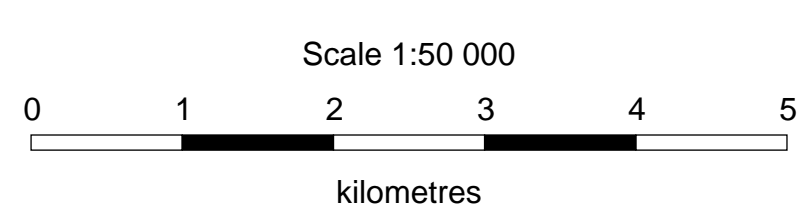


56° 30' 49° 30' 20' 10' 56° 00' 49° 30'

**MAP 96-32
Open File 012H/1367**

**GEOLOGY OF THE ROBERTS ARM BELT BETWEEN HALLS BAY AND LAKE BOND,
NEWFOUNDLAND (PARTS OF 12H/1 AND 8)**



LEGEND

- Early Silurian to Late Devonian**
Daves Pond Granite
SDG Grey to pink, medium- to fine-grained granite, quartz-monzonite and granodiorite (Dean, 1977a)
- TWIN LAKES COMPLEX (SDTL)**
SDTL Diorite, quartz diorite, tonalite, granodiorite, gabbro and amphibolite (comp. Dean, 1977b)
- SDUa Granitoid intrusive rocks (Swinden and Sacks, 1986)
SDUg Gabbro, diorite and diabase (comp. Swinden and Sacks, 1986)
- Early Silurian to Early Devonian**
Skull Hill Quartz Syenite
SDS Quartz syenite, quartz monzonite, diorite and gabbro (comp. Evans et al., 1994)
- Early Silurian**
TOPSAILS INTRUSIVE SUITE
EST Granite, granodiorite, syenite and gabbro, including peralkaline intrusions and minor volcanic rocks (comp. Whalen and Currie, 1988)
- Late Ordovician to Early Silurian**
BADGER GROUP
Sarsom Formation
OSBS Grey, well-bedded greywacke, including conglomerate layers; sedimentary structures indicate deposition in a mainly turbidite environment (comp. various sources)
- Early Ordovician to Late Silurian**
OSMS Metamorphic rocks: quartzite, andalusite- and staurolite-bearing pelite, and carbonaceous shale of uncertain derivation (Swinden and Sacks, 1986)
- Early to Middle Ordovician**
Loon Pond pluton
OLP Pink to pinkish-grey, very fine- to medium-grained quartz monzonite, granodiorite and granite (comp. Bostock, 1988)
- ROBERTS ARM GROUP**
(no stratigraphic order implied)
ORA Greyish-green to grey and white rhyolite and dacite flows, agglomerate, tuff and sills; includes quartz-syenitic schist (Dean, 1977c; Swinden, 1987)
ORVa Basalt, pillow lava, pillow breccia and greenschist; mafic breccia, sedimentary rocks and felsite (comp. Bostock, 1988)
ORVb South Brook basalt
ORVc Pillow lava and massive basalt (Swinden and Sacks, 1986)
ORVd Gullbridge felsic volcanic rocks
ORVe Rhyolitic ash-flow tuff, lesser rhyolite flows, tuff, ferruginous chert, and minor mafic schist (Swinden and Sacks, 1986)
ORVf Burnt Island basalt
ORVg Pillow basalt, mafic tuff and chloritic schist (Swinden and Sacks, 1986)
ORVh Gull Hill sedimentary rocks
ORVi Volcaniclastic chert, ferruginous chert, sandy and fine conglomeratic sedimentary rocks (Swinden and Sacks, 1986)
ORVj Baker Brook basalt
ORVk Pillow basalt and massive basalt (Swinden and Sacks, 1986)
ORVl Crescent Lake Formation
ORVm Red and green shale, chert and tuff; grey to black tuffaceous greywacke and shale; minor conglomerate horizons and basalt flows near the base (Dean, 1977c)
- Early Ordovician**
HALL HILL - MANSFIELD COVE COMPLEX (EOHs, EOHh)
EOHs Dominantly plagiogranite, lesser granodiorite, alkalic, mafic dykes (Swinden, 1987)
EOHh Hall Hill Complex (EOHh)
EOHm Dominantly mafic and intermediate intrusive rocks; includes minor pegmatitic gabbro, pillow lava, pyroxenite and plagiogranite (Swinden, 1987)
EOHn Gabbro, pegmatitic gabbro, and pyroxenite; may be related to the Hall Hill Complex (EOHh) (comp. Swinden and Sacks, 1986)

Geology by H.S. Swinden and P.E. Sacks, 1985, 1986; additional legend information as referenced.
Geological mapping carried out by the Geological Survey of Canada under the Canada-Newfoundland Mineral Development Agreement 1984-1989.
Base map in digital format published by Surveys and Mapping Branch, Natural Resources Canada, Ottawa.
Contour interval 10 metres.
Approximate magnetic declination 1989 for centre of 12H/8 was 25°03'W, decreasing 7.4' annually.
Copies of this map may be obtained from the Geoscience Publications and Information Section, Geological Survey, Department of Mines and Energy, P.O. Box 8700, St. John's, Newfoundland, Canada A1B 4J6.
Digital compilation and cartography by J.S. Ash, S.P. Colman-Sadd, W.L. Dickson, C. Saunders and T. Pallaunavag.
Recommended citation:
Swinden, H.S. and Sacks, P.E.
1986. Geology of the Roberts Arm belt between Halls Bay and Lake Bond, Newfoundland (parts of NTS 12H/1 and 8). Map 96-32, Scale 1:50 000. Newfoundland Department of Mines and Energy, Geological Survey, Open File 012H/1367.

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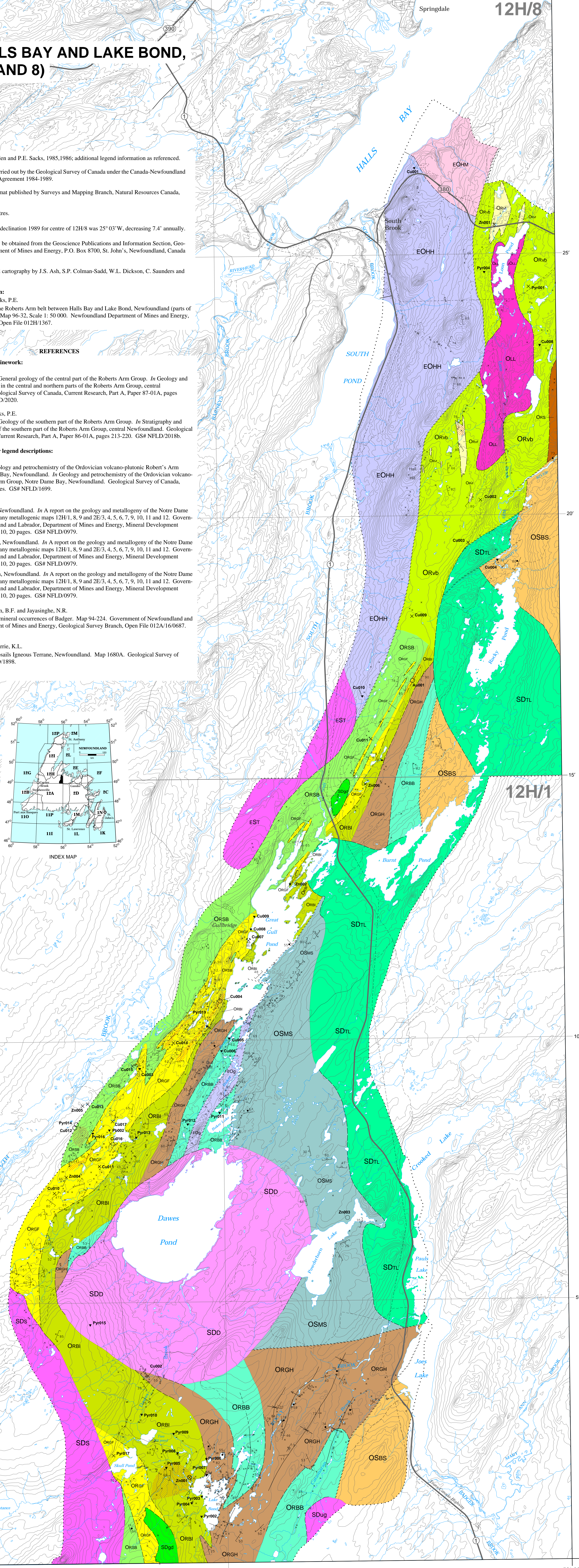
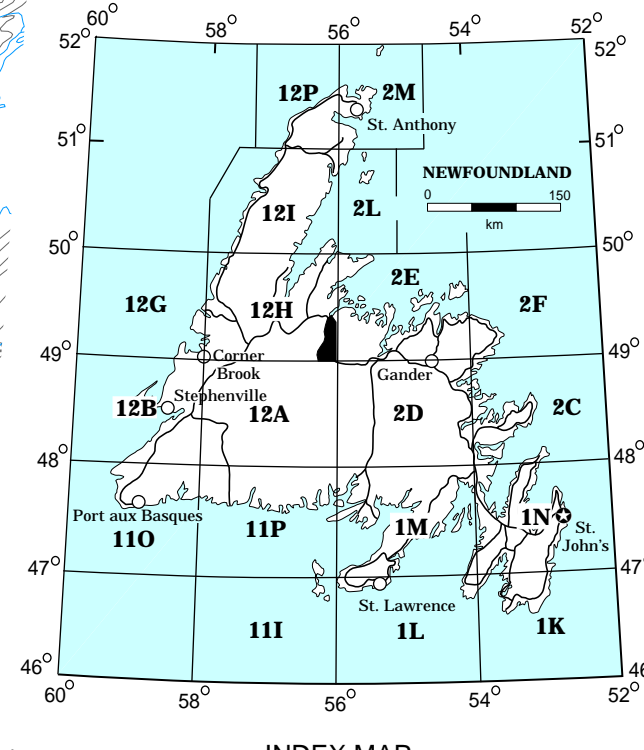
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- SYMBOLS**
- Geological contact: defined, approximate, assumed
- Fault
- Anticline
- Syncline
- Bedding, tops known: inclined, overturned
- Bedding, tops unknown
- Pillow lava layering (angle of dip not measured)
- Cleavage, first generation
- Cleavage, second generation
- Cleavage or foliation, generation unspecified
- Rock exposure
- Alteration Zone
- Limit of mapping
- Mineral occurrence symbols (number in brackets is status code on table below):
- Developed Prospect (2)
- Past Producer - dormant (3)
- Prospect (5)
- Showing (6)
- Indication (7)

MINERAL OCCURRENCES

NMI Number	Deposit Name	Status	Minerals and/or Rocks Present
12H01/Cu002	Baily Showing	6	po, ppr, cp, sp, gn
Cu003	North Road Showing	7	cp
Cu004	Southwest Shaft	5	cp, po, ppr
Cu005	Baker Brook #1	7	cp, ppr, hem, (az, mal)
Cu006	Baker Brook #2	7	cp, po, (az, mal)
Cu007	Gullbridge Mine	3	cp, ppr, po, (mag, il, sp, gn)
Cu008	Mineral Point North #1	7	ppr, po, cp
Cu009	Mineral Point North #2	7	ppr, po, cp
Cu010	Daves Pond West Copper	6	ppr, gn, (Ag)
Cu011	Starkes Pond South Copper	6	ppr, cp
Cu012	Starkes Pond West Copper #1	5	ppr, cp, gn, sp, (Ag)
Cu013	Starkes Pond West Copper #2	6	ppr, cp, sp
Cu014	San Occurrence	6	ppr, cp
Cu015	Diamond Pond South Copper	6	ppr, cp
Cu016	Starkes Pond South Road	6	ppr, cp
Cu017	Starkes Pond North Copper	6	ppr, cp, gn
Py002	Starkes Pond West Lead	7	ppr, gn, cp, sp, (Ag)
Py002	Lake Bond Southwest	7	ppr
Py003	Lake Bond West #1	7	ppr, po, cp, sp
Py004	Lake Bond West #2	7	ppr, cp, sp, gn
Py005	Lake Bond Northwest #1	7	ppr, po, cp, sp, gn
Py006	Lake Bond North #1	7	ppr, cp, gn
Py007	Lake Bond North #2	7	ppr, cp
Py008	Lake Bond Northwest #2	7	ppr, cp
Py009	Two Bit Pond East	7	ppr, cp, sp
Py010	Two Bit Pond Northwest	7	ppr, cp
Py011	Baker Lake	7	ppr
Py012	Baker Lake West	7	ppr, po
Py013	Starkes Pond East	7	ppr, cp
Py014	Starkes Pond West	5	ppr, cp, sp
Py015	Daves Pond Southwest	7	ppr, po, cp, (Au, Ag)
Py016	Starkes Pond Road	7	ppr
Py017	Skull Pond West	6	ppr, sp
Py019	Great Gull Pond Southwest	7	ppr, po, cp
Zn001	Lake Bond	2	ppr, cp, gn, po, (Au, Ag)
Zn002	Great Gull Pond North	6	ppr, cp, sp
Zn003	Powderhorn Lake	5	po, ppr, cp, sp
Zn004	Daves Pond West Zinc	6	ppr, gn, cp, sp, (Ag)
Zn005	Starkes Pond West Zinc	6	ppr, po, cp, (Ag, Au)
Zn006	Handcamp - MAC Zinc	6	ppr, po, sp, gn, cp, bo, mag, spec, ba
12H08/Au001	Handcamp	5	ppr, cp, gn, sp, (cov, pt, ba, Au, Ag)
Cu001	South Brook	7	ppr, cp
Cu002	Tommy's Arm River	6	cp, ppr, mo
Cu003	Moose Brook	6	cp, ppr, mo
Cu004	Rocky Pond	7	cp, ppr
Cu008	Kaile Big	7	cp, sp, ppr
Cu009	Busy Big	6	ppr
Cu010	Angle Zone	7	cp, gn, sp, mal, (Ag)
Cu011	Handcamp Central Zone	6	ppr, cp, sp
Py001	Loon Pond South	6	ppr, mag
Py004	Loon Pond	7	ppr, po, mag
Zn001	Loon Pond West	6	ppr, cp, gn, cp, (cov, Au, Ag)

Commodity Abbreviations	Mineral and Rock Abbreviations
Cu	Copper
Au	Gold
Pb	Lead
Zn	Zinc
Ag	silver-bearing minerals
pt	platinum
ba	barite
hem	hematite
cov	covellite
cp	chalcopyrite
gn	galena
hem	hematite
il	illite
mag	magnetite
mal	malachite
mo	monymonite
po	pyrite
ppr	pyroxenite
py	pyroxene
sp	spinelite
spec	specularite



56° 30' 49° 30' 20' 10' 56° 00' 49° 30'