

Product Pipelines.—There are a number of product pipelines operating in Canada that constitute part of the oil pipeline industry. Perhaps, in the strictest sense, all are not product pipelines since there is often a connotation with product pipeline which denotes refined petroleum products and at one time pipeline transportation of products usually meant gasoline and the distillate fuel oils. Heavy fuel oils are not normally transported by pipeline. However, in more recent times and particularly since the emergence of liquid hydrocarbon production from gas fields, principally in Alberta, other classes of pipeline have come into operation. Some of these are classed with crude oil pipelines because they move condensate or pentanes plus which need further processing but most also move propane and butane which are finished products. Whether they are crude or product pipelines is not important but they are described below to complete the picture of Canadian oil pipelines.

There are three pure product lines in Eastern Canada, all supplying markets in Ontario. Two pipelines, Sun-Canadian Pipe Line Company and Sarnia Products Pipe Line, run from refineries at Sarnia to bulk plants in London, Hamilton and Toronto. Trans Northern Pipe Line Company, once a pipeline carrying products from Montreal to markets in Ontario as far west as Hamilton, now is a divided line. Products from Montreal are carried only to the area from Brockville east, including the Ottawa valley; products from refineries west of Toronto are carried eastward as far as Kingston.

In Western Canada, the recently constructed Petroleum Transmission Company pipeline carries propane, butane and pentanes plus from a plant at Empress in Alberta to Winnipeg in Manitoba, a distance of 578 miles. The predominant product carried is propane which is marketed at various locations along the line. Elsewhere in Alberta, the Rimby Pipe Line Company transports condensate from the Rimby gas plant and from the Rangeland condensate pipeline serving areas north of Calgary to Edmonton. Also going to Edmonton are three separate pipelines, one each for propane, butane and pentanes plus, running from the Leduc conservation gas plant. Near Calgary, Home Oil Company operates a condensate pipeline to serve refineries there and also to make deliveries to the Rangeland condensate pipeline. There are other condensate pipelines in Alberta, most of which are primarily associated with production and do not serve end users.

Pipeline Tariffs.—Typical of the charges to move crude oil are the following pipeline tariffs:—

	<u>Charge</u>	<u>Distance</u>
	cts. per bbl.	miles
Edmonton to Vancouver.....	40.0	718
Edmonton to Regina.....	43.2	438
Edmonton to Winnipeg.....	29.6	847
Edmonton to Sarnia.....	48.0	1,743
Edmonton to Port Credit.....	51.0	1,899
Portland to Montreal.....	10.5	236

Natural Gas Pipelines.—Few countries are fortunate enough to possess large resources of natural gas and sufficient markets to justify construction of country-wide networks of gas pipelines. Canada has become one of those few only within the past decade.

It was not until 1958 that Canadian natural gas was used in all provinces from Quebec westward. The development of gas gathering systems within the fields, of gas-distribution systems in the consuming areas, and of main transmission systems joining the two reached the position where, at the end of 1964, there was a total of over 41,800 miles of gas pipelines in Canada—4,958 being gathering, 13,274 being transmission and 23,574 being distribution.

Unlike oil pipeline companies which are common carriers (i.e., they do not own the oil in their lines), gas pipeline companies, with few exceptions, own the gas they transport. The principal exception is the Alberta Gas Trunk Line Company which transports virtually all of the gas exported from the province to the Alberta boundary where main transmission