

has been worked out as accurately as the almost flat-lying infrequent exposures permit in many places, the depth to possible producing horizons can be rather closely estimated in most places where drilling is contemplated.

The very extensive Athabaska tar sands are in beds of Lower Cretaceous age and constitute an oil reserve of tremendous proportions. Attempts made in the past to recover oil commercially have not been very successful; at present, oil is being recovered on a small scale and an industry of considerable magnitude may develop.

Salt is recovered from wells at Waterways. The salt occurs associated with gypsum in the Silurian.

Gypsum in northern Alberta and the Northwest Territories has not been exploited. In Manitoba gypsum is mined at Gypsumville and Amaranth from deposits in Silurian rocks.

The sodium sulphate of Canada practically all comes from deposits near Biggar and south of Moose Jaw, Sask. This substance is found in many of the lakes of southern Saskatchewan and Alberta.

The only metalliferous deposits of the Interior Plains area consist of galena and sphalerite in Devonian limestone south of Great Slave Lake. These deposits are not being exploited.

The Cordilleran Region.—The rocks of the Cordilleran Region range in age from Precambrian to Recent. The Rocky Mountain Belt is composed of great thicknesses of Precambrian, Palæozoic and Mesozoic sediments, in most places unaccompanied by plutonic or volcanic rocks. The Coast Range consists essentially of complex batholiths of granite of late Jurassic or early Cretaceous age cutting and enclosing sediments and volcanic rocks of earlier Mesozoic age, and fringed on both sides by pre-granite rocks and by isolated basins of younger rocks. The Interior Belt of plateaux and mountain ranges is underlain by Palæozoic, Mesozoic and Tertiary sediments and volcanic rocks. The pre-Tertiary beds are cut by numerous bodies of plutonic rocks and in several districts strata of Precambrian age are exposed.

The Precambrian rocks of the region are almost entirely quartzites, argillites, limestones, conglomerates and gneisses and schists derived from sedimentary rocks. In several places in the region these rocks are known to be several miles thick. The larger divisions of these old rocks over considerable areas have been named Yukon Group in Yukon, and Windermere, Purcell and Shuswap Series in British Columbia. The large divisions have been divided into formations, that can be traced across the country for considerable distances. On the whole the Precambrian rocks of the area are much fresher and easier to identify than those of the Canadian Shield.

Sedimentation continued during the Palæozoic and built up great thicknesses of quartzites, argillites and limestones, particularly in the Rocky Mountains.

During Triassic, Jurassic and early Cretaceous time volcanism on a vast scale characterized the area west of the present Rocky Mountains. Sedimentary rocks also accumulated.

In late Jurassic or early Cretaceous the area was affected by mountain-building movements and the great batholiths of the Coast Mountains were intruded. Since this deformation the area has been, in the main, subject to erosion but isolated basins hold late Cretaceous sedimentary rocks and fairly extensive areas of volcanic