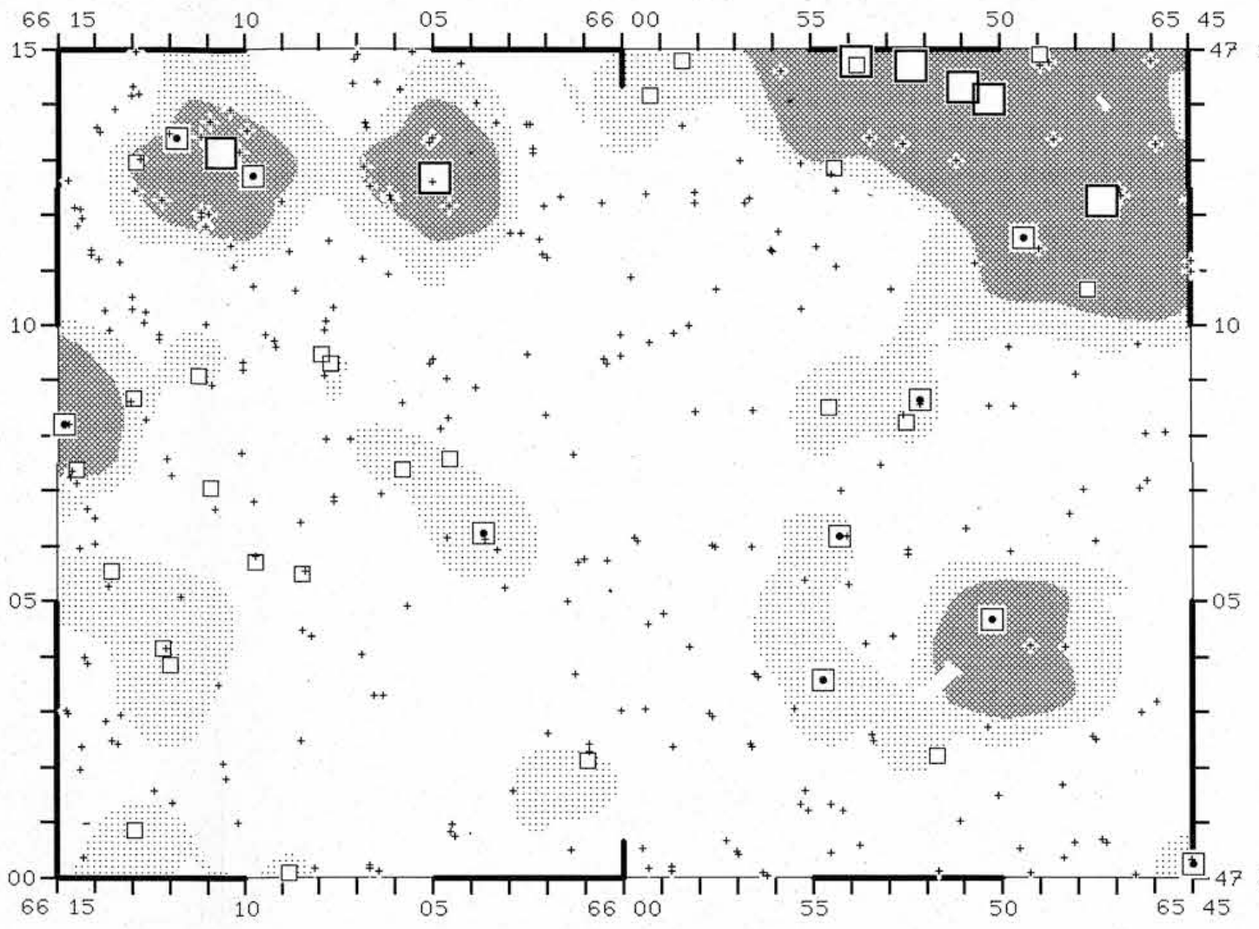


REGIONAL TREND MAP

0 5 10 15
KILOMETERS - SCALE 1:250,000

GOLD
IN
STREAM SEDIMENTS

PPB		%TILE
89.0 -		- MAX
	□	
18.0 -		- 98
	⊡	
2.0 -		- 95
	□	
1.0 -		- 80
	+	
0.5 -		- MIN

335 SAMPLES

PPB		%TILE
89.0	▩	MAX
2.0	▨	95
1.0	□	80
0.5		MIN

335 SAMPLES

GSC OPEN FILE 1954
CANADA - NEW BRUNSWICK
MINERAL DEVELOPMENT
AGREEMENT (1984-1989)

Contribution to Canada-New Brunswick Mineral Development Agreement 1984-89, a subsidiary agreement under the Economic and Regional Development Agreement. Project funded by the Geological Survey of Canada.

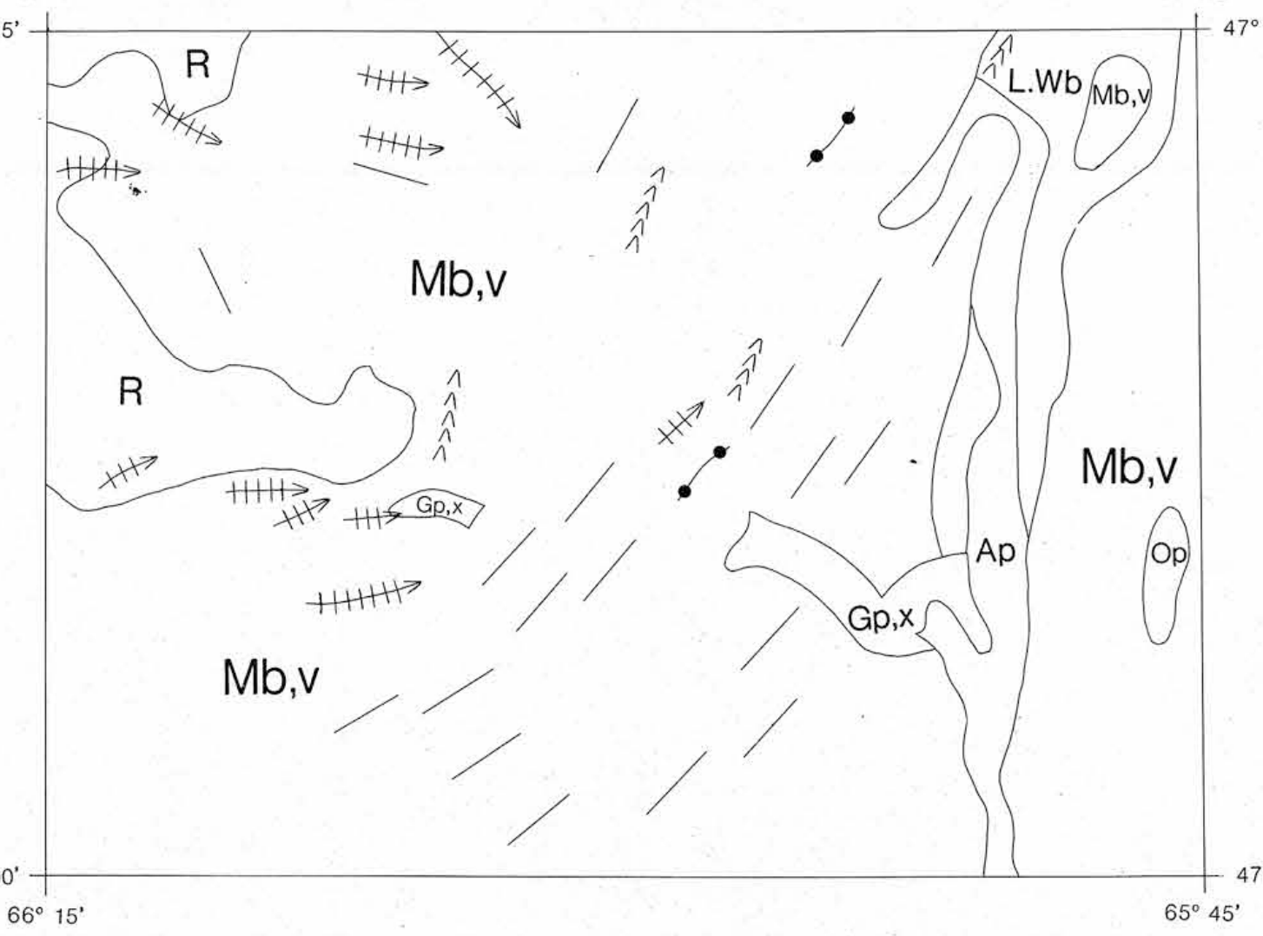
Contribution à l'Entente auxiliaire Canada/Nouveau-Brunswick sur l'exploitation minérale 1984-89 faisant partie de l'Entente de développement économique et régional. Ce projet a été financé par la Commission géologique du Canada.

Natural Resources and Energy
New Brunswick

Ressources naturelles et Énergie
Nouveau-Brunswick

Energy, Mines and Resources Canada
Énergie, Mines et Ressources Canada

Canada



0 5 10 15
KILOMETERS - SCALE 1:250,000

SURFICIAL GEOLOGY

Ap	Alluvial Sediments: sand,gravel,some silt, minor clay and organic sediment
Op	Organic Sediments: peat, muck, minor silt and fine sand
L.Wb	Lacustrine and Marine Sediments: sand silt, minor clay and gravel, patchy thin veneer of organic sediment
Gp,x	Glaciofluvial Sediments: sand, gravel, minor silt and till
Mm	Morainal Sediments: loamy ablation till, some lodgment till, minor silt, sand, gravel and boulders
Mb,v	Morainal Sediments: loamy lodgment till, minor ablation till, silt, sand, gravel and rubble
R	Bedrock: various lithologies and ages

SYMBOLS

Fluted bedrock and drumlinoid ridges ....
Esker .... >>>>>
Meltwater channel .... ++++>
Moraine ridge ....

Source of information:

Rampton, V.N. 1984, Surficial geology, New Brunswick; Geological Survey of Canada, Map 1594A, Scale 1:500,000

GEOLOGICAL SURVEY OF CANADA
MINERAL RESOURCES DIVISION
EXPLORATION GEOCHEMISTRY SUBDIVISION

CONTRACTORS

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Sediment Analysis:	Bondar-Clegg and Company Ltd., Ottawa Chemex Labs Limited, Vancouver (Au only)
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Cartography:	GSC – Geological Information Division Terra Surveys Ltd., Ottawa
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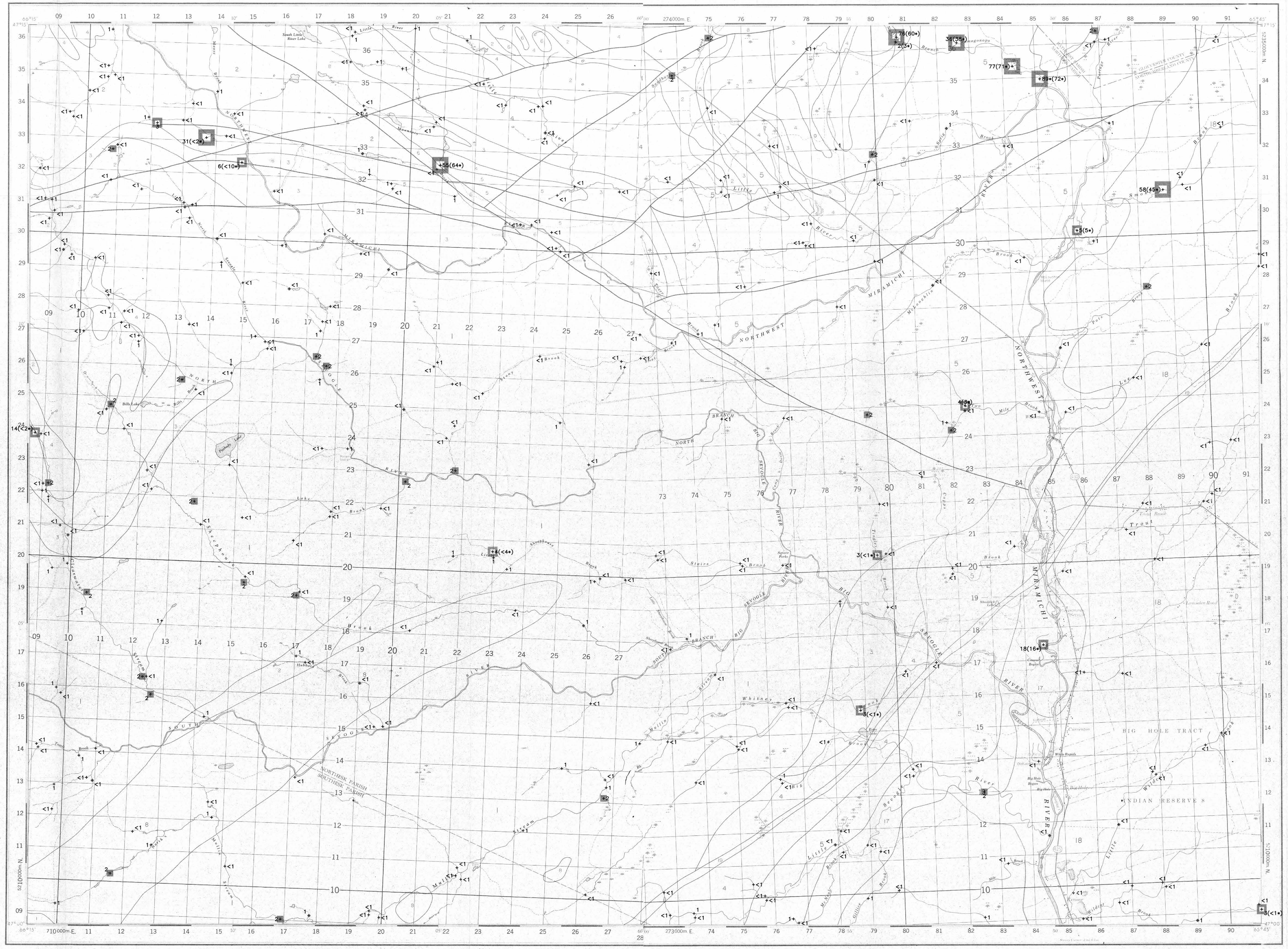
Contribution to Canada – New Brunswick Mineral Development Agreement 1984 – 1989, a subsidiary agreement under the Economic and Regional Development Agreement. Project funded by the Geological Survey of Canada.

CONCENTRATION		FREQUENCY
19 to 89	⊞	N= 7(2.1%)
3 to 18	⊞	N= 10(3.0%)
2	■	N= 26(7.8%)
0 to 1	+	N= 292(87.2%)

GEOLOGICAL SURVEY OF CANADA
COMMISSION GÉOLOGIQUE DU CANADA

Energy, Mines and Resources Canada
Énergie, Mines et Ressources Canada

NTS 21O/1 (E½); 21P/4 (W½)

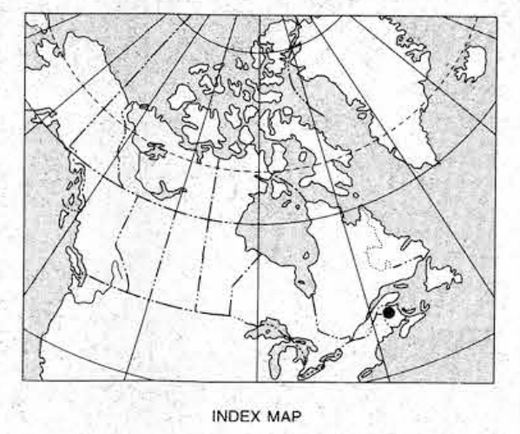


GOLD (ppb)
STREAM SEDIMENTS
GSC OPEN FILE 1954
REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 117-88
CANADA – NEW BRUNSWICK
MINERAL DEVELOPMENT AGREEMENT (1985 – 1989)

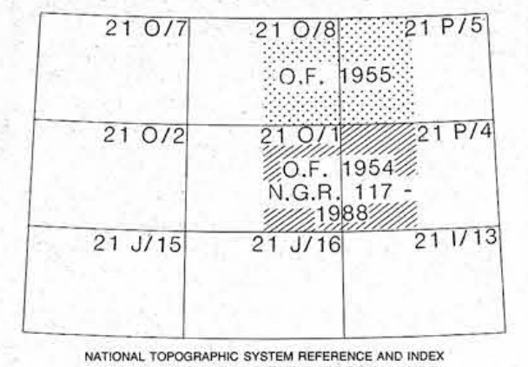
STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
NORTH-CENTRAL NEW BRUNSWICK, 1988

Scale 1:50 000 - Échelle 1/50 000
Kilometres 1 0 1 2 3 4 Kilomètres

Universal Transverse Mercator Projection
Projection transverse universelle de Mercator



INDEX MAP



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

GOLD (ppb)
STREAM SEDIMENTS
GSC OPEN FILE 1954
NORTH-CENTRAL NEW BRUNSWICK, 1988

GEOLOGY LEGEND[1]

JURASSIC

19*	Jm	47**	olivine diabase

PENNSYLVANIAN

18	Ps2	33	CLIFTON FORMATION: grey and red sandstone, conglomerate, siltstone, and shale, minor coal
17	Ps1	33	BATHURST FORMATION: red and grey sandstone, siltstone, shale, and conglomerate, minor coal

MISSISSIPPIAN

16	Ms	31	Red and brown sandstone, shale and conglomerate

DEVONIAN

15	Dfv	26	Maroon and orange flow-banded and massive rhyolite, rhyolite agglomerate, tuff, and breccia, dacite(?)
14	Dmv	26	Amygdaloidal basalt, basaltic tuff and breccia, palagonite tuff, andesite, minor shale, mudstone and siltstone
13	Ds1	26	Calcareous mudstone, siltstone, sandstone, maroon and green sandstone, siltstone, conglomerate, limestone, includes minor felsic and mafic volcanic rock
12	Df	25	Granite, adamellite, granodiorite, quartz monzonite, quartz feldspar porphyry and related rocks
11	Dm	25	Gabbro and diabase

SILURIAN

10	Ss2	20	CHALEUR GROUP: calcareous siltstone, sandstone and shale, minor limestone, red slate, conglomerate (includes Perham Formation)

ORDOVICIAN AND/OR SILURIAN

9	OSs	19	Argillaceous limestone, calcareous shale

ORDOVICIAN

8	Of2	15	Gneissic and cataclastic granite
7	Of1	15	Rhyolite and quartz feldspar metaporphyry (includes rocks of Ofv1 and Ofv2)
6	Om1	15	Metagabbro and metadiabase

ORDOVICIAN AND OLDER(?)

5	Os3	15	Dark grey phyllite, graphitic slate, red and green manganiferous slate and chert, feldspathic lithic and quartzose greywacke and iron formation, minor limestone and conglomerate
4	Omv2	15	Metabasalt, pillow metabasalt, basaltic metatuff, minor metatrachyte (may include rocks of Os2, Ofv1, and Ofv2)
3	Ofv2	15	Quartz and quartz feldspar metaporphyry, quartz sericite schist, quartz chlorite sericite schist, crystal metatuff (includes rocks of Os2 and Omv1)
2	Ofv1	15	Rhyolite metatuff, metaphyllite, rhyolite metaporphyry, quartz sericite, quartz chlorite sericite schist (includes rocks of Ofv2, Omv, Os1 and Of1)
1	Os2	15	Grey phyllite, metaquartzite, metagreywacke, minor limestone, graphitic schist, hornfels (may include rocks of Os3, Ofv, and Omv)

[1] This geology legend is common for GSC OPEN FILES 1953,1954,and 1955

* Map unit number for rock type

** A mnemonic code assigned to rock type and age recorded as part of field observations

SYMBOLS

Geological boundary ....
Fault ....
No data .... +*
Single analysis, 10g sample weight .... + 27
Single analysis, <10g sample weight .... + 27*
Repeat analysis, both samples 10g .... + 27 (14)
Repeat analysis, first sample 10g, repeat < 10g .... + 27(14*)
Single analysis, 10g sample, less than detection limit of 1 ppb .... + < 1
Field duplicate site .... *

Geology base derived from:

New Brunswick Department of Natural Resources (1979) Geological Map of Northern New Brunswick, Map NR-3, Scale 1: 500,000

Elevation in feet above mean sea level

Magnetic declination for 1989 ranges from 21°05'W, decreasing 2.8' annually, in the southwest corner of the map area, to 21°29'W, decreasing 3.2' annually, in the northeast corner of the map area.

GOLD (ppb)
STREAM SEDIMENTS
GSC OPEN FILE 1954
NORTH-CENTRAL NEW BRUNSWICK, 1988