DEPARTMENT OF NOVA SCOTIA ENERGY, MINES AND RESOURCES GEOPHYSICAL SERIES DEPARTMENT OF MINES AND ENERGY (HIGH RESOLUTION AEROMAGNETIC TOTAL FIELD) MINERAL RESOURCES AND GEOLOGICAL SERVICES GEOLOGICAL SURVEY OF CANADA 20,224 G 11 F/12d 62° 00'00" 61° 52'30" INDEX MAP 62° 00'00" 57'30" 61° 52'30" 55'00" PUBLISHED 1980 This map was compiled from digitally-recorded aeromagnetic survey data obtained using an inboard rubidium vapour magnetometer which measured the total field with a resolution of 0.005 gamma. Flight altitude was 150 m above ground at 300 m average flight line spacing. Double control lines were flown at an average spacing of 12 kilometers.

The data was edited, compiled, levelled and gamma values for contouring interpolated on a square grid (0.25 cm grid spacing at published map scale) by computer processes.

The levelling process employed the two components of the double control line and the short segments of traverse which connected them where they were not exactly coincident. This data was used to minimize and distribute non-geological contributions from the total magnetic field profile along the control line. The corrected control lines were used to level the traverse lines by a method of minimal sum-total adjustment.

The final data grid was contoured and plotted using the automatic contouring program and digital plotting facilities of Dataplotting Services Ltd., Toronto.

Airborne survey and digital compilation was carried out by Resource Geophysics and Geochemistry Division, Geological Survey of Canada. The survey operations took place in October and November 1977 and October 1978 using Beechcraft Queenair 65-B80 aircraft C-FWZG.

No correction has been made for the regional gradient of the earth's magnetic field.

The topography for this map was reproduced from 1:50,000 topographical map sheets, published by the Department of Energy.

Mines and Resources, Ottawa.

The survey data used to compile this map is available in digital form from the Geological Survey of Canada at the cost of retrieval and copying.

Funds for this survey were provided jointly by the Canada Department of Regional Economic Expansion, the Geological Survey of Canada, and the Nova Scotia Department of Mines and Energy.

Copies of this map may be obtained from the Mineral Resources, Nova Scotia Department of Mines, Halifax, or from the MAP 20,223 G 11 E/16 a&b 11F/5e ISOMAGNETIC LINES (absolute total field) 20,230-G 20,226 G NOVA SCOTIA 11 E/10h 11 E/9e&f 11E/9g&h 250 gammas... 50 gammas... 20,236 G 20,233 G 20,229 G 10-20 gammas... 11 E/10a 11 E/9c&d SCALE 1:25,000 2 gammas... 11E/9a&b 11 F/12d (1 gamma = 1 nanotesla in SI units) 20,235 G 20,232 G 20,228 G 20,224 G 1 MILE Magnetic depression.... FEET 2000 1000 0 1000 2000 3000 4000 5000 Flight lines..... Flight altitude: 150m above ground level 60558 11 E/7h 11E/8g&h 11 E/8e&f 20,231 G ROCKY MOUNTAIN METRES 500 20,227 G 500 1000 2000 METRES 20,234 G 1500

MAP 20,223 G

11F/5e

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