnipeg, Man	. 848	45
Sarnia, Ont	. 1,743	64
Port Credit, Ont	. 1,899	72
Vancouver, B.C	. 718	40
Washington State, U.S.A	. 740	42

Gas Pipelines.—Construction of gas pipelines in Canada continued to dominate all pipeline construction in 1959. Even so, the construction program was below the record level of 1958 by about one-third. In contrast to 1958 when the majority of pipeline work was concentrated in Ontario on projects associated with the Trans-Canada pipeline, the major construction jobs were in the western provinces. Approximately 1,600 miles of all types of gas line (gathering, transmission and distribution) were laid in the west compared with 1,100 miles in the east, where the installations were essentially all distribution systems. The addition of this milage brought the total of natural gas pipelines in Canada to over 28,400 miles. This total includes 2,671 miles of gathering line, 9,980 miles of main trunk line and 15,830 miles of distribution line.

As in the petroleum industry which has two main transmission lines from the sources of supply to markets in the east and in the west, there are two main gas trunk lines stretching in opposite directions. The gas supply of Westcoast Transmission Pipe Line Company is in the Peace River district of British Columbia and Alberta. This line serves markets in the lower mainland area of British Columbia and makes deliveries to a United States pipeline system at a point on the British Columbia-Washington border near Chilliwack. The Trans-Canada Pipe Line Company line carries natural gas from Alberta to distribution companies in Saskatchewan, Manitoba, Ontario and Quebec.

Westcoast Pipeline and Connecting Pipelines.—The Westcoast line was completed in 1957 and consists of 605 miles of 30-inch main trunk line and 206 miles of gathering line varying from 26 inches down to four inches in diameter. The line delivers to the Inland Natural Gas Company Limited, British Columbia Electric Company and to Pacific Northwest Pipeline Corporation in the United States. Inland serves the Cariboo region of British Columbia including the main towns of Kamloops, Vernon, Kelowna, Penticton, Trail and Nelson. British Columbia Electric serves the greater Vancouver area. Pacific Northwest takes gas for distribution in the northwestern United States.

Trans-Canada Pipeline and Connecting Pipelines.—The Trans-Canada pipeline is the longest pipeline in the world, consisting of a total of 2,290 miles of pipe stretching from the Alberta-Saskatchewan border to Montreal in Quebec. The line is 34 inches in diameter