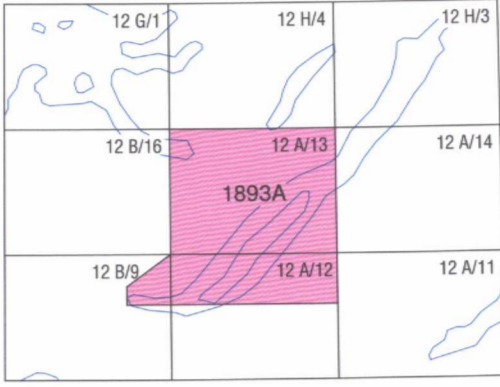


MAP 1893A
SHEET 1 OF 2
GEOLOGY
CORNER BROOK LAKE REGION
NEWFOUNDLAND

Scale 1:50 000 - Échelle 1/50 000

Universal Transverse Mercator Projection / Projection transversale universelle de Mercator



Geology by P.A. Carwood and J.A.M. van Gool, 1994

Digital cartography by M. Hudson, Geoscience Information Division

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada
Digital base from data compiled by Geomatics Canada, modified by the Geoscience Information Division

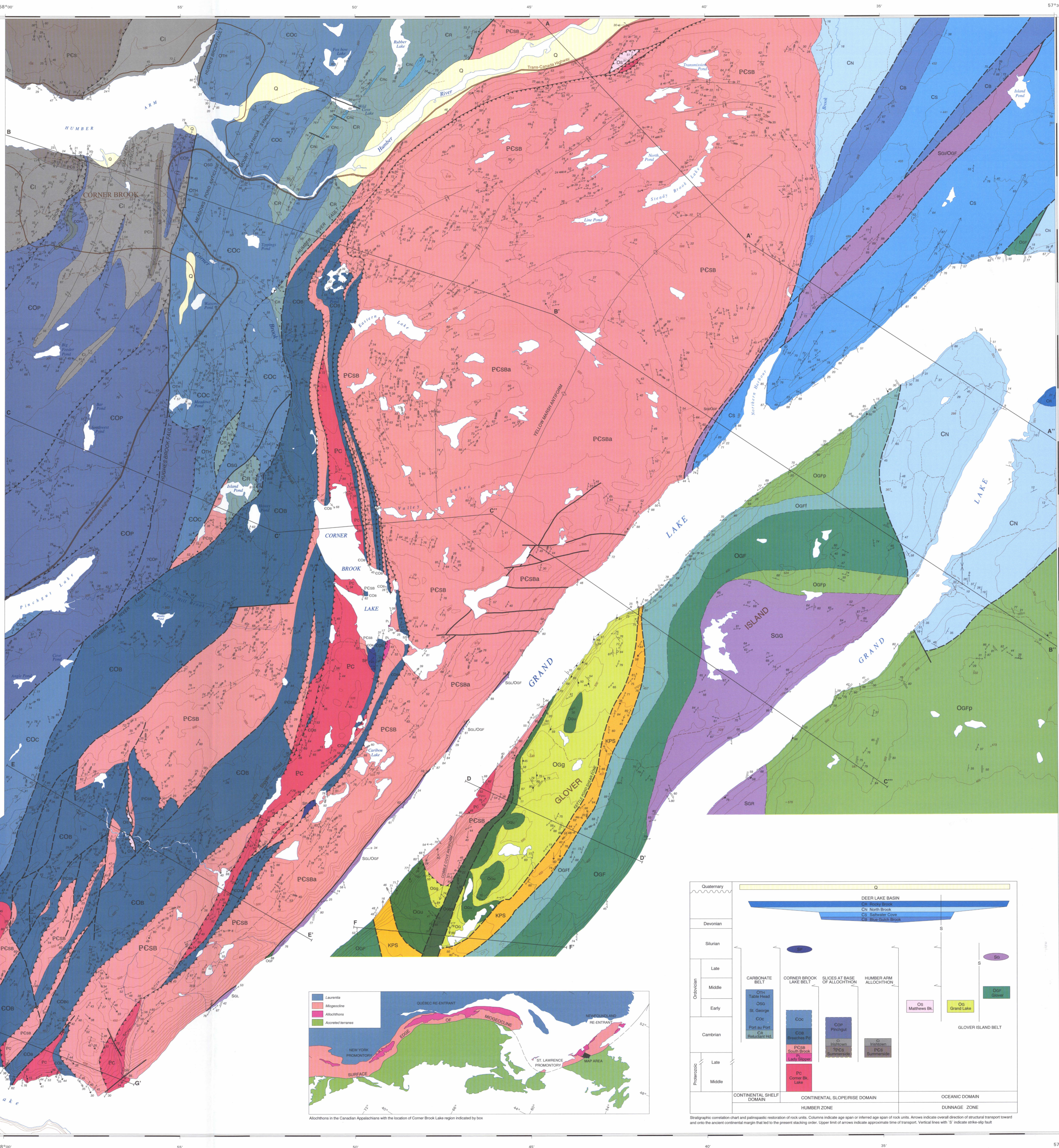
Copies of the topographic maps for this area may be obtained from the Canada Map Office, Natural Resources Canada, Ottawa, Ontario, K1A 0S9

Magnetic declination 1998, 23°13' W, decreasing 7.1" annually

Elevations in metres above mean sea level

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- Curie, R.L. and van Benth, J.T., 1992. Geology, southern Long Range Mountains, Newfoundland. Geological Survey of Canada, Map 1815A, scale 1:100 000
- Hys, R.S., 1982. Geology of the Carboniferous Deer Lake Basin. Mineral Development Division, Newfoundland Department of Mines and Energy. Map 86.7, scale 1:100 000
- Kennedy, D.P., 1981. Geology of the Corner Brook Lake area, western Newfoundland. M.Sc. thesis, Memorial University of Newfoundland, St. John's, Newfoundland, 370 p.
- Kroop, G.A., 1982. Optimal employment along the Bear Vein Extension Line at Glover Island, western Newfoundland. Ph.D. thesis, Memorial University of Newfoundland, St. John's, Newfoundland, 289 p.
- Williams, H. and Carwood, P.A., 1986. Reinterpretation along the eastern margin of the Humber Arm Allochthon (between George Lake and Corner Brook, western Newfoundland). In: Current Research, Part A, Geological Survey of Canada, Paper 86-1A, p. 749-765



LEGEND

COVER ROCKS

QUATERNARY

- Q Gravel and glacial deposits: sand, gravel, boulder clay, fill

DEER LAKE BASIN

CARBONIFEROUS (VISEAN) DEER LAKE GROUP (Ch-Cn)

- Ch ROCKY BROOK FORMATION: red-brown siltstone and mudstone with sandstone and of shale
- Cn NORTH BROOK FORMATION: red-brown siltstone and sandstone with pebble conglomerate and minor limestone

CARBONIFEROUS (TOURNASIAN) ANGUILLÉ GROUP (Cs-Cs)

- Cs SALTY WATER COVE FORMATION: grey sandstone and siltstone, black carbonaceous mudstone with minor conglomerate, limestone, and dolomite
- Cs BLUE GULCH BROOK FORMATION: grey pebbly to cobble conglomerate, micaceous sandstone and rare impure limestone

PLUTONIC ROCKS

- Sg Pegmatite and granite: intrusive into internal domain of Humber Zone
- Sg Plutons intrusive into Damage Zone mafic igneous rocks: medium-grained equigranular granodiorite with minor granite, gabbro, and diorite; Sg1, Glover Island Granodiorite; Sg2, Red Brook Granodiorite; Sg3, Island Pond pluton; Sg4, Little Pasture Point pluton

DUNNAGE ZONE

LOWER ORDOVICIAN

- KPS Kettle Pond shear zone
- OgP GLOVER FORMATION: mafic and siliceous volcanic rock and high-level intrusives with minor volcanoclastic sedimentary rock; OgP1, yellow lava and diabase; OgP2, basalt and mafic volcanic rock
- Og/OgP GRAND LAKE COMPLEX: massive and layered gabbro, variably serpenitized and magnetized ultramafic rock, basal gneissic, dioritic and crosscutting mafic dykes; Ogs, gneissic; Ogs1, serpenitized ultramafic rock; Ogs2, gabbro
- OS MATTHEWS BROOK SERPENTINITE: serpenitized ultramafic rock with iso-carbonate and quartz-carbonate-fuchsite alteration; restricted to fault-bounded sivers in internal domain of Humber Zone

HUMBER ZONE

HUMBER ARM ALLOCHTHON (EXTERNAL DOMAIN)

LOWER CAMBRIAN

- Ch IRISH TOWN FORMATION: dark grey to black shale with buff to grey quartzite and pebbles to boulder conglomerate

UPPER PROTEROZOIC TO LOWER CAMBRIAN

- PCSB SUMMER RIDGE FORMATION: red, green, and grey sandstone, granite to pebble conglomerate and shale

SICES OF SEDIMENTARY ROCK AT BASE OF ALLOCHTHON

MIDDLE CAMBRIAN TO LOWER ORDOVICIAN

- OgP1 IRISH TOWN FORMATION: thin bedded limestone and dolomite; mudstone, grey to green shale, pebbles to boulder conglomerate, and dark green sandstone; Ogs, predominantly limestone and limestone conglomerate

TACONIAN AUTOCHTHON (EXTERNAL DOMAIN)

CARBONATE BELT

MIDDLE CAMBRIAN TO MIDDLE ORDOVICIAN

PORT AU PORT, ST. GEORGE, AND TABLE HEAD GROUPS

- COC Grey limestone and dolomite, minor shale; OIG - St. George Group, bedded dolomite and limestone; CH, Table Head Group, bedded grey limestone

UPPER CAMBRIAN

- CR RELUCTANT HEAD FORMATION: thin bedded limestone, dolomite mudstone, grey to green shale, and grey limestone conglomerate
- CRc Marble-rich sequence

TACONIAN AUTOCHTHON (INTERNAL DOMAIN)

CORNER BROOK LAKE BELT

LOWER CAMBRIAN TO LOWER ORDOVICIAN

FLURIEU'S SUPERGROUP

- OCS BREECHES POND FORMATION: grey calcareous siltstone, calc-mica siltstone, mica and granitic siltstone, marble and meta-limestone conglomerate; OCS, marble-rich sequence

UPPER PROTEROZOIC TO LOWER CAMBRIAN

MOUNT MUSGRAVE GROUP (PCSB)

- PCSB SOUTH BROOK FORMATION: quartzite and pelitic siltstone, quartzite, garnet siltstone, and minor metak, amphibolite and quartz pebble conglomerate; PCSB1, quartzite; PCSB2, siltstone and metak; minor metak, and amphibolite, with pervasive albite porphyroblasts; includes granitoid gneiss which is probably equivalent to S1 or PC1

LATE PROTEROZOIC

VOLCANIC AND INTRUSIVE ROCKS

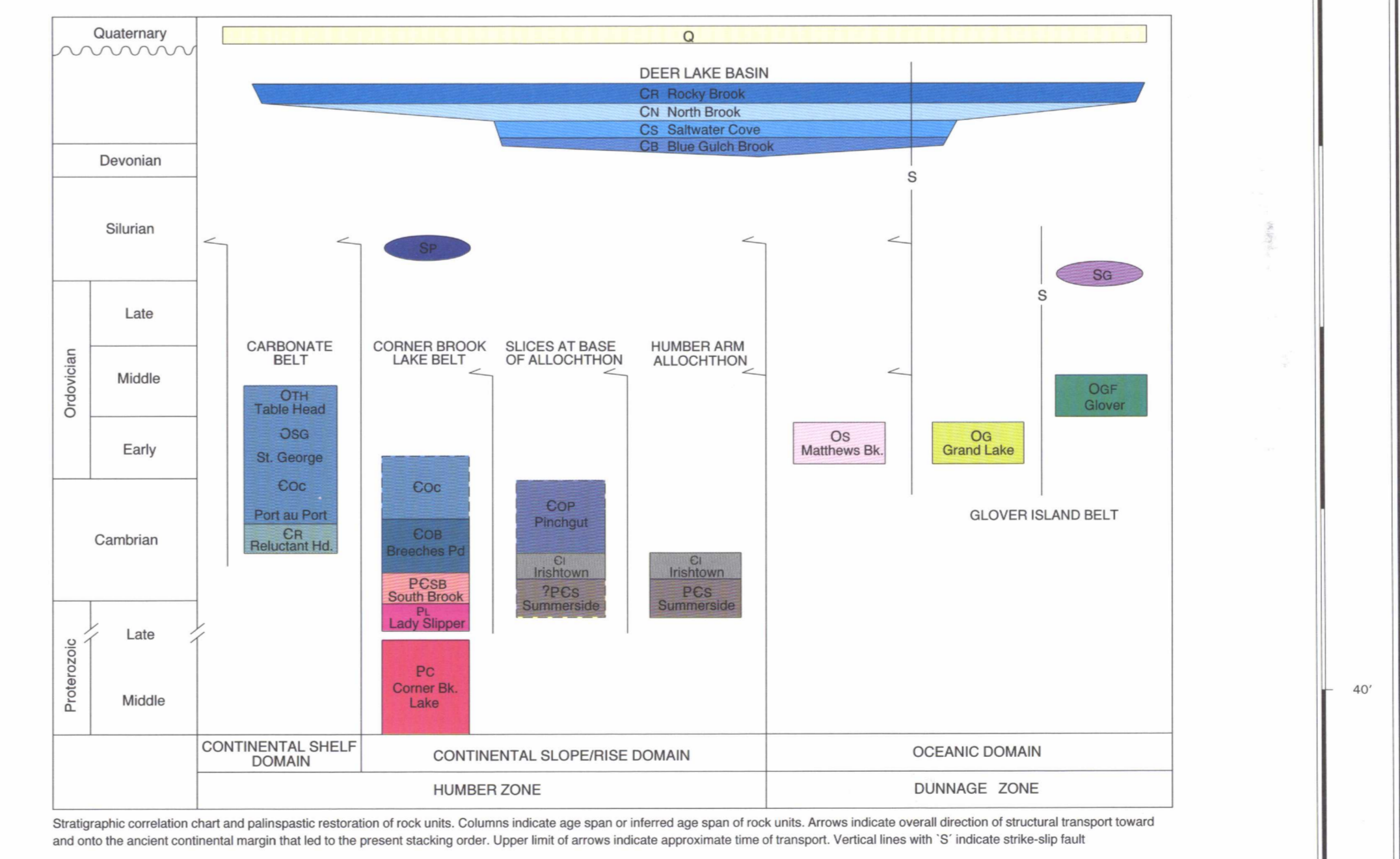
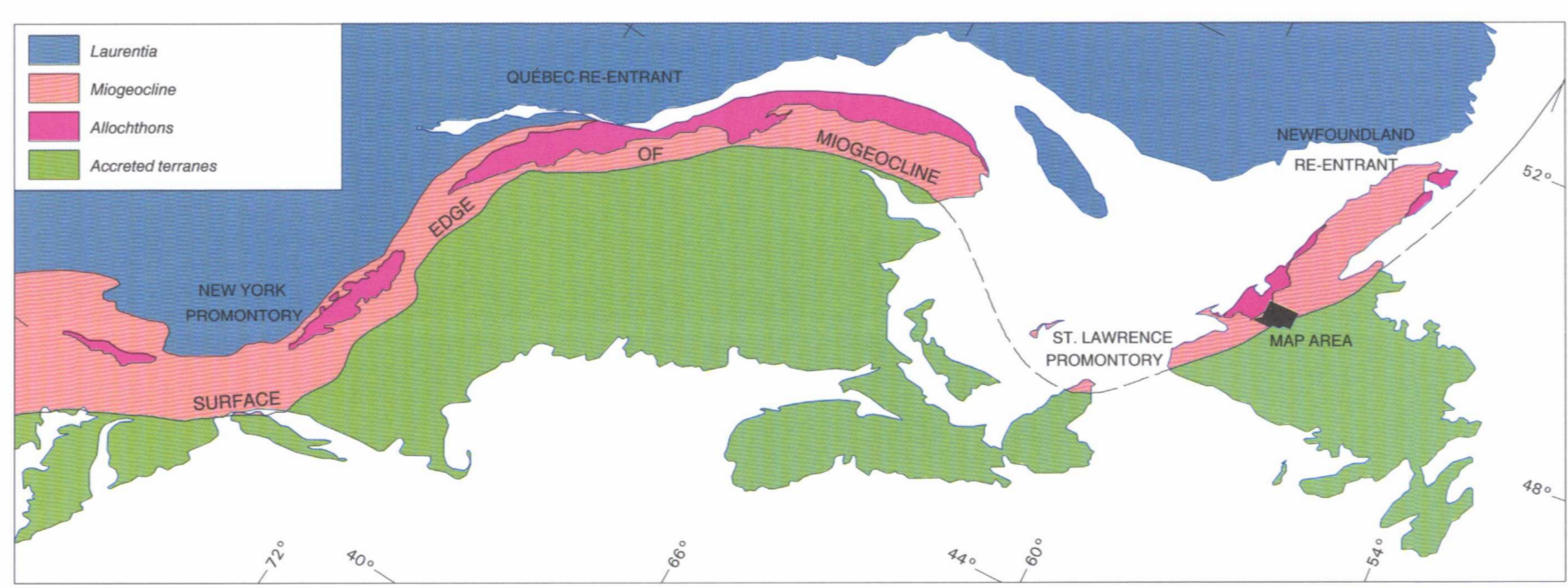
- PL LADY SUPPER PLUTON: deformed granodiorite and amphibolite

BASEMENT ROCKS

MIDDLE AND UPPER PROTEROZOIC

- PC CORNER BROOK LAKE COMPLEX: granitoid gneiss with amphibolite, minor quartzite and psammite gneiss

Geological boundary (defined, approximate or assumed)
 Bedding (S, upright, overturned)
 Layering or primary banding in plutonic rocks
 Attitude of mafic dykes (inclined)
 Gneissosity in basement rocks
 Cleavage or schistosity (S, S₁, S₂)
 Fracture cleavage
 Fault orientation
 Fold axis (F, vergence not determined, S-fold, Z-fold, M-fold)
 Fold axis (F₁, F₂)
 Creulation lineation (L₁, L₂)
 Intersection lineation (I₁)
 Fold axis (RHK)
 Slickenside
 Mineral or stretching lineation
 Thrust fault (defined, approximate or assumed)
 High-angle fault (defined, approximate or assumed)
 Extensional fault (defined, approximate or assumed)
 Axis of upright anticline with plunging, overturned syncline
 Axis of upright anticline with plunging, overturned syncline
 Axis of upright syncline with plunging, overturned syncline
 Line of section



COOPERATION

COOPERATION AGREEMENT ON MINERAL DEVELOPMENT / ENTENTE DE COOPÉRATION SUR L'EXPLOITATION MINÉRIÈRE

Contribution to Canada Newfoundland Cooperation Agreement on Mineral Development (1995-1996), a bilateral agreement under the Economic and Regional Development Agreement.

Contribution à l'Entente de coopération Canada - Terre-Neuve sur l'exploitation minière (1995-1996), une entente bilatérale signée en vertu de l'Entente Canada - Terre-Neuve de développement économique et régional.

Canada / Terre-Neuve

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ESIC CIST

MAR 19 1998

Earth Sciences Sector / Secteur des sciences de la Terre