

Section along lines A-B, C-D, E-F, G-H, I-J, and K-L

LEGEND

- 22** IONA ISLANDS INTRUSIONS: olivine gabbro, gabbro, diorite, red granite with locally abundant gabbro inclusions (Post Middle Cambrian?)
- 21** 21A, NORTHERN BIGHT GRANITE: red granite with minor biotite (Post-Mugravetown Group, probably related to 22)
21B, POWDER HORN DIORITE COMPLEX: fine-grained and porphyritic gabbro and minor hornfels probably related to 22; medium-grained diorite in small, irregular bodies probably related to 21A
- ORDOVICIAN**
- LOWER ORDOVICIAN**
BELL ISLAND GROUP
- 20** Sandstone and shale, beds of oolitic hematite
- CAMBRIAN**
- UPPER CAMBRIAN**
- 19** ELLIOT COVE FORMATION: black and dark grey shale with limestone nodules, minor limestone, siltstone
- MIDDLE CAMBRIAN (?)**
- 18** Diabasic gabbro (probably related to Chapel Arm pillow lava)
- MIDDLE CAMBRIAN**
CHAMBERLAIN BROOK AND MANUELS RIVER FORMATIONS: black, grey, green slate; minor local red slate; limestone nodules in some beds; andesitic pillow lavas and breccias (Chapel Arm Member); manganese beds at base
- 17**
- LOWER CAMBRIAN**
BONAVISTA, SMITH POINT, AND BRIGUS FORMATIONS: red and pale green slate commonly with limestone nodules; pink algal limestone; minor conglomerate at base
- 16**
- LOWER CAMBRIAN OR LATE PRECAMBRIAN**
- 15** RANDOM FORMATION: white quartzite, quartz pebble conglomerate, with interbeds of green and red arkose and/or laminated grey siltstone
- 6** HODGEWATER GROUP (4-6)
SNOWS POND FORMATION (Upper Part): dark grey, wavy-bedded siltstone and grey arkose; green arkose commonly crossbedded; rare grey pebble conglomerate; restricted red arkose at top
- 13** MUSGRAVETOWN GROUP (8-14)
CROWN HILL FORMATION: red conglomerate; bright red siltstone at base; minor green conglomerate
- 12** TRINNY COVE FORMATION: green and red arkose, gnt, siltstone, conglomerate; rare beds similar to 6
- 11** MATURIN PONDS FORMATION: massive red arkose overlain and underlain by bedded red siltstone and arkose
- 10** BIG HEAD FORMATION: white weathering, green slate similar to 7; massive grey to green arkose; siltstone; minor pink arkose and conglomerate
- 14** Undivided, red, green, and grey arkose, siltstone, conglomerate, slate
- 5** SNOWS POND FORMATION (Lower Part) AND WHITEWAY FORMATION: red siltstone, arkose and slate; grey-green wavy-bedded siltstone, green massive arkose, apple green slate in middle; 5a, restricted section lacking red beds
- 4** HALLS TOWN AND CARBONAR FORMATIONS: dark grey slate; massive, greenish grey arkose, siltstone; 4a, red arkose restricted to northeastern part of map-area
- 3** Gabbro, minor intrusive rocks (Post lower part of Conception Group, pre-Cambrian)
- 2** CONCEPTION GROUP
Greenish green slate, siltstone greywacke; minor conglomerate, red siltstone; 27, similar rocks probably within the Harbour Main Group (1)
- 7** CONNECTING POINT GROUP
Green and grey, well-bedded siltstone, slate, greywacke; minor coarse sandstone, black cherty argillite, red siltstone, and conglomerate; numerous andesitic dykes and sills probably related to 8
- 1** HARBOUR MAIN GROUP
Andesite, basalt, rhyolite and related ignimbrites, pyroclastic and minor intrusive rocks; red subgreywacke, conglomerate, siltstone
- HOLYROOD PLUTONIC SERIES**
- A** Pink granite, minor aplite (Post Harbour Main, pre-Conception?)
- B** Quartz monzonite, quartz diorite, quartz gabbro, diorite, gabbro, minor grey granite (Post Harbour Main, pre-Conception?)

Areas largely drift covered
Bedding (horizontal, inclined, vertical, overturned)
Cave (inclined, vertical)
Fault (defined, approximate, assumed)
Shear zone
Anticline (defined, approximate, arrow indicates direction of plunge)
Syncline (defined, approximate, arrow indicates direction of plunge)
Glacial striae
Fossil locality
Mineral occurrence
Inferred paleocurrent direction based on planar crossbedding

MINERALS

Barite
Fluorite
Iron
Lead
Limestone
Manganese
Zinc

Geology by W. D. McCartney, 1951-1955, 1957; geology of Harbour Grace map-area from Map 1035A, by R. D. Hutchinson, 1952; geology of Bell and Kellys Island from Map 1018A by E. R. Rose, 1952

To accompany G.S.C. Memoir 341 by W. D. McCartney

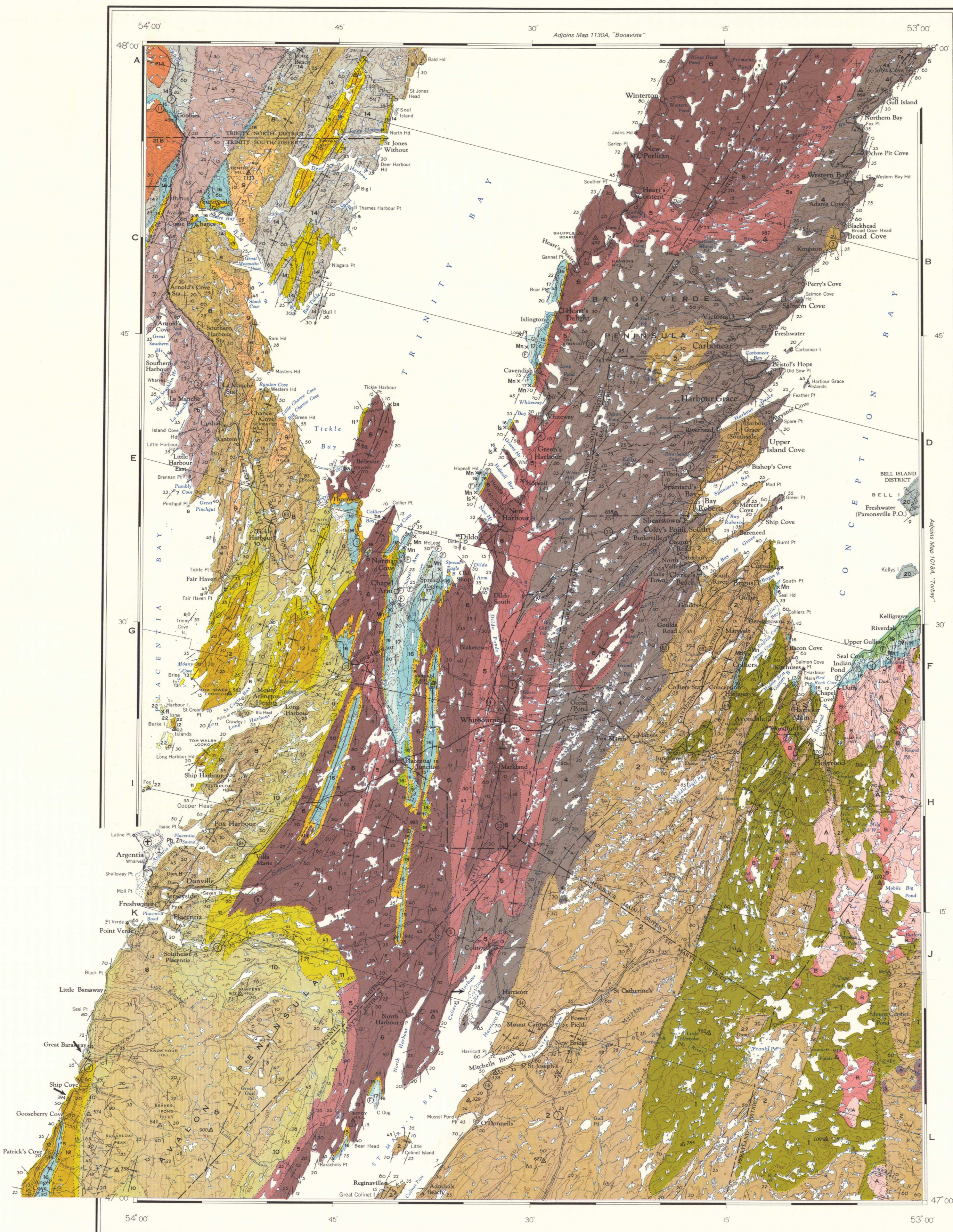
Geological cartography by Geological Cartography Unit, 1965

Road, all weather
Other roads
Cart track
Trail or portage
Railway
Power transmission line
District boundary
Post Office
Church

Horizontal control point
Intermittent stream
Rapid, falls
Marsh
Lighthouse
Airport
Seaplane base
Contours (interval 100 feet)
Height in feet above mean sea-level

Base-map compiled and drawn by the Surveys and Mapping Branch, 1956

Mean magnetic declination, 28° 01' West decreasing 2.5' annually. Readings vary from 27° 24' in the S.W. corner to 28° 41' in the N.E. corner of the map-area



PUBLISHED 1966
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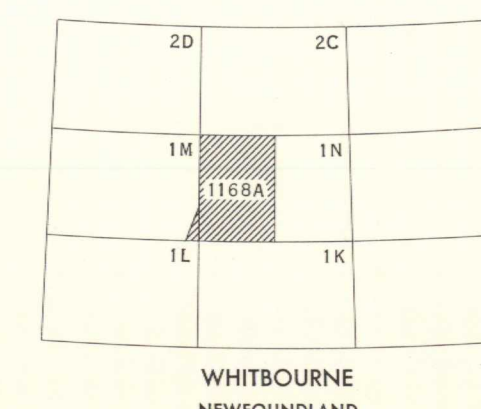


MAP 1168A
GEOLOGY
WHITBOURNE
(St. John's, West Half)
NEWFOUNDLAND

Scale: One Inch to Four Miles = $\frac{1}{253,440}$
Miles

G 3401-C5
1910-
G4
OMMC

DEPT. OF ENERGY, MINES & RESOURCES
GEOGRAPHICAL
JUN 29 1967
BRANCH 4
MAD 1



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