

LEGEND

PLEISTOCENE AND RECENT

15 Extensive drift-covered areas; muskog, soil, till, gravel, alluvium

CARBONIFEROUS (?) OR TRIASSIC (?)

14 BONAVENTURE FORMATION: reddish and greenish conglomerate, arkosic sandstone and siltstone, shale, limestone

CARBONIFEROUS PENNSYLVANIAN

13 BATHURST AND CLIFTON FORMATIONS: red conglomerate and grit, red sandstone and shale; grey sandstone and shale, grey-green siltstone, minor olive-green and red shale

DEVONIAN

12 ACID INTRUSIVE ROCKS: granite, gneissic granite, quartz monzonite, granodiorite, and associated quartz and quartz-feldspar porphyries

DEVONIAN AND SILURIAN (?)

11 BASIC INTRUSIVE ROCKS: diabase, gabbro, diorite, serpentinized peridotite

LOWER DEVONIAN

10 DALHOUSIE FORMATION (9 and 10)
VOLCANIC ROCKS: andesite and associated dykes and sills, andesite tuff, rhyolite, felsite, and agglomerate; minor shale and siltstone

9 SEDIMENTARY ROCKS: shale, argillite, siltstone, mudstone, limestone and conglomerate; minor volcanic rocks

SILURIAN

8 UPPER SILURIAN (may include some Lower Silurian; includes Chaleur Bay Group)
VOLCANIC ROCKS: rhyolite, rhyolite tuff, trachyte, dacite, andesite, basalt, agglomerate, flow breccia, porphyry; minor sedimentary rocks

7 SEDIMENTARY ROCKS: argillite, phyllite, siltstone, mudstone, sandstone, limestone, greywacke, and conglomerate. Skarn and hornfels in vicinity of granitic rocks

ORDOVICIAN (?)

6 BASIC INTRUSIVE ROCKS: diabase, gabbro, diorite

5 ELMTREE GROUP: phyllite, slate, argillite, greywacke, conglomerate, siliceous limestone. Basic volcanic flows and breccia in lower part. Skarn and hornfels in vicinity of granitic rocks

ORDOVICIAN (Middle Ordovician in part; includes Tetagouche Group)

4 SEDIMENTARY ROCKS: grey, black, green, and red phyllite and slate, greywacke; various siliceous sedimentary rocks, minor siliceous limestone and conglomerate. In places includes rocks of units 3, 2 and 1

3 BASIC VOLCANIC ROCKS: basalt, basaltic tuff, andesite; minor sedimentary rocks

2 AUGEN SCHISTS: quartz and quartz-feldspar augen schist, quartz-sericite schist, quartz-chlorite-sericite schist; minor iron-formation and basic volcanic rocks

1 ACID VOLCANIC ROCKS: rhyolite, trachyte, quartz and quartz-feldspar augen schist, quartz-sericite schist; minor iron-formation and basic volcanic rocks

- Geological boundary (approximate)
- Fault (defined, approximate, assumed)
- Anticline (approximate)
- Syncline (approximate)
- Mining property (see index below)
- Soil profile above nonmineralized rocks 75 ●
- Soil profile above mineralized rocks 53 ▲

MINING PROPERTIES AND PROSPECTS

1. Keymet Mines Ltd.
2. Nigadoo River Mines, Ltd.
3. Beresford Mines Ltd. - Noranda Mines Ltd.
4. Quebec Sturgeon River Mines, Ltd. (Millstream Iron deposit)
5. Quebec Sturgeon River Mines, Ltd. (Hachey and Shaft deposits)
6. Anaconda American Brass, Ltd. (Armstrong 'A' deposit)
7. Anaconda American Brass, Ltd. (Armstrong 'B' deposit)
8. Anaconda American Brass, Ltd. (Rocky Turn Group)
9. Tetagouche Exploration Co., Ltd. (Orvan Brook)
10. Great Northern Development Corp., Ltd.
11. Anaconda American Brass Ltd. (McMaster)
12. Anaconda American Brass Ltd. (Caribou)
13. Kennco Explorations (Canada) Ltd. (Murray deposit)
14. Restigouche Mining Co. (New Jersey Zinc)
15. Devil's Elbow Mines, Ltd.
16. Middle River Mining Co., Ltd. (Texas Gulf Sulphur Co., Ltd.)
17. Cominco Ltd. (Wedge)
18. Cominco Ltd. (Stratmat)
19. Heath Steele Mines, Ltd.
20. Heath Steele Mines, Ltd.
21. Heath Steele Mines, Ltd.
22. Cominco Ltd. (Nepisiguit)
23. Captain Mines, Ltd.
24. Brunswick Mining and Smelting Corp., Ltd. (No. 6)
25. Brunswick Mining and Smelting Corp., Ltd. (No. 12)
26. Key-Anacon Mines, Ltd. (New Larder U)

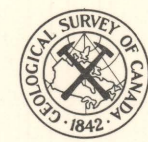
Geological compilation by R. W. Boyle and H. Lo, 1967 from published maps of the Geological Survey of Canada and New Brunswick Department of Natural Resources

To accompany G. S. C. Bulletin 174, by E. W. Present

- Road, all weather Route 8
- Other roads
- Railway
- County boundary
- Parish boundary
- Intermittent stream
- Contour (interval 200 feet)



Base-map cartography by the Geological Survey of Canada, 1968, from maps published at 1:250,000 by the Surveys and Mapping Branch, 1959, 1960, and from New Brunswick Highway Department Road Index Maps 1967



GEOLOGICAL SURVEY OF CANADA
DEPARTMENT OF ENERGY, MINES AND RESOURCES

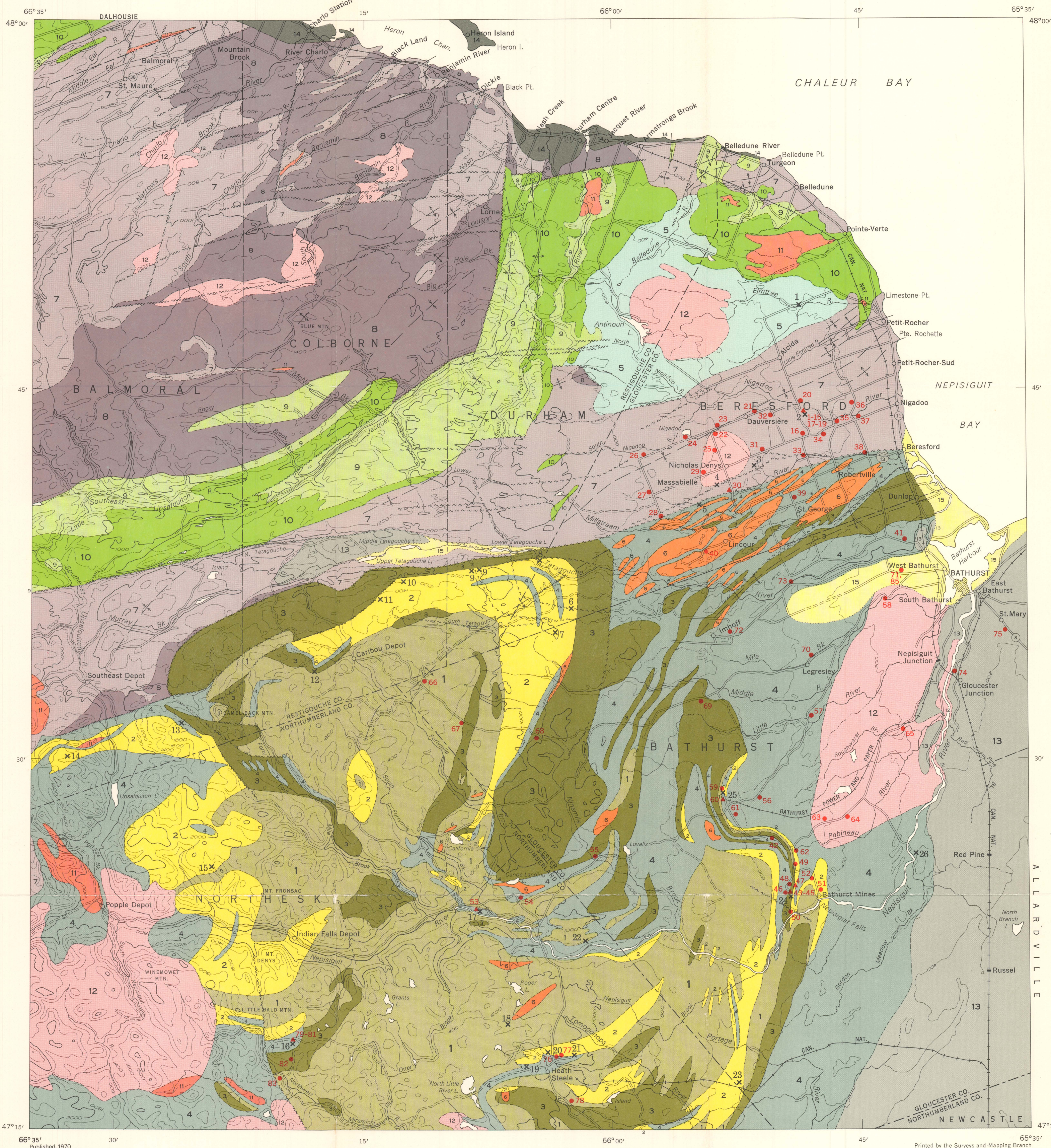
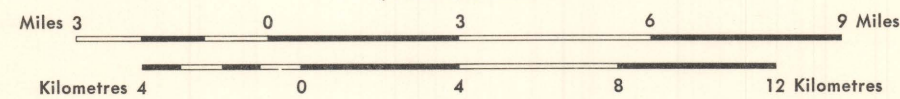


Figure 1

Geology and principal base metal deposits, Bathurst area, New Brunswick.

Scale 1:190,080
(1 inch to 3 miles)



Geological cartography by the Geological Survey of Canada, 1969

Approximate magnetic declination 1969, 23° 39' West decreasing 1.6' annually

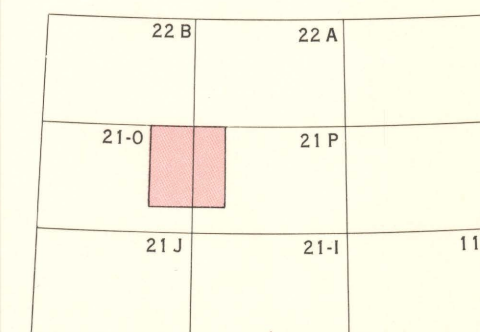


Figure 1