



DESCRIPTIVE NOTES

This map summarizes available data on the extent of the coal seam of the Chipman area. It has been compiled from the mining-block maps on 1 inch to 400 feet, prepared by the Provincial Geologist, Dr. W. J. Wright, supplemented by geological information collected by the author.

The map is divided into areas where, according to available information: (A) no coal is present; (B) coal is present under an overburden of not more than 50 feet; and (C) coal is present under an overburden of more than 50 feet.

The boundary between areas A and B is the outcrop of the coal seam at the bedrock surface. This outcrop may be exposed, but in most places it lies beneath a cover of drift from a few feet to about 30 feet thick. The boundary of the coal-bearing area is shown on both maps as a broken line where there is information from old workings or groups of boreholes. If only general geological information is available without facts concerning the seam itself, the line is dotted.

The boundary between areas B and C has been traced by superimposing the contour map of the coal seam on the topographic map. Evidently, intersections of a coal seam contour with a topographic contour indicating an elevation 50 feet higher should be points on this boundary line. The distinction between areas B and C is made because strip-mining, which in present operations is becoming increasingly important, is limited to areas with a depth of overburden not exceeding 50 feet. It will be noticed that all areas worked out by this method fall within the 50 feet of overburden boundary. Underground workings commonly cross this line, but do not occur at depths of more than 150 feet.

For prospecting new suitable stripping or mining areas, the following suggestions may be helpful. It is generally known that the coal seam is everywhere accompanied by grey shales and fine grey sandstones, locally known as "cockles". Many discoveries of coal in the area were made by tracing or drilling natural outcrops of these rocks.

Not so well known is the fact that red sandstones and shales, with some green-grey sandstone and conglomerate, of the Hurley Creek formation, everywhere overlie the coal-bearing beds. If, therefore, these red beds are encountered in outcrop or drill-hole, coal-bearing strata can be expected to underlie them, though the coal seam itself may be of insufficient thickness or may even be missing. On the other hand, a thick series of grey sandstones and quartz conglomerates underlies the coal-bearing formation, and occurrence of these beds will in most places indicate that no coal will be found underneath.

It may be advisable to commence shallow drilling for coal within areas where the seam may be expected at less than 50 feet depth (B), about one-quarter mile from the outcrop of the seam as shown on the map. It should be realized, however, that the position of this outcrop, where shown by a dotted line, is only a rough approximation. It may, therefore, happen that only grey sandstones and conglomerates are encountered. If a thickness of about 50 feet of such beds has been drilled, it would appear that the drill had reached the lower part of the Minto formation, and that no coal was present. In this case, the next hole should be drilled farther from the plotted position of the coal outcrop, which apparently would require revision on the map. If, however, only red beds are encountered, coal may be assumed to be present underneath, and the next trial should be made closer to the position of the coal outcrop as shown on the map.

There is some evidence that another coal seam may overlie the Minto seam. This seam, occurring in the Sunbury Formation, is known from two prospects on Mowatt Brook, in the northwest corner of the area. The thickness of the seam in these occurrences is only about one foot.

LEGEND

A Area of no coal, underlain by formations older than coal seam

B Area, where coal is probably present under overburden of not more than 50 feet

C Area, where coal is probably present under overburden of more than 50 feet

Area, worked out by strip-mining

Area, worked out by shaft-mining

Outcrop of coal seam

Coal outcrop

Slope

Note. Shafts are too numerous to be shown

Boundary of area with not more than 30 feet overburden

Elevation contour of coal seam in feet above sea-level

Contour interval 25 feet

Approximate position of boundary of provincial mining blocks

Number of mining block

42

Information compiled from mining-block maps, prepared by Provincial Geologist, and from geological map No. 49-21A, by I. E. Miller, 1948

Cartography by Geological Mapping Division, 1949

Base-map surveyed by Topographical Survey 1949

Approximate Magnetic Declination 22°55' West

