

In addition to the foregoing, many other industrial minerals are being produced in Canada and are making their contribution to the industrial prosperity of the nation. These include feldspar, mica, talc, soapstone, arsenic, serpentine, diatomite, and ochre. Many others such as actinolite, graphite, epsomite, flint pebbles, volcanic ash, corundum, and apatite have been produced in the past and can be produced again when the demand arises. Still others such as potash, witherite, celestite, rare-element minerals, and rare earths are known to occur in quantity and may come into production shortly, depending on the outcome of investigations now in progress. The steadily increasing demand for the industrial minerals now being produced and the development of uses for those at present lying dormant, make the prospects for increased production of these exceedingly useful materials very promising.

#### PETROLEUM AND NATURAL GAS

Extensive recent discoveries of petroleum and natural gas have created a phenomenal expansion in the oil industry and established a vast potential in the natural-gas field. Expansion in the oil industry, however, was not confined to exploration alone, for much progress was made in 1953-54 toward extending marketing facilities by the planning and construction of new refineries to process the oil and pipelines to transport it. Progress was also made in planning for the transportation of natural gas, particularly from Alberta, and authorization was given for the construction of an all-Canadian pipeline to be built across the prairies to Winnipeg, Man., and to continue eastward north of the Great Lakes to serve Ontario and western Quebec. The building of this line will mean an expenditure of hundreds of millions of dollars on development wells to produce the gas, processing plants to purify it, gathering lines to collect it, trunk lines to transport it and distribution lines to market it in Prairie and Central Canada towns and cities. The direct and indirect benefits to Canada of such a project will be enormous and large quantities of gas from Canadian sources will become available to supplement other fuels in the industrial areas of Ontario and Quebec and to provide fuel for mining and pulp and paper industries throughout northern Ontario.

A plan to build a natural gas pipeline from Peace River, Alta., to Vancouver, B.C., with lines southward to serve the Pacific Northwest area of the United States, is also under consideration.

**Exploration and Discovery.**—All four western provinces shared in the oil and gas exploration activities in 1953 and new and significant discoveries were made. In Manitoba the most promising discovery was at Roselea, a few miles from the producing Virden field in the southwest part of the Province. This discovery, and those of a somewhat similar nature in other provinces, has much significance for future developments because of its stratigraphic and structural relationships. Mississippian strata occur in the Williston basin and in the mountains and foothills of Alberta but thin out to the north and east owing to erosion after deposition, and it is on the up-dip wedging out-edge of these sediments that the oil has been found. The eastern and northern limit of these sediments has been outlined in a general way by widely spaced wells. It extends across the southwest corner of Manitoba, across southern Saskatchewan and trends northwest to cross Alberta, west of Edmonton into the Peace River area west of the town of Peace River, and