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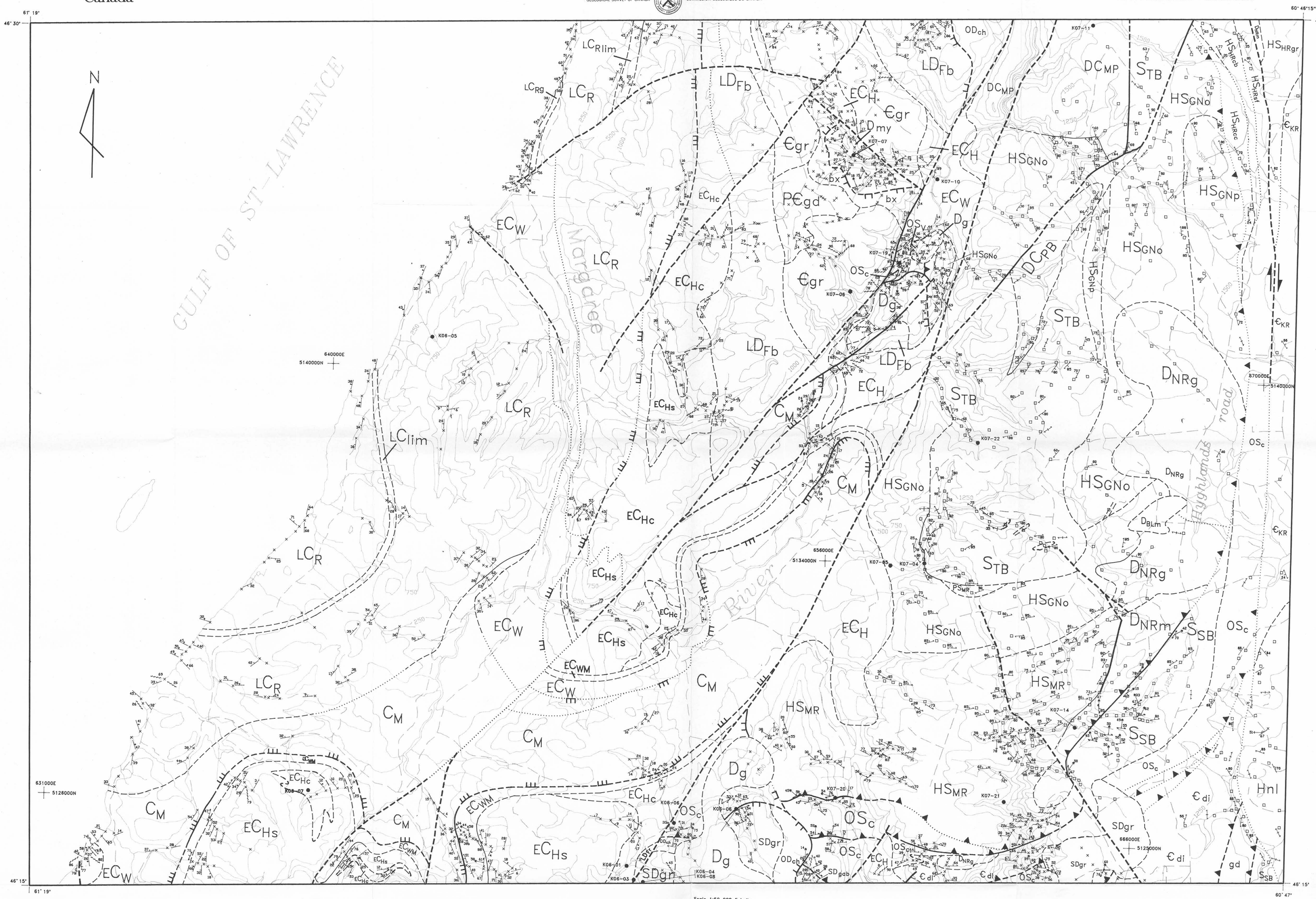

Scale 1:50 000 Echelle

Metres 0 1000 2000 3000 4000 5000

Geological map (1:50,000) of Margaree River area, Cape Breton Island Nova Scotia. (11K6 and west 11K7).

Map produced by: **G.Lynch, C.Tremblay and H.Rose**

LEGEND

CARBONIFEROUS

- LC_R — Riversdale Group: arkose, quartzite, cross bedded or trough cross bedded sandstone, minor limestone(lim) and conglomerate(g)
- C_M — Mabou Group:interbedded shale and dolostone local redbeds, lithic arkose and conglomerate
- EC_W — Windsor Group: limestone,evaporites, redbeds.
- EC_{WM} — Macumber Formation laminated intraclastic limestone
- EC_H — Horton group: coarse clastics, (c)conglomerate with abundance of granitic and gneissic clasts, (s)micaceous sandstone, arkose, redbeds, minor quartzite, local coarse poorly sorted debris flow breccia

DEVONIEN

- DC_{MP} — Margaree Pluton: coarse porphyritic rapakivi granite (343+-17 Ma, Rb-Sr, O'Beirne-Ryan et al.,1986)
- D_{my} — Mylonite, stronly lineated muscovite + chlorite schist, mylonitic gneiss, subordinate cataclasite
- bx — Cataclasite, breccia and micro breccia
- LD_F — Fisset Brook Formation: (b)vessicular basalt, (r)rhyolite and interbedded redbeds, siltstone, conglomerate
- D_g — Granite to syenogranite, pink slightly porphyritic biotite-bearing
- D_{NRg} — Granodiorite: medium to coarse-grained, light grey, megacrystic, bi-hb granodiorite

SILURIAN-DEVONIAN

- SDgr — Granite, biotite monzogranite, locally foliated and weakly chloritized
- SD_{gab} — Medium to coarse grained diorite and gabbro, with pyroxene crystals and phenocrysts

SILURIAN

- S_{TB} — Taylor's Baren Pluton: variably foliated augen granite
- HS_{GNo} — Orthogneiss: light grey, homogeneous, qtz-feld-bi+-qt gneiss, minor amphibolite
- HS_{MR} — Middle River Metamorphic Complex: individed medium to high grade metasedimentary rocks: includes psammatic units, bi-gt-ky schist, amphibolite, marbre
- S_{SB} — Sarach Brook Formation: undivided fine to coarse grained felsic to intermediate pyroclastics and flows and minor slate; locally mylonitic

ORDOVICIAN-SILURIAN

- OS_V — Schistose chloritic volcanic rocks, metabasalt and mylonitic diorite. Possibly equivalent to S_{SB}
- OS_c — Schistose polymictic meta conglomerate meta-sandstone and quartz-pebble sandstone schist, chlorite-muscovite schist
- OD_{ch} — Chloritic schist of uncertain origin, locally mylonitic, possibly schistose LDf or OSv

CAMBRIAN-PRECAMBRIAN

- $Ꞓ_{gr}$ — Granite, equigranular biotite or biotite-muscovite granite, includes Cheticamp pluton
- $Ꞓ_{di}$ — Medium to coarse grained diorite strongly chloritic, locally schistose or mylonitic
- $HꞒ_{gd}$ — Granodiorite, locally foliated and chloritic
- HS_{GNp} — Paragneiss: banded, mafic qtz-feld-bi-hb-gt gneiss, amphibolite, minor pelitic gneiss
- HS_{HRcb} — Coineach Brook amphibolite: fine to coarse grained amphibolite
- HS_{HRcc} — Cape Clear Road schist: medium to coarse grained pelitic, micas-gt-st-ky schist
- HS_{HRsf} — Second Forks Brook Road schist: fine grained, bi-gt schist
- HS_{HRgr} — Gillis Road schist: psammitic-semipelitic, ch+-gt+-ky schist
- Hnl — North Branch Baddeck River Leucotonalite (614+-38/-4 Ma, U-Pb [zircon], Jamieson et al., 1986)
- $Ꞓ_{KR}$ — Kathy Road diorite: medium grained, equigranular diorite locally strongly sheared

- Geological contact: defined, approximate, assumed
- Steep brittle fault: defined, approximate, assumed
- Ainslie Detachment: low-angle to bedding parallel extensional detachment fault and calc-mylonite, defined, approximate assumed
- Margaree Shear Zone: upper limit of low-angle ductile extensional shear zone, defined, approximate, assumed
- Ductile reverse or thrust fault: defined, approximte, assumed
- K07-14 — Nova Scotia Department of Natural Resources Mineral Occurence Card Open File Report 600
- Lineation: mineral, mylonitic, crenulation
- Bedding: inclined, vertical, overturned, top known
- Schistosity, foliation: inclined, vertical
- Mylonitic foliation: inclined, vertical
- Gneissic foliation: inclined, vertical
- Brittle shear plane, dipping towards inclination number
- Outcrop visited during the course of this study
- Compiled from: Horne (1992) west of Hyghlands Road and from Barr, Jamieson and Raeside (1992) east of Hyghlands Road.
- 631000E / 5126000 — Universal Transverse Mercator (UTM) coordinates

and compiled from:

BARR, S.M., JAMIESON, R.A.& RAESIDE, R.P. (1992). Geology, Northern Cape Breton Island, Nova Scotia; Geological Survey of Canada, Map 1752A, scale 1:100 000

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FRENCH, V.A., (1985): Geology of the Gillanders Mountain intrusive complex and satellite plutons, Lake Ainslie area Cape Breton Island, Nova Scotia M.Sc. thesis, Acadia University, Wolfville, Nova Scotia 237p.

KELLY, D.G.,(1968): Geology of the Baddeck Cape Breton Island, Nova Scotia; Geological Survey of Canada, Map 1211A, scale 1:63 360

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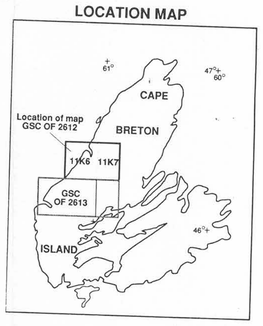
LOCATION MAP



COOPERATION
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