

Geological and Natural History Survey of Canada.

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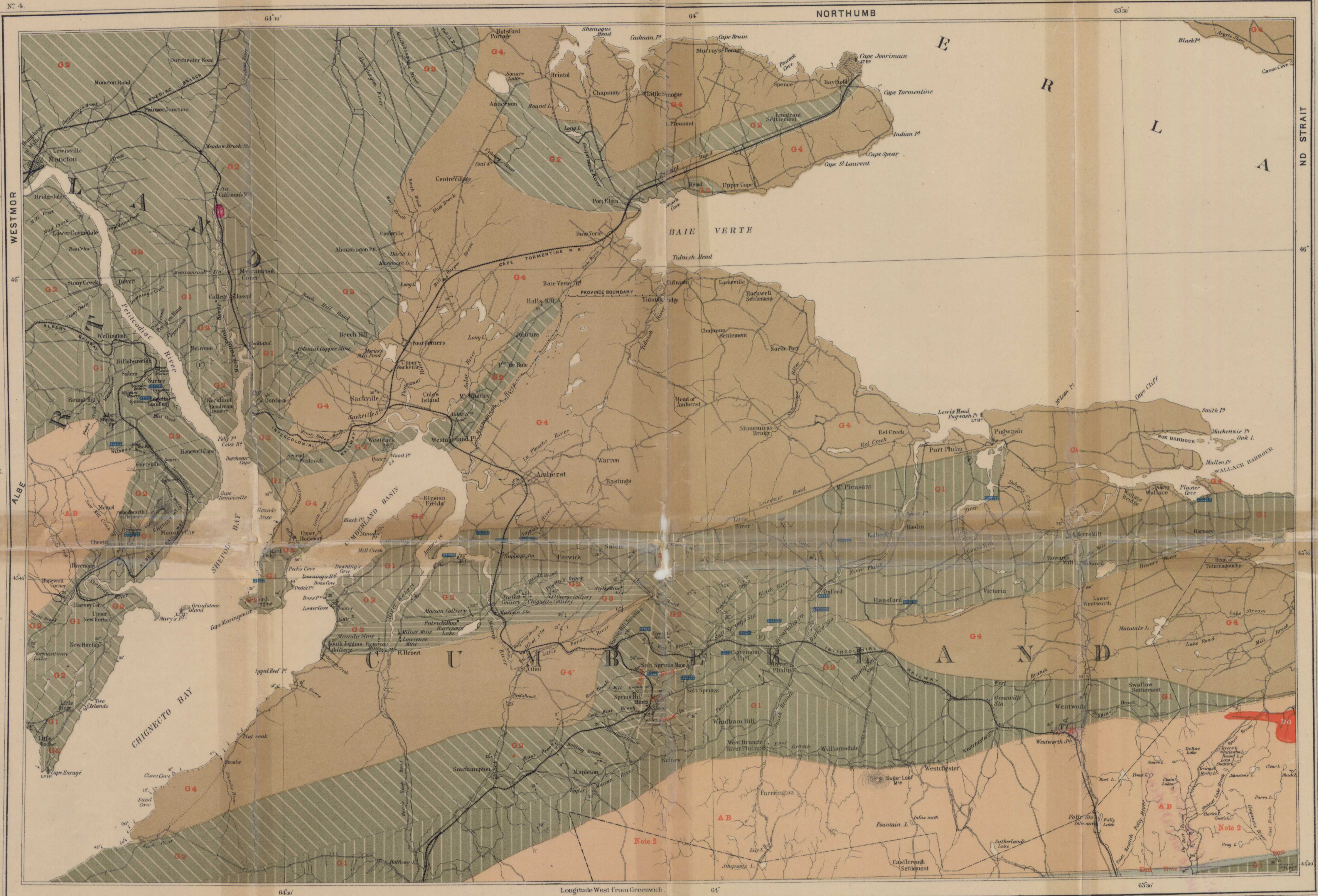
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Explanation of Colours.

- G4. Permian Carboniferous & Upper Carboniferous.
- G5. Coal Measures.
- G2. Millstone Grit.
- G1. Lower Carboniferous.
- E. Silurian.
- Dm. Cambro-Silurian.
- AB. Pre-Cambrian.
- Do Di. Dolerite Diorite &c.
- Gr. Granite.

- Geological boundaries.
- Parish
- County
- Province



NOTE 1.
The iron ore deposits of the Londonderry Mines and vicinity occur in a well-defined belt of rocks which extend for many miles along the south flank of the Cobequid Mountain range. They also have a considerable development in Fictou Co., where their stratigraphical position is more easily determined. Though iron ores occur in this county in formations of various age, the series of rocks, largely slate and quartzite, which contain the Londonderry ores and their equivalents elsewhere, are now generally regarded as of Middle or Cambro-Silurian age. [See Supplement Acad. Geol. 1875, pages 80 and 92. Trans. N. S. Inst., vol. V., page 207.] The same view was presented by Mr. Gilpin in his paper before the American Inst. Mining Eng., 1885. Their exact horizon cannot yet be given, but they may be stated to be intermediate between the fossiliferous Upper Silurian and the gold-bearing strata of the south coast of Nova Scotia. A short distance west of the Londonderry Mines, local beds of highly crystalline limestones occur, associated with black slates, which apparently accompany this belt of rocks throughout a great part of its extent.

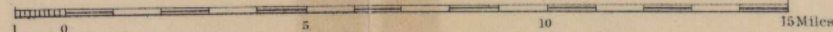
NOTE 2.
The age of the rocks composing the Cobequid Mountain range has been for many years a vexed question. They were for a long time regarded as a lower portion of the Upper Silurian, until the discovery of fossiliferous rocks of this age on their northern flank, at Wentworth, proved them to belong to a much lower horizon. In Trans. N. S. Inst. of Nat. Sci., Vol. III., page 348, the older metamorphic and largely volcanic positions of the range were compared by Dr. Housman to the altered Quebec gneiss, and subsequently in vol. V., page 271, he pointed out that the gneiss (see also his paper in the same issue for 1868, see also on Geology, Southern New Brunswick, p. 105.) Sir Wm. Dawson pointed out their great resemblance to the Kingston group of New Brunswick, the Huronian or Pre-Cambrian age of which was subsequently clearly indicated by the presence of unconformably overlying areas of Primordial rocks. The Cobequid series underlie unconformably the rocks of the iron ore belts which flank the range on the south, and which are presumably of Cambro-Silurian age; but their close lithological resemblance in many respects to Pre-Cambrian rocks, both in New Brunswick and Cape Breton, has led to their being assigned to the same low position in the geological scale.

Compiled and drawn by Scott Barlow, assisted by N. J. Giroux from Surveys made by the Admiralty, Intercolonial Railway and Geological Surveys. Geologically surveyed by Messrs Scott Barlow, W. M. Ouat and R. W. Ellis.

PROVINCE OF NOVA SCOTIA AND PART OF NEW BRUNSWICK.

Nat. Scale: 385440.

Scale: 4 miles to one inch.



Diagonals: Iron & Cu. Copper. M. Mn. Manganese. Gypsum. Fossils.

To illustrate Reports by Messrs Scott Barlow, W. M. Ouat and R. W. Ellis 1872-1884.

Cumberland Coal-field as spanghill sheet 230