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Ginn R.M., Leahy E.J. 1961. Milligan Township, District Cochrane; Ontario Department of Mines, Preliminary Map P.0104, scale 1:15 840.

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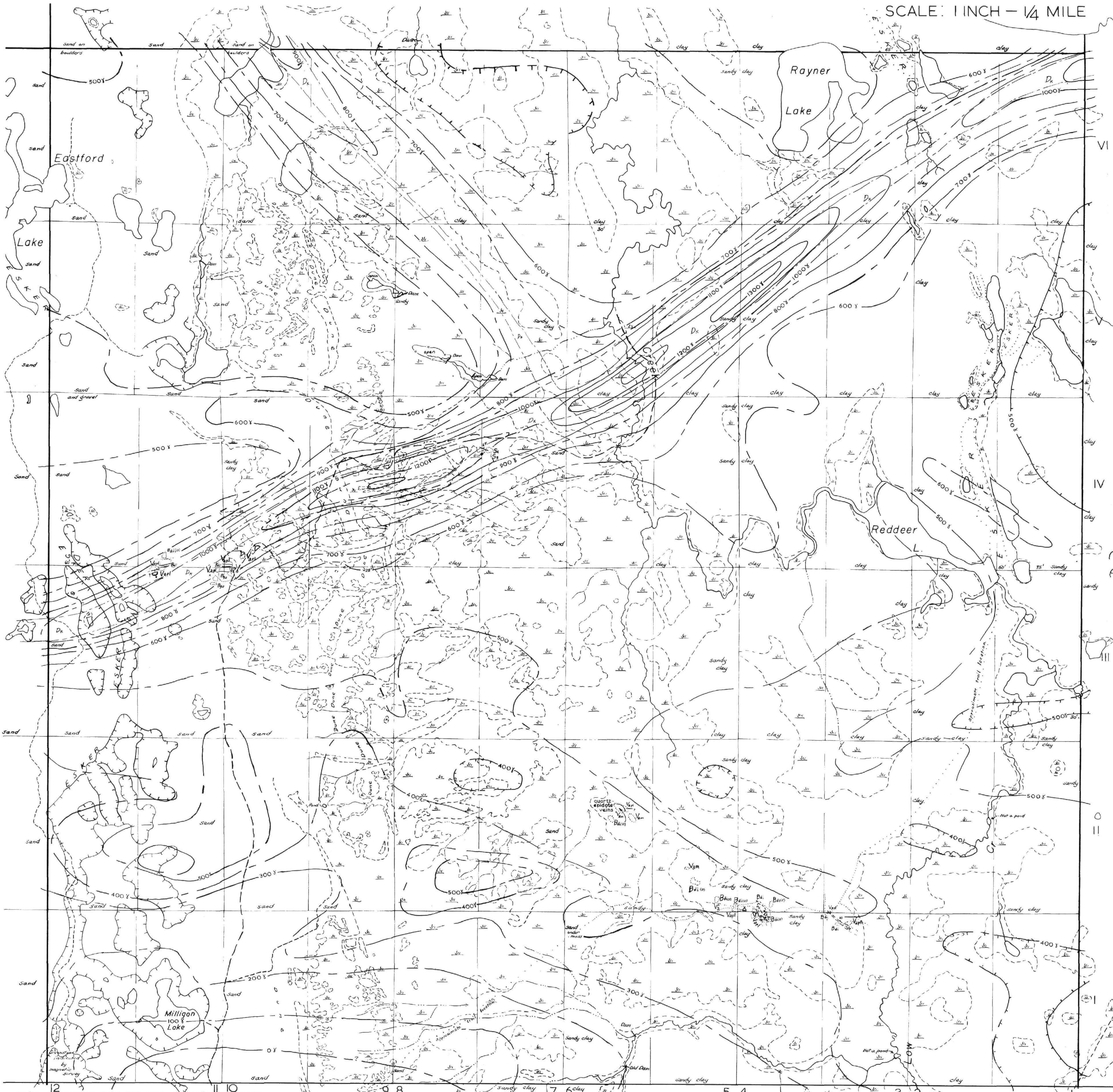
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# MILLIGAN

DISTRICT OF COCHRANE

SCALE: 1 INCH = 1/4 MILE



### LEGEND

- Diabase, Keweenawan (Dk)
- Basic intrusives: diorite (Bdi), diabasic diorite (Bdi(D)), gabbro (Bga)
- Sediments: graywacke (Sg), siltstone (Ss)
- Rhyolite (Vr)
- Andesite and or basalt (Va), massive (Vam), pillowed (Vapi)

### SYMBOLS

- Outcrop area
- Small outcrop
- Geological boundary, defined
- " " , approximate
- " " , assumed
- " " , indicated by geophysical data
- Strike and dip of strata
- " " " " joints
- Direction in which flows face
- Road
- Trail
- Boundary of muskeg or swamp
- Topographic depression
- Magnetic contours, value in gammas
- Magnetic depression contours value in gammas

### NOTES ON THE GEOLOGY OF MILLIGAN TOWNSHIP

The western part of Milligan township is covered by a large esker with abundant kettles and small kettle lakes. A number of sand dunes lie to the east of this esker. A small discontinuous esker covers parts of lots 1, 2, and 3. Much of the remainder of the township is covered by glacial lake clay and silt, with numerous small bog deposits. The central part of the township is quite swampy.

The few rock outcrops in Milligan township generally stand prominently above the glacial deposits. A series of pillowed and massive basic lavas have been intruded by coarse-grained to medium-grained basic rocks. A small amount of acid lava was observed in lot 3, concession 1.

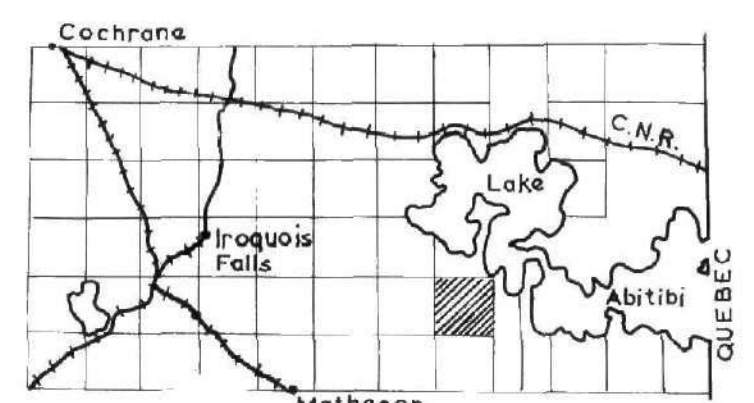
The intrusive rocks include coarse-grained gabbro in lots 10 and 11, concession III, composed of amphibole and pyroxene and minor feldspar; immediately to the north of the gabbro, a sill of diorite; diabasic quartz diorite, with obvious amounts of green epidote throughout the rock, in the southeastern part of the township and north of the gabbro and diorite noted above.

A single outcrop of well bedded siltstone and graywacke occurs in lot 7, concession IV.

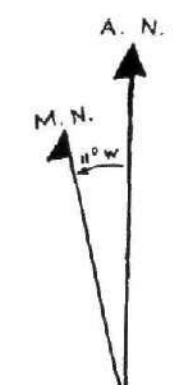
The rocks trend northwesterly, although there are local deviations from this trend. Outcrop exposures are too few to establish a good picture of the structure.

The magnetic contours, taken from Map 296G of the Geological Survey of Canada, indicate continuity of a Keweenawan diabase dike across the township, and suggest that a northwesterly dike branches off from the main dike in lot 7, concession V.

No evidence of significant quartz or sulphide mineralization was seen.



Geology by:	R.M. Ginn	1960
Assisted by:	E.J. Leahy	
Base map and topographic detail:	J.Satterly	1960
Traced by:	R.M. Ginn	1961



Major topography from Ont. Dept. of Lands and Forests, Forest Resources Inventory.

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