



LEGEND

Map-units 1 to 14 appear on Map 19-1960, "Hayesville"

Map-units 2, 9 to 12, and 15 to 17 appear on Map 20-1960, "McNamee"

- CARBONIFEROUS**  
**PENNSYLVANIAN**
- 17 Grey to green and brown sandstone; minor conglomerate, red and green siltstone
  - 16 Hard buff siltstone, sandstone, grit, and conglomerate
- MISSISSIPPIAN AND/OR PENNSYLVANIAN**
- 15 Red calcareous conglomerate, grit, and sandstone; minor green and buff conglomerate at top
- DEVONIAN (?)**
- 13 13. Pink and grey, coarse-grained biotite quartz monzonite and granodiorite
  - 14 14. Pink and grey medium- to coarse-grained biotite-muscovite quartz monzonite and fine-grained alaskite; 14a, includes minor pink miarolitic alaskite
- DEVONIAN OR (?) OLDER**
- 12 Hornblende diorite; 12a, probably includes sedimentary and volcanic rocks
- SILURIAN**  
**MIDDLE AND/OR UPPER SILURIAN**
- 11 Grey and green-grey, fine- to coarse-grained quartzose greywacke, grey and dark grey slate; 11a, includes grit
  - 10 Green and grey-green slate and fine-grained greywacke, maroon slate
- LOWER (?) AND MIDDLE SILURIAN**
- 9 Grey fine-grained greywacke, coarse-grained lithic greywacke, grey and dark grey slate; 9a, includes grey and dark grey greywacke, grit, and fine pebble conglomerate; and grey and dark grey slate
- ORDOVICIAN**  
**MIDDLE OR UPPER ORDOVICIAN**
- 8 Black carbonaceous slate
  - 7 Light grey to green-grey, medium- to coarse-grained quartzite, slate, laminated fine-grained quartzite, siltstone, and slate; 7a, metamorphosed equivalents: quartzite, siltstone, and slate with ovoid chlorite porphyroblasts
  - 6 Thin-bedded red, green, and minor grey argillite, slate, and chert, commonly with manganiferous carbonate nodules; 6a, metamorphosed equivalents: dark maroon and dark grey laminated argillite and chert, hornfelsic argillite and recrystallized chert
- MIDDLE ORDOVICIAN**
- 5 Thin-bedded dark grey and black graphitic slate, argillite, and chert with many tiny irregular quartz veinlets; 5a, metamorphosed equivalents: black argillite and fine-grained hornfels, recrystallized chert
- ORDOVICIAN**
- 3 3. Thin-bedded and laminated, grey, fine- to medium-grained quartzite and argillite; 3a, metamorphosed equivalents: thin-bedded grey quartzite and brown hornfels
  - 4 4. Brown greywacke-hornfels, thin-bedded brown, grey, and white hornfels; 4a, includes grit- and conglomerate-hornfels
  - 2 Grey and dark grey greywacke and slate; 2a, green andesite breccia with quartz and chert fragments; 2b, metamorphosed equivalents: brown and grey greywacke-hornfels, fine-grained brown hornfels, dark grey argillite
  - 1 Brown and grey fine-grained hornfels and dark green altered basic volcanic rock

- A. Grey fine-grained diorite sill
- B. Pink, buff, and grey fine-grained trachyte(?) sill
- C. Dark grey-green fine- to coarse-grained diabase sill; found only in rocks on map-unit 6

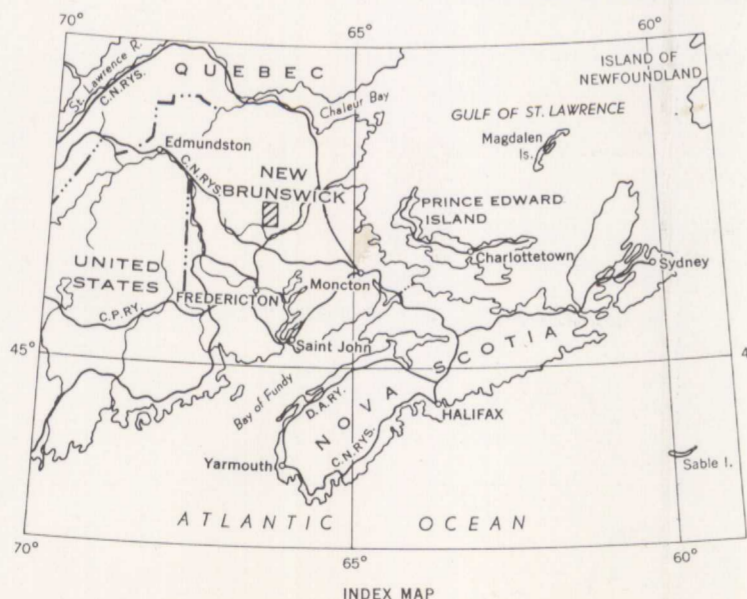
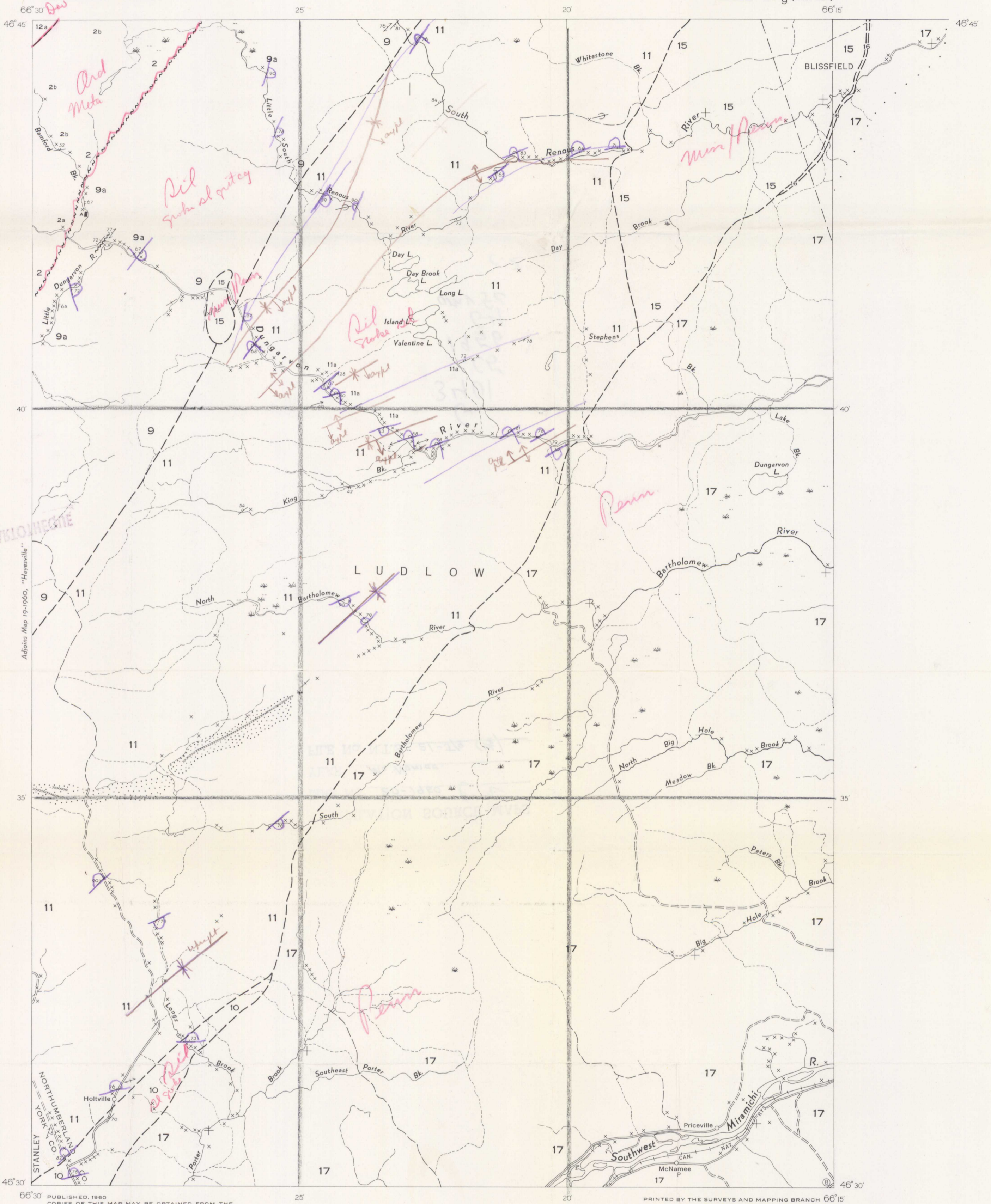
- Rock outcrop
- Geological boundary (defined, approximate)
- Limit of geological mapping
- Bedding, direction of top known (horizontal, inclined, vertical, overturned)
- Bedding, direction of top unknown (inclined, vertical, dip unknown)
- Cleavage in slate (inclined, vertical)
- Lineation, fold with plunge of axis (horizontal, inclined)
- Fault (defined, approximate, assumed)
- Glacial striae
- Esker and associated gravel and sand

Geology by W.H. Poole, 1959

Cartography by the Geological Survey of Canada, 1960

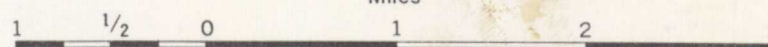
Approximate magnetic declination, 22° 54' West

In response to public demand for earlier publication, Preliminary Series maps are issued in this simplified form and will be clearer to read if all or some of the map-units are hand-coloured



MAP 20-1960  
TO ACCOMPANY PAPER 60-15  
**GEOLOGY**  
**McNAMEE**  
NORTHUMBERLAND AND YORK COUNTIES  
NEW BRUNSWICK

Scale: One Inch to One Mile = 1/63,360 Miles



Air photographs covering this area may be obtained through the National Air Photographic Library, Topographical Survey, Ottawa

LEGEND

- Main highway
- Other roads
- Cart track
- Trail
- Post Office
- County boundary
- Parish boundary
- Intermittent stream
- Marsh
- Rapids and falls

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