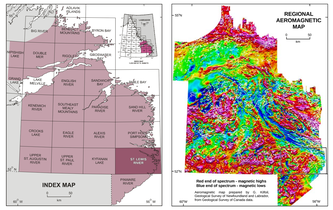
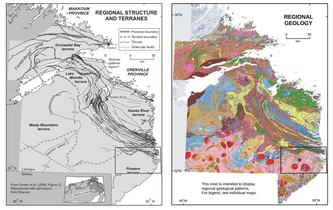
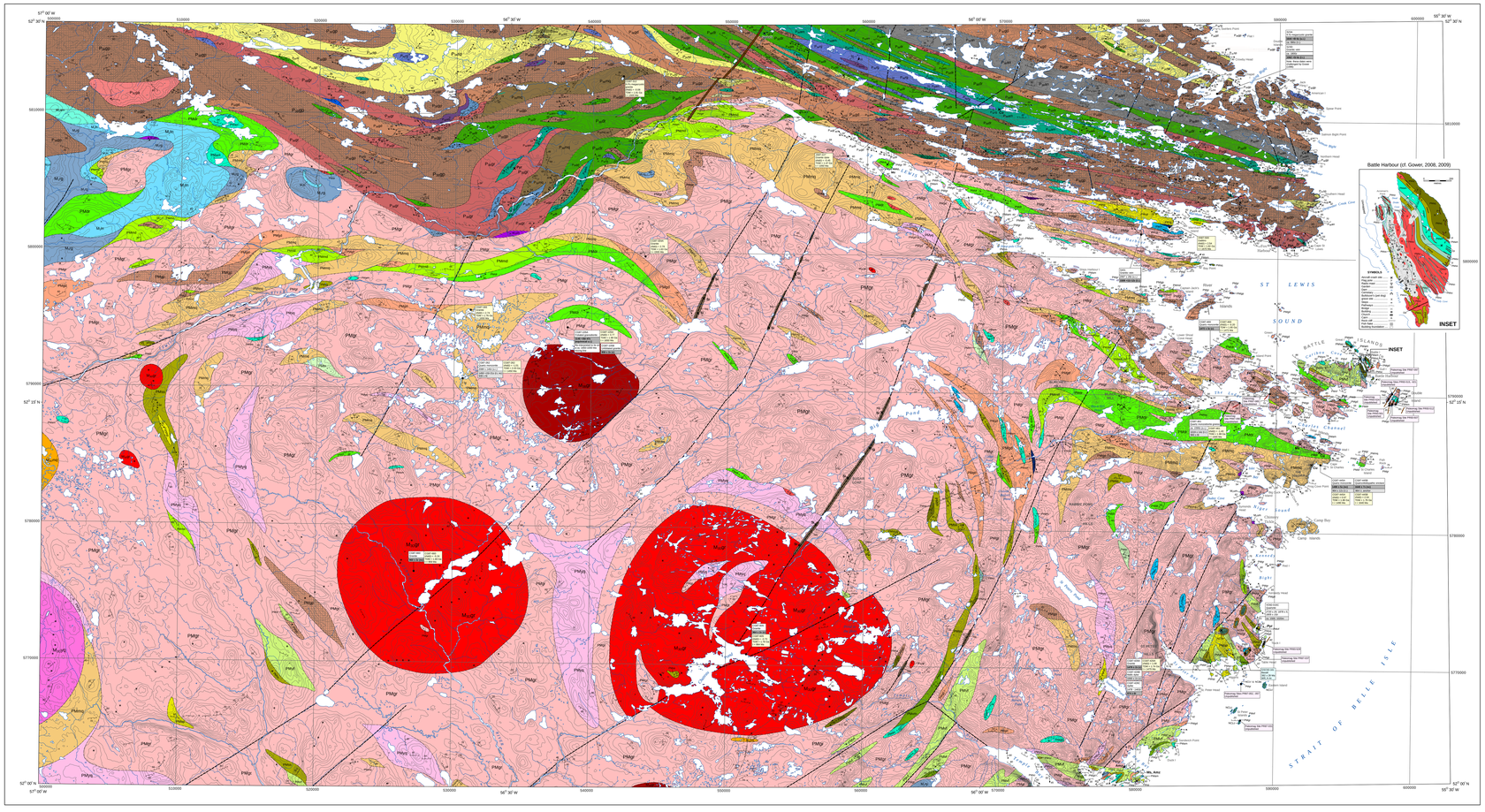
Newfoundland Labrador
NATURAL RESOURCES







ST. LEWIS RIVER

A preliminary version of this map was originally published uncoloured (Gower et al., 1988b) and a brief description of rock types in the area was given by Gower et al. (1988a). Most of the map is based on investigations carried out in 1987, but additional field mapping was done in subsequent years. The coastal islands were mapped in 1988 by R.F. Cawthorn and M.J. Kennedy, and the area during detailed mapping on Battle Island in 2007 (Gower, 2008, 2009; see inset). The present map incorporates field data collected by Gallo (1982) and Hanmer and Scott (1990), and includes data stations resulting from projects stemming from adjacent areas (e.g., Bostock, 1987; Wardle and Ryan, 1990; Wardle et al., 1990; Ryan, 1991; Ryan et al., 1991). Geochronological data for Adams (e.g., Bostock, 1987; Wardle and Ryan, 1990; Wardle et al., 1990; Ryan, 1991; Ryan et al., 1991). Geochronological results (Gower et al., 1991; Scott et al., 1993; Tucker and Gower, 1994; Wasteneys et al., 1997), Nd-Sm isotopic data (J.S. Daly, unpublished – see digital database), and K-Ar isotopic data (Wanless et al., 1983) are included. Paleomagnetic sites of G. Murthy et al. (unpublished – see digital database) are also shown. Localities designated as mineral occurrences include those described in assessment files (Gower, 1988; Gower et al., 1989) and 2003 field seasons, but include earlier and later reported discoveries (see Mineral Occurrence Table, current to 2005).

Since the preliminary map was published, interpretation for the region has evolved, so there are many differences between the current and preliminary versions of this map. Unit modification is partly related to an integrated compilation approach applied to the whole of eastern Labrador, but border regions of the map have been revised as a result of data collected from adjacent map areas. Unit boundaries have been modified to reflect interpretations of aeromagnetic data, and to honour field observations, using structural observations, regional aeromagnetic data and topographic trends. Re-interpretation in some northeast segments was assisted by industry high-resolution aeromagnetic data. Pre-1994 data station sites have been digitized from where originally located on aerial photographs or (rarely) on topographic maps, so reliability of location is likely mostly dependent on initial plotting accuracy. Subsequent locations are based on GPS-supported readings.

As is characteristic of metamorphic and plutonic terranes, individual outcrops are typically very complex, and commonly embody several different rock types. Generally, the unit polygon depicted is based on what was judged to be the dominant rock type observed at the time of mapping and data compilation. Minor rock units, too small to be depicted at the map scale, may be emphasized minor rock types deemed to have high significance. All rock types recorded from any individual outcrop may be determined by consulting the "Unit designation" string for that locality given in the digital database. The user is alerted to the fact that rock units depicted may be quite complex, and that the nature of the dominant rock type may be modified by subsequent detailed stained slabs, or petrographic thin sections. Differences may be due to subsequent, more refined identifications, but other reasons may apply, such the sample (or thin section) not being representative of its source material. Unit designator and polygon labels applied are based on an awareness of such factors.

Recommended citation:
Gower, C.F., 2010. Geology of the St. Lewis River area (NTS sheets 03/D/04 and 05; 13A/01, 02, 07 and 08), southeastern Labrador. Geological Survey, Mines Branch, Department of Natural Resources, Government of Newfoundland and Labrador, Map 2010-24; Open File LAB/1566.

Geological cartography by T. Pallamavuje, Cartographic Unit, Geological Survey, Department of Natural Resources.

Digital NTS base maps (NTS 03/D/04 and 05; 13A/01, 02, 07 and 08) used for this map are available from Survey and Mapping Branch, Natural Resources Canada.
Coordinates are in metres at 57° 00' W at the start of 2010 with 21° 56' W.
Elevations are in metres above sea level for NTS sheets 13A/02, 07 and 08, and in feet for NTS sheets 03D/04 and 05, and 13A/03. Contour interval 20 metres or 40 feet (03D/04 and 05) or 50 feet (13A/02).
UTM (Universal Transverse Mercator) Grid Zone 21, NAD (North American Datum) 27.

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Copies of this map may be obtained from the Geoscience Publications and Information Section, Geological Survey, Mines Branch, Department of Natural Resources, Government of Newfoundland and Labrador, P.O. Box 8700, St. John's, NL, A1B 4J6, Canada. Email pubs@gov.nl.ca.

NOTE: Map 2010-24 is one of twenty-five maps on the geology of the Grenville Province in eastern Labrador and adjacent eastern Makkovik Province produced by the Geological Survey, Mines Branch, Department of Natural Resources, Government of Newfoundland and Labrador.

Mines Branch website: http://www.nr.gov.nl.ca/mines/index.html.

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MINERAL OCCURRENCE DATA SOURCES

Deposition No.	Map label	Status	Commodity	Reference
03/D/04/Ocu/001	Ocu	Showing	Cu, Mo	Andrews and Beecham, 1997
03/D/04/Ocu/002	Ocu	Indication	Mo	Gower et al. (1989a, b)
03/D/04/Ocu/003	Ocu	Showing	Cu	Gower et al. (1989a, b)
03/D/04/Ocu/004	Ocu	Showing	Cu	Gower et al. (1989a, b)
03/D/04/Ocu/005	Ocu	Showing	Cu	Gower et al. (1989a, b)