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GEOLOGICAL SURVEY OF CANADA COMMISSION GÉOLOGIQUE DU CANADA



DEPARTMENT OF ENERGY, MINES AND RESOURCES MINISTÈRE DE L'ÉNERGIE, DES MINES ET DES RESSOURCES

SURFICIAL GEOLOGY, WINCHESTER, ONT. 31G/3 W4

SCALE 1:50,000

LEGEND

SURFICIAL DEPOSITS AND TERRAIN FEATURES

QUATERNARY

POSTGLACIAL - 10,000 years BP to present

- 7 Organic deposits: muck and peat; mainly peat bogs and poorly drained areas supporting fen, swamp, marsh and meadow vegetation
6 Alluvial deposits: stratified sand, silty sand, silt and silty clay; includes fluvial deposits, sand bars and spits of modern floodplain of present streams

MARINE - CHAMPLAIN SEA 12,800 to 10,000 years BP approx.

- 5 Marine beach deposits: gravel and sand, fossiliferous; derived mainly from the reworking by the Champlain Sea of older glacial or glacio-fluvial deposits; includes abandoned raised beaches, bars, spits, beach ridges, boulder beaches and boulder pavements
4 Marine sand: uniform, fine-grained, buff to grey sand, fossiliferous; shallow-water facies of off-shore sediments of the Champlain Sea; upper part of this sand is buff and has often been reworked by wind into low dunes; when exposed in fresh cuts below the chemically weathered zone this sand is grey in colour
3 Marine clay: blue-grey clay, silty clay and silt, calcareous, fossiliferous; deep-water facies of off-shore sediments of Champlain Sea; locally this unit is overlain by a thin layer of sand; in the northeastern part of the map-area the upper part of these sediments is unfossiliferous, somewhat less calcareous and consists of laminated red and greenish grey clay

GLACIAL-LATE OR CLASSICAL WISCONSIN - 12,800 years BP and/or older

- 2 Drumlinized glacial deposits: compact, grey to brown when leached and oxidized, calcareous, sandy glacial till; drumlinized surface topography modified by the marine waters of the Champlain Sea during the postglacial submergence; many drumlins are overlain by gravel and sand lag deposits and abandoned beach and boulder ridges
1 Bevelled or modified till deposits: compact, grey to brown when leached and oxidized, calcareous, sandy glacial till; topography flat to gently rolling with surface materials reworked and winnowed by the marine waters of the Champlain Sea; includes bouldery, washed till on slopes and plains which grades downwards into unmodified till

BEDROCK AREAS

PALEOZOIC

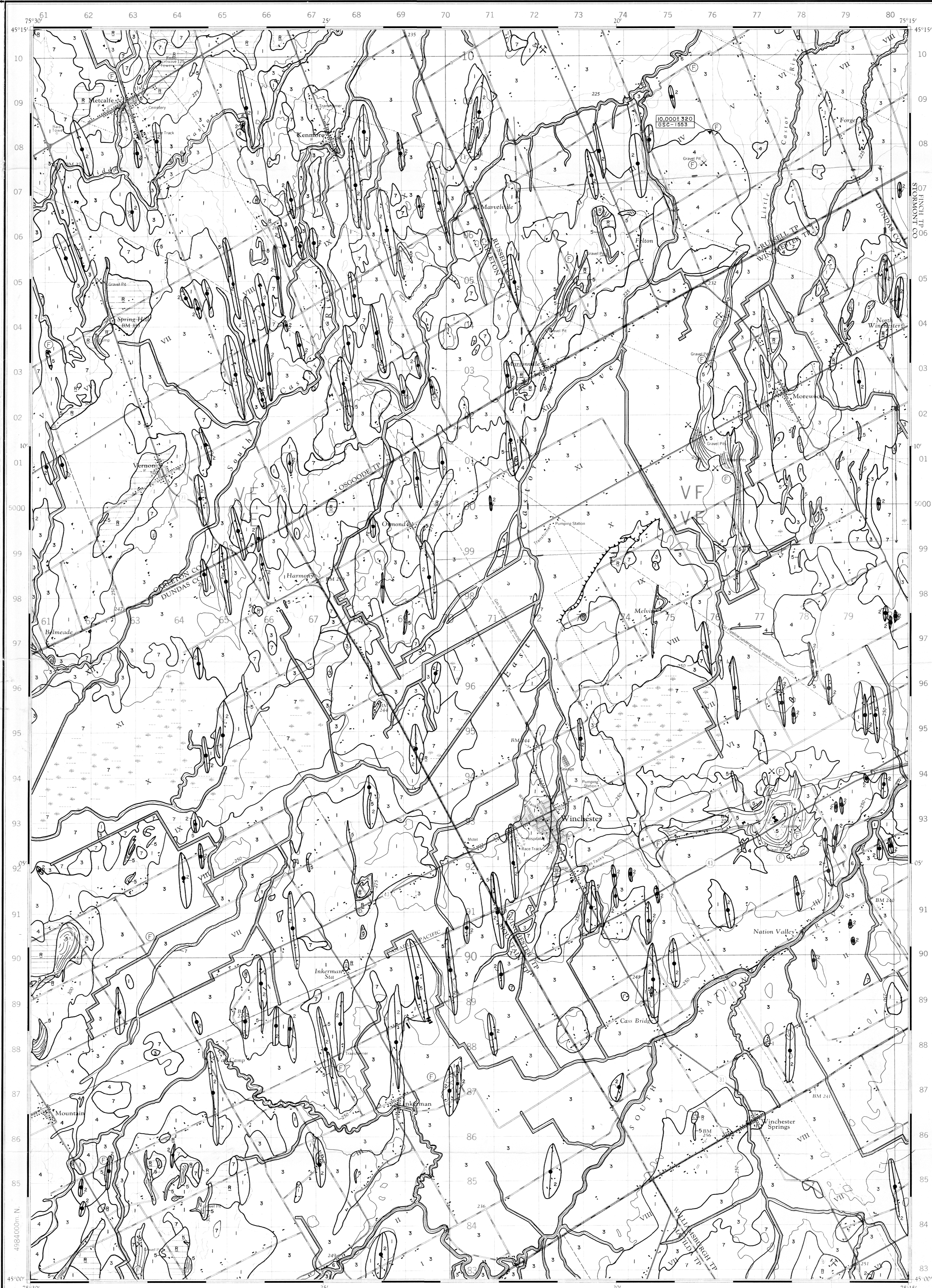
- 5 Limestone, dolomite and shale; mainly bare limestone, dolomite and locally shale bedrock; includes areas thinly veneered by Quaternary unconsolidated sediments up to in. (3") thick, most commonly consisting of washed and reworked glacial till and limestone and dolomite slabs and shingles; limestone and dolomite normally occur as tabular outcrops

- Geological boundary
Bedrock scarps
Direction of ice movement indicated by drumlin
Former strandline positions of Champlain Sea indicated by flights of abandoned marine beaches
Abandoned postglacial river channels; valley walls, gullies and present day drainage ways; includes some man-made field and road side drainage ditches
Fossil locality
Gravel or sand pit
Bedrock quarry
Locality of specimen, dated in years by radiocarbon method

GEOLOGY BY S.H. RICHARD 1970, 71, 72

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada.

OPEN FILE 213 MAY 1974 GEOLOGICAL SURVEY OTTAWA



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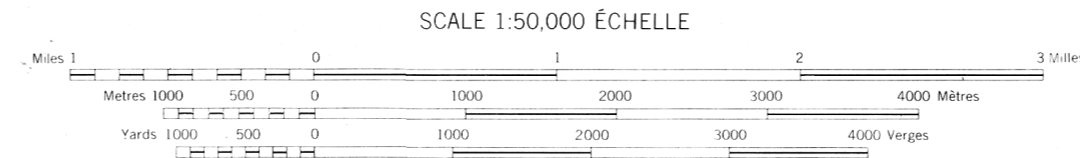
Copies may be obtained from the Map Distribution Office, Department of Energy, Mines and Resources, Ottawa.

WINCHESTER ONTARIO

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Des cartes sont en vente au Bureau de distribution des cartes, ministère de l'Énergie, des Mines et des Ressources, Ottawa.

Table with 2 columns: French and English descriptions of symbols and features like roads, railways, and landmarks.



CONTOUR INTERVAL 25 FEET Élévation en pieds et mètres (du niveau moyen de la mer) North American Datum 1957 Transverse Mercator Projection

Table with 2 columns: French and English descriptions of symbols and features like buildings, churches, and water bodies.

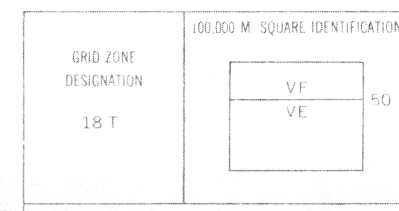
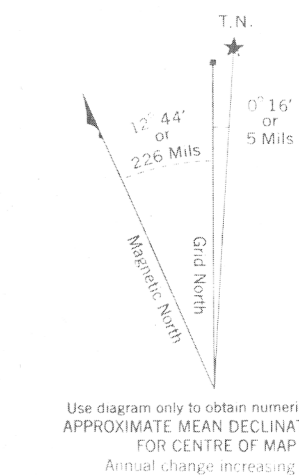
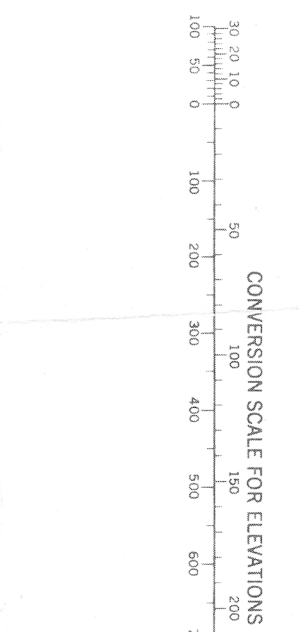


Table showing grid zone identification for various map sheets like 31G/4E, 31G/4W, etc.

ONE THOUSAND METRE UNIVERSAL TRANSVERSE MERCATOR GRID ZONE 18

Table showing grid zone identification for various map sheets like 31G/5E, 31G/5W, etc.