

The Pleistocene and Engineering Geology Division makes studies of the unconsolidated materials that mantle the bedrock throughout the greater part of Canada. The geological study of these materials is a prerequisite for many types of engineering and agricultural projects.

The Fuels Resources Division is engaged in the technical study and interpretation of rock cuttings from wells drilled for oil and natural gas with a view to directing exploration for these minerals to localities offering the greatest promise of production. The Division also investigates the geology of coal deposits as a basis for estimating Canada's coal reserves and conducts research into the microscopic character of individual seams.

The Geological Cartography Division prepares cartographical representations for the reproduction of preliminary and standard geological maps, compiles and edits geological and related maps, prepares drawings for maps in the Airborne Magnetic series, and provides drawings, tracings, diagrams, designs, etc., as required.

The technical editing of all reports and map manuscripts published by the Geological Survey is conducted by the Geological Manuscripts Division, which also prepares quarterly and annual reports on the progress of field and office projects, supervises papers prepared for publication and supervises and assists in the preparation of geological map compilations.

*Mines Branch.*—The Branch is concerned in the main with the technological problems of the mineral industry and maintains well-equipped ore-testing, mineral-dressing, fuel-research, ceramic, radioactivity and industrial minerals laboratories.

The Mineral Dressing and Process Metallurgy Division serves Canada's mineral industry through its tests, investigations and research on all types of Canadian ores. The main purposes of these activities are to devise economic and efficient methods of processing ores—a service of special benefit to new mining ventures and particularly to those developing low-grade or complex deposits—and to assist mine operators in solving problems encountered in mill practice. Much of the Division's recent research has been on the extraction of gold from complex ores and on the processing of titanium ores. As a service to industry and to assist the Department of National Defence, extensive investigations have been conducted on the corrosion of metals.

The Radioactivity Division is concerned with investigations of radioactive ores, particularly with the development and application of methods whereby marketable concentrates may be produced from individual uranium ores. The primary purposes of the Division's technical services and laboratory facilities are to help bring new properties into production by determining methods suitable for treatment of particular ores and to encourage the search for uranium deposits. Extensive experimental and development work is conducted on the treatment of ores and products from the properties of Eldorado Mining and Refining Limited, a Crown company.

The work of the Industrial Minerals Division is related to the development and processing of industrial minerals, including water used for industrial purposes. The Division makes field studies of deposits, examines industrial processes utilizing them and conducts research into methods of beneficiating minerals from deposits of marginal and submarginal quality to bring them up to the standards demanded by modern industry.