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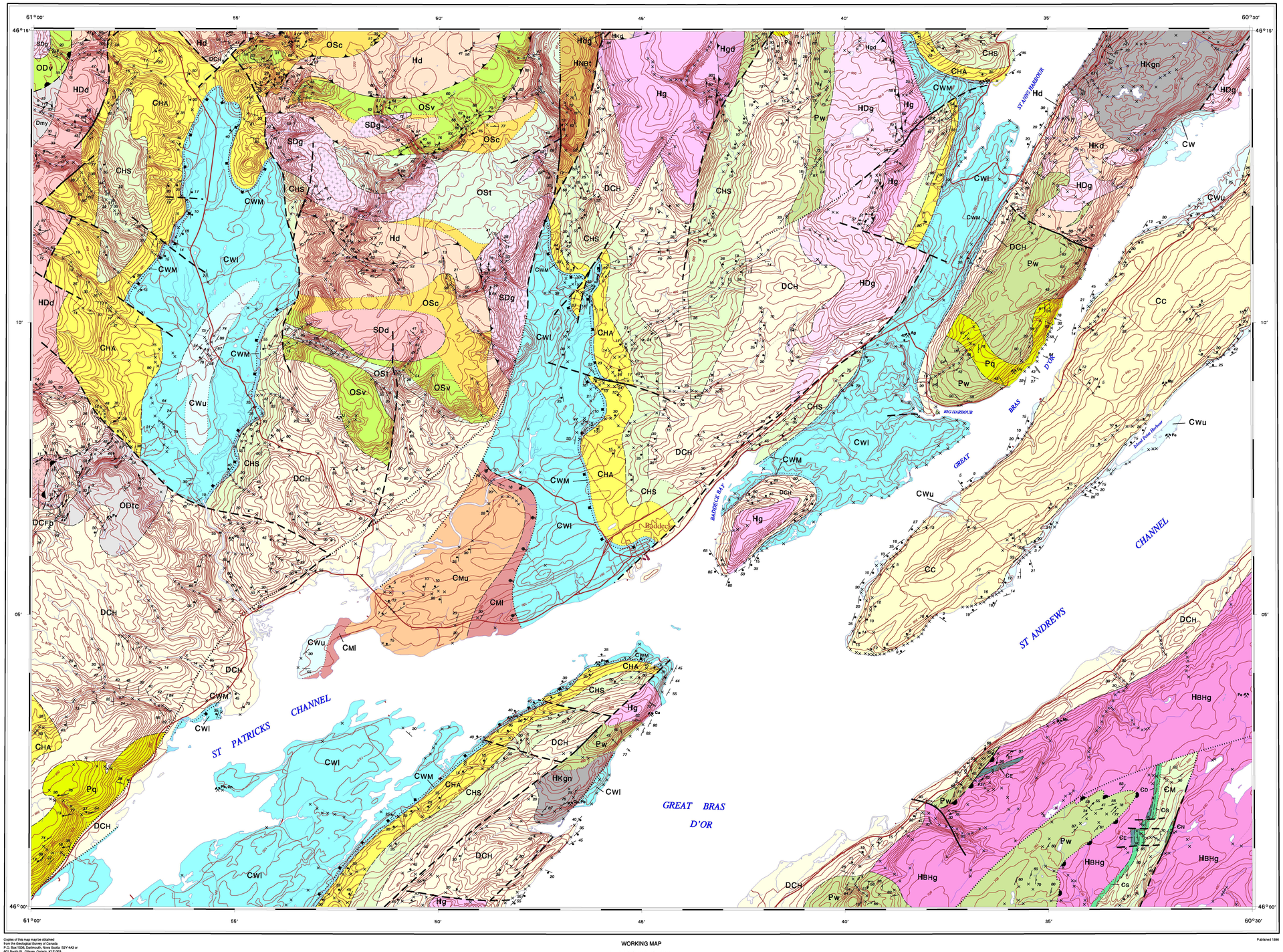
GEOLOGICAL SURVEY OF CANADA | COMMISSION GÉOLOGIQUE DU CANADA

cgq centre géoscientifique du québec



LEGEND

Carboniferous

Westphalian

Cumberland Group

- Cc — *South Bar Formation: grey sandstone, pebbly sandstone with minor conglomerate and mudstone, rare coal*

Mabou Group

- CMu — *Upper member equivalent to Pomquet Formation: red and green siltstone and sandstone, minor conglomerate*
- CMl — *Lower Mabou: interbedded grey shale, siltstone, and thin beds of brown locally stromatolitic dolostone*

Visean

Windsor Group

- CWu — *Upper Windsor: anhydrite, gypsum, red and grey siltstone, with thin beds of fossiliferous grey limestone*
- CWl — *Lower Windsor: anhydrite, gypsum, minor dolomitized biohermal limestone, siltstone and shale*
- CWM — *Macumber Formation: laminated intraclastic peloidal and micritic grey limestone, locally oolitic*
- CW — *undifferentiated Windsor Group*

Famennian - Tournaisian

Horton Group

- CHA — *Ainslie Formation: mostly fluviatile cross-bedded sandstone and conglomerate, siltstone*
- CHS — *Strathlorne Formation: grey and red siltstone, sandstone, micritic limestone, conglomerate with carbonate clasts*
- DCH — *Craignish Formation: dominantly conglomerate with red and grey sandstone, thick and thinly bedded, alluvial fan facies*

Devonian - Carboniferous

- Dmy — *Mylonite, strongly lineated muscovite-chlorite schist, mylonitic gneiss, subordinate cataclasite*
- DCFb — *Fisset Brook Formation, basalt member: vesicular porphyritic basalt and andesite, with minor interbedded red siltstone and conglomerate*

Silurian-Devonian

- SDg — *Medium-grained equigranular granite, biotite monzogranite, locally foliated and weakly chloritized*
- SDd — *Medium- to fine-grained equigranular dark coloured diorite, fresh to weakly chloritized*

Ordovician-Silurian

Money Point Group

- OSt — *Sarach Brook Formation: rhyolite, felsic to intermediate tuff, lapilli tuff and volcanic breccia, minor volcanic flows and slate (433 +7/-4 Ma, U-Pb zircon in rhyolite, Dunning et al., 1990)*
- OSv — *Schistose chloritic volcanic rocks, metabasalt and mylonitic diorite*
- OSc — *Schistose quartz-pebble wacke, siltstone, polymictic meta-conglomerate and meta-sandstone*

uncertain age

- ODv — *Chlorite schist, metavolcanic rocks*

Cambrian

Bourinot Group (White et al., 1993)

- €N — *MacNeil Formation: dark grey shale, siltstone, and limestone*
- €M — *MacMullin Formation: sandstone*
- €G — *Gregwa Formation: volcanic rocks*
- €D — *Dugald Formation: fossiliferous sandstone, siltstone, and shale*
- €E — *Eskasoni Formation: bimodal volcanic suite including amygdaloidal basalt*

Uncertain age

- ODtc — *Chloritic schist, mylonite and ultramylonite; protoliths includes polymictic conglomerate, lapilli tuff, basalt and rhyolite*
- HDg — *Medium- to locally coarse-grained variably foliated granite of uncertain age*
- HDd — *Typically medium-grained equigranular diorite, weak chloritization*

Hadrynian

- Hd — *Variably foliated to schistose chloritized and epidotized diorite*
- Hg — *Foliated and non-foliated, locally mylonitic, medium-grained pink granite*
- HBHg — *Boisdale Hills granite*
- Hgd — *Medium-grained foliated granodiorite, locally garnet bearing*
- HNBt — *North Branch Baddeck River leucotonalite: medium- to coarse-grained tonalite, variably foliated to weakly gneissic with biotite (614 +36/-4 Ma, U-Pb zircon, Jamieson et al., 1986)*
- HKgn — *Kellys Mountain gneiss: gneissic to schistose granodiorite, diorite, and amphibolite*
- HKd — *Kellys Mountain diorite: variably foliated medium-grained diorite*

Proterozoic

George River Group

- Pq — *Pure white fine- to coarse-grained quartzite, locally with pelitic interbeds of muscovite schist*
- Pw — *Medium- to high-grade metasedimentary rocks with lesser volcanic members. Includes biotite metawacke, biotite-garnet schist, biotite-garnet-sillimanite schist, impure quartzite, marble, chloritic schist and amphibolite*

- *Rock outcrop*
- *Bedding: tops unknown, tops known, overturned*
- *Gneissic fabric:*
- *Foliation: generation unknown, 1st generation, 2nd generation*
- *Fault, gouge plane or striated fracture: sense unknown, normal*
- *Shear zone or mylonite: sense unknown, dextral, sinistral, normal*
- *L-fabric, lineation*
- *Intersection lineation*
- *Fold axis*
- *Axial plane: 2nd generation*
- *Joint*
- *Quartz vein*
- *Silckenside*
- *Mineral Occurrence (Ponsford and Lyttle, 1984):*
  Ag...Silver Au...Gold Bi...Bismuth Cu...Copper Fe...Iron Mn...Manganese Pb...Lead Zn...Zinc U...Uranium
- *Geological boundary (defined, approximate, assumed)*
- *Steep fault (defined, approximate, assumed)*
- *Detachment fault (defined, approximate, assumed)*
- *Margaree shear zone (defined, approximate, assumed)*
- *Listric fault (defined, approximate, assumed)*
- *Thrust fault (defined, approximate, assumed)*
- *Anticlinal axis*
- *Synclinal axis*

References and related maps:

Barr, S.M., Raeside, R.P., and Jamieson, R.A.
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1986: Geological map of the Sydney Basin, Cape Breton Island, Nova Scotia. Nova Scotia Department of Mines and Energy, Map 86-1A, scale 1:50 000.

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1990: U-Pb zircon, titanite, and monazite ages in the Bras d'Or and Aspy terranes of Cape Breton Island, Nova Scotia: implications for magmatic and metamorphic history; Geological Society of America, Bulletin, v. 102, p. 322-330.

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1967: Baddeck and Whycocomagh map-areas with emphasis on Mississippian stratigraphy of central Cape Breton Island, Nova Scotia (11K/2 and 11F/14); Geological Survey of Canada, Memoir 351, 65 p.

Ponsford, N.A., Lyttle, N.A.
1984: Metallic Mineral Occurrences Map and Data Compilation, Eastern Nova Scotia (Map Sheets 11F,11G,11J,11K,11N). Nova Scotia Department of Mines and Energy, OFR 600

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1993: A revised interpretation of Cambrian - Ordovician volcanic, sedimentary and plutonic units in the Boisdale Hills of Central Cape Breton Island, Nova Scotia. Program and Summaries, Seventeenth Annual Review of Activities, Nova Scotia Department of Natural Resources, p. 46.

OPEN FILE
DOSSIER PUBLIC
OF2488
GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA
OTTAWA
1996

LOCATION MAP - LOCALISATION DE LA CARTE

Geology by G. Lynch and B. Lafrance 1994; assisted by J. Ortega

Digital cartography by T. Houlahan, Geological Survey of Canada

Electrostatic plot produced by the Geological Survey of Canada

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

Digital base map assembled and modified by the Geological Survey of Canada from digital bases compiled by the Canada Centre for Geomatics

Mean magnetic declination 1995 estimated to be 21°33'W at coordinates 46°N and 61°W

WORKING MAP

BEDROCK GEOLOGY

BADDECK

CAPE BRETON ISLAND

NOVA SCOTIA

Scale 1:50 000 - Échelle 1/50 000

Kilometres 1 0 1 2 3 4 Kilometres

Contour Interval 50 Feet
North American Datum 1983
Universal Transverse Mercator Projection

COOPERATION

COOPERATION AGREEMENT ON MINERAL DEVELOPMENT | ENTENTE DE COOPÉRATION SUR L'EXPLOITATION MINÉRALE

Contribution to Canada-Nova Scotia Cooperation Agreement on Mineral Development (1992 - 1995) a subsidiary agreement under the Economic and Regional Development Agreement.

Contribution à l'Entente de coopération Canada - Nouvelle-Écosse sur l'exploitation minérale (1992 - 1995), entente auxiliaire négociée en vertu de l'Entente Canada/Nouvelle-Écosse de développement économique et régional.

Canada | Province of Nova Scotia

11 K/5	11 K/7 OF3059	11 K/8
11 K/5	11 K/2 OF2488	11 K/1
11 F/14 OF2817	11 F/15	11 F/16

NATIONAL TOPOGRAPHIC SYSTEM REFERENCE

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Lynch, G. and Lafrance, B., 1996: Bedrock geology, Baddeck (11K/02), Geological Survey of Canada, Open File 2488, Scale 1:50 000.

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