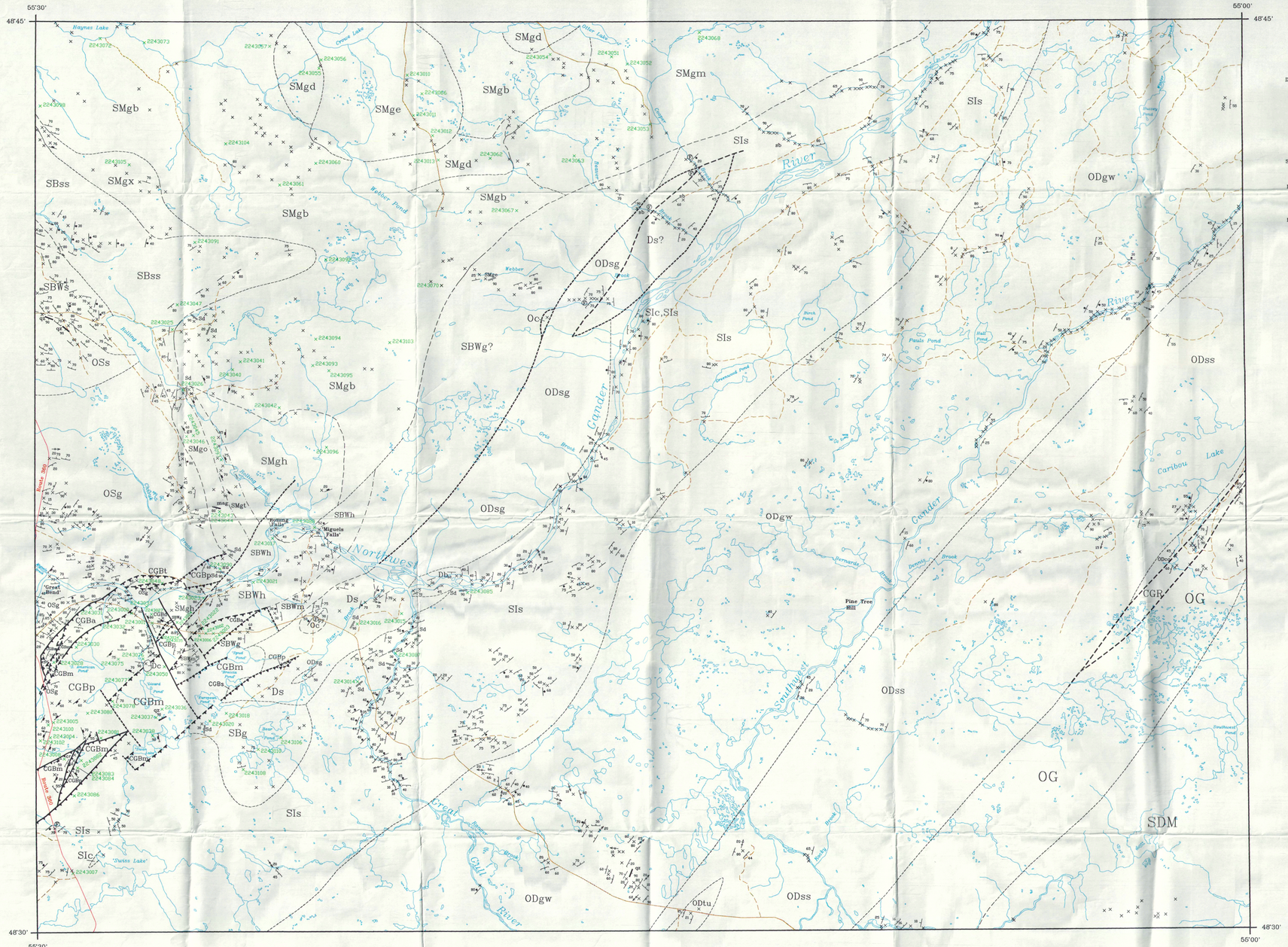
GEOCHEMICAL SAMPLE SITES IN THE EASTERN POND (2D/11) MAP AREA, CENTRAL NEWFOUNDLAND



GOVERNMENT OF
NEWFOUNDLAND AND LABRADOR
Department of Mines and Energy
Geological Survey

LEGEND

DEVONIAN? OR YOUNGER

Db Red-brown, very thick-bedded, coarse-grained breccia containing imbricated slate clasts (derived from Unit Sd) and well-rounded, polymict pebbles and cobbles derived mainly from Units SBWg, SBWh, OGSs and OGgw

Ds Grey to buff, very thick-bedded, feldspathic sandstone, pebble and cobble conglomerate, red, brown and black shale; contains conspicuous chert clasts derived from Unit Oc

Dc Brown, very thick-bedded, poorly sorted, oligomictic, peridotite-cobble and -pebble conglomerate and coarse-grained sandstone

SILURIAN OR YOUNGER

Sd Black, fine- to medium-grained diabase dyke

LATE SILURIAN? TO EARLY DEVONIAN

MIDDLE RIDGE GRANITE

SDM Medium-grained, equigranular, muscovite – biotite ± garnet granite

EARLY SILURIAN TO EARLY DEVONIAN

MT. PEYTON INTRUSIVE SUITE (SM)

SMgm Pink, medium- to fine-grained, locally miarolitic, leucocratic biotite granite

SMge Pink to grey, fine-grained, equigranular, biotite granite

SMgd Buff to grey, medium-grained, equigranular, hornblende – biotite granodiorite

SMgx Pink to buff, medium-grained, equigranular, leucocratic, muscovite – biotite granite locally displaying a strong euhedral foliation; commonly contains xenoliths of migmatized sediment

SMgb Grey to black, mainly fine- to medium-grained, biotite – hornblende ± clinopyroxene gabbro; contains local patches of coarse-grained pyroxene ± biotite gabbro

SMgh Grey, medium- to coarse-grained, locally layered, hornblende – pyroxene gabbro; minor layered olivine gabbro adjacent to Unit SMgt

SMgt Grey, medium- to coarse-grained, schistic troctolite containing thin leucocratic and melanocratic, discontinuous layers and lenses

SMgo Layered medium- to coarse-grained, locally highly gossanous, olivine-rich gabbro, leucocratic olivine gabbro and minor anorthositic gabbro. Cut by several peridotite and clinopyroxenite pipes

SBg Bear Pond gabbro: White, coarse-grained and black, medium-grained, hornblende gabbro and black diabase; gabbro locally displays a weak mineral alignment. Possibly equivalent to Unit SMgh

INDIAN ISLANDS FORMATION?

SIc Pebble conglomerate lenses within Unit SIs

SIs Medium- to very thick-bedded, variably-cleaved, grey, buff, red and green sandstone, siltstone, shale and conglomerate containing felsic volcanic, grey sandstone and quartz-veined sandstone clasts; local calcareous horizons containing corals, crinoids and brachiopods

BOTWOOD GROUP

WHWAM FORMATION (SBW)

SBWs Thin- to thick-bedded, well-cleaved, red and green siltstone, sandstone, conglomerate and breccia containing felsic volcanic, grey sandstone and quartz-veined sandstone clasts

SBWm Red and green, weakly cleaved, siltstone and sandstone locally containing mud-cracks and rain-pits

SBWg Grey to green, well-cleaved, locally mud-crack-bearing and rippled sandstone and siltstone. SBWh: hornfels

LATE ORDOVICIAN to EARLY SILURIAN

BADGER GROUP or EQUIVALENT ? (SB)

SBss Buff-weathering, grey, mud-crack-bearing, boudinaged, sandstone hornfels; SBsm: migmatized equivalents

MIDDLE TO LATE ORDOVICIAN

Oc Black, pyritic, ribbon chert containing laminae of cleaved graphitic shale that locally contain Middle Ordovician graptolites

DAVIDVILLE GROUP (OD)

ODsg Black, graphitic, well-cleaved shale and siltstone containing Middle Ordovician graptolites

ODgw Fine- to coarse-grained, dark well-cleaved greywacke, locally containing shale intraclasts, interbedded with grey to black siltstone, shale, and minor conglomerate lenses

ODss Grey to black shale and minor siltstone and rare interbedded fine- to medium-grained greywacke; locally graphitic

ODco Fine- to coarse-grained conglomerate containing predominantly quartz-porphyry clasts

ODtu Strongly cleaved, grey to buff, quartz – feldspar-crystal tuff

EARLY ORDOVICIAN OR OLDER

SPRUCE BROOK FORMATION (OS)

OSg Grey to black, polydeformed, greywacke sandstone, siltstone

OSs White-weathering, cream, green and purple, thick-bedded, highly quartz-veined, quartz-rich sandstone and minor green shale and siltstone

GANDER GROUP (OG)

OG Semipelite and pelite containing minor psammite and quartzite and rare concordant amphibolite bands

CAMBRIAN to EARLY ORDOVICIAN ?

GANDER RIVER COMPLEX (CGR)

CGR Serpentinite locally containing talc – magnesite schist and tremolite aggregates

GREAT BEND ULTRAMAFIC COMPLEX (CGB)

CGBe Melange of sheared, cleaved siltstone and ultramafic rock

CGBr Fault-brecciated, red, silicified ultramafic rock

CGBt Chloritized basalt flows and schistose mafic tuff

CGBa Amphibolite and chloritized amphibolite schist, probably of gabbroic origin, and mylonitic serpentinite

CGBm Mainly schistose magnetite containing minor chromite layers and pods

CGBd Massive to schistose, layered, serpentinized dunite and harzburgite

CGBp Massive to sheared, layered to uniform, serpentinized peridotite; includes dunite and minor harzburgite, sheared equivalents

SYMBOLS

Geological contact (defined, approximate, assumed, transitional)

Fault (defined, approximate, assumed)

Thrust (defined, approximate, assumed)

Geochemical sample site ... x 2241234

Outcrop ... x

Bedding (tops known, unknown, overturned, vertical) ... 50

Primary igneous layering or mineral alignment (inclined, vertical)

Cleavage (first, second; inclined, vertical) ... 50

Shear or schistic fabric (inclined, vertical) ... 50

Fold axis (first, second, third generation)

Glacial striation (single, earlier (1), later (2))

Vein, Dyke

Fossil locality

Mineral occurrences

gold	au	arsenopyrite	asp
chromite	cr	magnetite	mag
pyrite	py	quartz vein	qz
stibnite	sb	gossan	go

Bedrock geochemical samples collected by W. Lawson Dickson during 1991.

Geological base map modified from Blackwood (1981), Dickson (1991), Eckstrand, O.R., and Cogulu, E.H. (1993), and J.P. Hayes (Unpublished data, 1992).

Cartography by W. Lawson Dickson.

This project is a contribution to the Canada – Newfoundland Cooperation Agreement on Mineral Development 1990 – 1994. Project carried out by the Newfoundland Department of Natural Resources.

References Cited

Blackwood, S.P. (1980) West Gander Rivers and Dead Wolf Pond (NTS 2D/1E and 2D/11W), Newfoundland. Newfoundland Department of Mines and Energy, Mineral Development Division Map 81100.

Dickson, W.L. (1991) Geology of Eastern Pond (NTS 2D/11W), Newfoundland. Newfoundland Department of Mines and Energy, Geological Survey Map 91-18.

Eckstrand, O.R. and Cogulu, E.H. (1993). Geology of the Caribou Hill intrusion, Mt. Peyton Complex, central Newfoundland. In Report of Activities for 1993. Newfoundland Department of Mines and Energy, Geological Survey Branch Report, pp. 116–118.

Recommended Citation

Dickson, W.L. (1996) Geochemical data and sample sites from the Eastern Pond (NTS 2D/11), Mount Peyton (NTS 2D/14) and Botwood (NTS 2E/3) map areas Central Newfoundland. Newfoundland Department of Mines and Energy, Geological Survey Open File NFLD/2614.

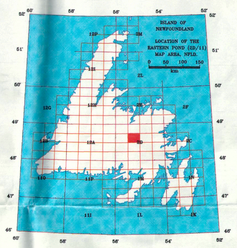
OPEN FILE NFLD/2614

Geological Survey Map 96-26. Accompanies Open File NFLD/2614.

Released 1996. Revised version released February, 1997

Scale: 1:50,000

0 1 2 3 km



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