

LEGEND

TRIASSIC - JURASSIC

FUNDY GROUP

- Dxw** NORTH MOUNTAIN FORMATION*: basalt.
- Ts** BLIMOND FORMATION*: siltstone, shale.
- Lw** WOLFVILLE FORMATION*: red conglomerate, shale, sandstone.

unconformity

CARBONIFEROUS - DEVONIAN

EARLY CARBONIFEROUS

WINDSOR GROUP*

- Cw** Undivided: shale, arkose, limestone, gypsum, anhydrite, minor salt.

EARLY CARBONIFEROUS - LATE DEVONIAN(?)

HORTON GROUP*

- Ch** Undivided: sandstone, siltstone, and conglomerates.

unconformity

DEVONIAN

LATE DEVONIAN

SOUTH MOUNTAIN BATHOLITH
(listed in order of increasing mafic mineral content; see accompanying list for unit names.)

- MUSCOVITE LEUCOGRANITE***: buff, orange, pink, red, white; predominantly fine- to medium-grained, minor coarse-grained porphyritic, equigranular or pegmatitic; 3-28% muscovite, 0-8% topaz, 0-2% biotite, 0-2% andalusite, trace cordierite*.
- FINE-GRAINED LEUCOGRANITE***: buff, orange, pink, red, white; predominantly fine- to medium-grained, minor coarse-grained; variably porphyritic and equigranular, minor pegmatitic; 3-13% muscovite, 2-7% biotite, 0-trace cordierite and andalusite; metasedimentary xenoliths* are rare.
- COARSE-GRAINED LEUCOGRANITE***: buff, orange, white, pink; predominantly medium- to coarse-grained, minor fine-grained; megacrystic or seriate; 3-28% muscovite, trace 5% cordierite, 0-trace andalusite; metasedimentary xenoliths are rare.
- MUSCOVITE-BIOTITE MONOZONITE***: light to medium grey, minor buff or orange; predominantly medium- to coarse-grained, minor fine-grained; megacrystic or seriate; 7-12% biotite, 1-3% muscovite, trace 5% cordierite; metasedimentary xenoliths are common.
- BIOTITE MONOZONITE***: light to medium grey; predominantly medium- to coarse-grained; megacrystic or seriate; 10-17% biotite, trace 1% muscovite, trace 1% cordierite; metasedimentary xenoliths are common to abundant.
- BIOTITE GRANDIORITE***: light to medium grey; predominantly medium- to coarse-grained; minor fine-grained; megacrystic or seriate; 15-25% biotite, trace muscovite, trace cordierite; metasedimentary xenoliths are abundant.
- MAFIC PORPHYRY***: light, medium or dark grey or brownish-grey; predominantly fine- to medium-grained, minor coarse-grained; porphyritic; 10-20% biotite, trace muscovite; metasedimentary xenoliths are abundant.

UNDIFFERENTIATED ROCKS (uncertain age)

- U** granitoid rocks with abundant xenoliths, biotite ± garnet clots and schlieren (may be "contaminated" South Mountain Batholith granitoids with abundant assimilated Meguma Group metasedimentary rocks).

MIDDLE DEVONIAN OR EARLIER(?)

- Dx** MAFIC INTRUSIONS*: gabbro, diorite, minor quartz diorite.

EARLY DEVONIAN

- Dr** TORBROOK FORMATION*: shale, siltstone, quartzite, minor shaly and/or fossiliferous limestone and iron formation.

SILURIAN

- Sv** NEW CANAAN FORMATION*: andesite, siltstone, slate, limestone and shaly limestone.
- Sr** KENTVILLE FORMATION*: shale, siltstone, slate.

ORDOVICIAN - SILURIAN

- OSw** WHITE ROCK FORMATION*: quartzite, slate, siltstone, rhyolite, basalt, andesite.
- OSw** Undivided White Rock and Kentville formations.*

CAMBRIAN - ORDOVICIAN

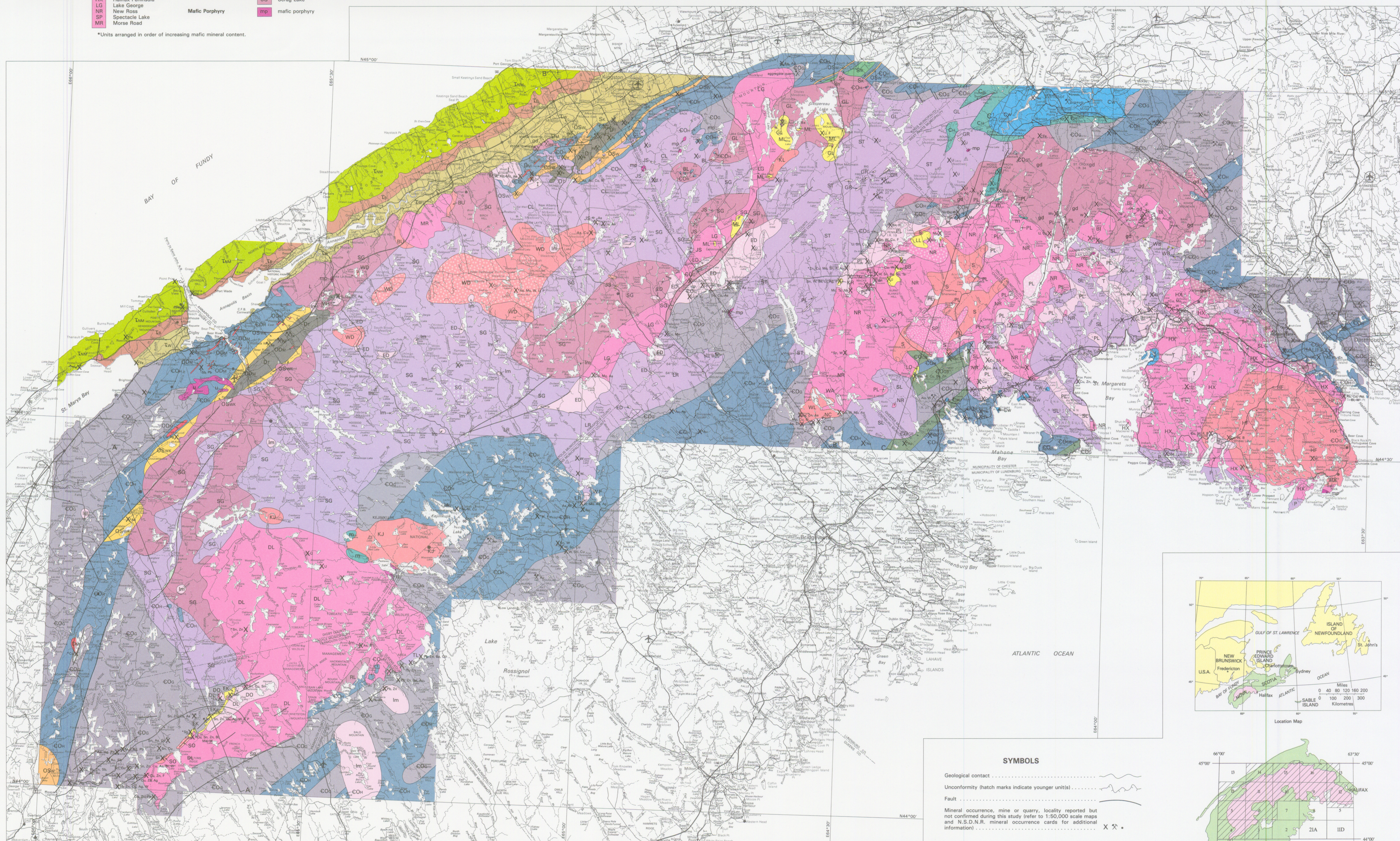
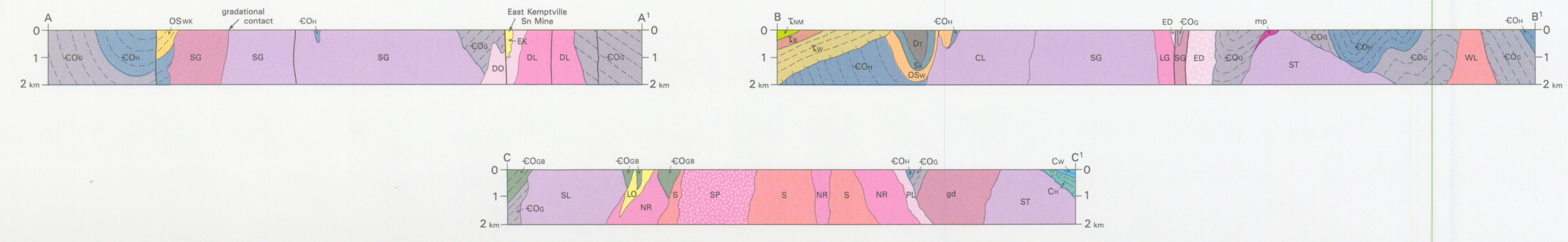
MEGUMA GROUP

- COs** HALIFAX FORMATION*: predominantly slate with minor greywacke.
- COs** GREEN BAY FORMATION*: slate and greywacke.
- COs** GOLDENVILLE FORMATION*: predominantly greywacke with minor slate.

SUMMARY OF UNIT NAMES

ROCK TYPE*	UNIT	UNIT NAME	ROCK TYPE*	UNIT	UNIT NAME	
Muscovite Leucogranite	BB	Burnt Blanket	Muscovite-Biotite Monzogranite	BU	Button Brook	
	EX	East Kempville		HF	Harrisfield	
	KR	Keddy-Reeves		JS	Joe Simon	
	LL	Lake Lewis		KJ	Kejinkujik	
	LO	Long Lake		KL	Kerr Lake	
	ML	Murphy Lake		S	Sherwood	
	WB	Wash Brook		SO	Solomon Lake	
				WD	West Dalhousie	
				WL	White Lake	
Fine- to Medium-Grained Leucogranite	Im	Leucomonzogranite	Biotite Monzogranite	CL	Cloud Lake	
	DO	Dog Lake		GL	Gaspereau Lake	
	ED	East Dalhousie		LR	Little Round Lake	
	GR	Gold River		P	Peggy's Cove	
	IN	Inglisville		SG	Scrag Lake	
	MH	Mickey Hill		SL	Sandy Lake	
	JS	Joe Simon		ST	Salmontail	
	NC	New Cornwall		TL	Tobacco Lake	
	PL	Penikese Lake				
	SB	Sabeana Lake				
T	Tantallon	Biotite Grandiorite	gp	granodiorite		
WA	Walden		BL	Boat Lake		
WF	Westfield		CL	Gaspereau Lake		
			L	Lequille		
			RL	Roseway Lake		
			SG	Scrag Lake		
Coarse-grained Leucogranite	BI		Big Indian Lake	Mafic Porphyry	mp	mafic porphyry
	DL		Davis Lake			
	HX		Halifax Peninsula			
	LG		Lake George			
	NR	New Ross				
	SP	Spectacle Lake				
MR	Morse Road					

*Units arranged in order of increasing mafic mineral content.



LEGEND

TRIASSIC - JURASSIC

- FUNDY GROUP**: sedimentary and volcanic rocks.

CARBONIFEROUS - DEVONIAN

- HORTON AND WINSOR GROUPS**: sedimentary and carbonate rocks.

DEVONIAN

SOUTH MOUNTAIN BATHOLITH

- STAGE 2 PLUTONS**: two-mica monzogranite, coarse- and fine-grained leucogranite, leucogranite.
- STAGE 1 PLUTONS**: biotite granodiorite, biotite monzogranite, minor fine-grained leucogranite.

CAMBRIAN - EARLY DEVONIAN

- WHITE ROCK, KENTVILLE, TORBROOK FORMATIONS**: metasedimentary and metavolcanic rocks.
- MEGUMA GROUP**: flyschoid metasedimentary rocks.

STAGE 2 PLUTONS:

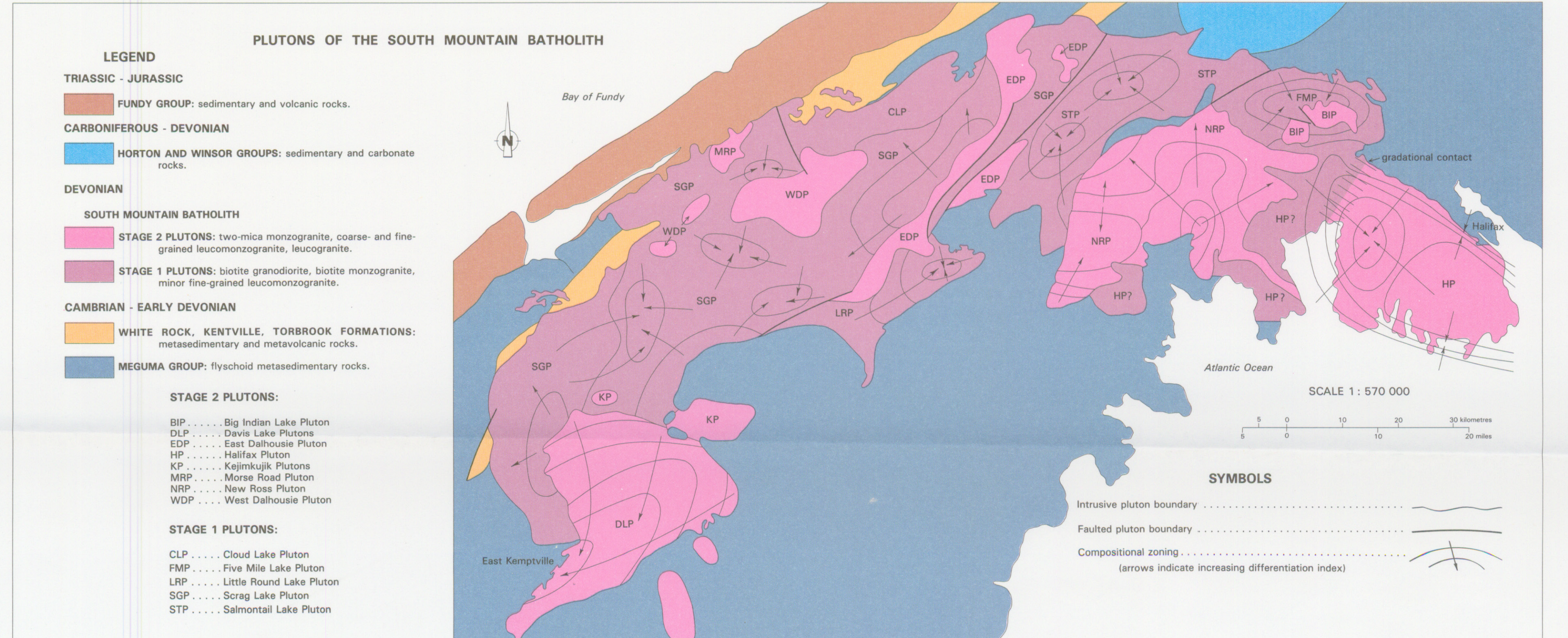
- BIP: Big Indian Lake Pluton
- DLP: Davis Lake Pluton
- EDP: East Dalhousie Pluton
- HP: Halifax Pluton
- KJP: Kejinkujik Pluton
- MRP: Morse Road Pluton
- NR: New Ross Pluton
- WDP: West Dalhousie Pluton

STAGE 1 PLUTONS:

- CLP: Cloud Lake Pluton
- FMP: Five Mile Lake Pluton
- LRP: Little Round Lake Pluton
- SGP: Scrag Lake Pluton
- STP: Salmontail Lake Pluton

SYMBOLS

- Intrusive pluton boundary
- Faulted pluton boundary
- Compositional zoning (arrows indicate increasing differentiation index)



SYMBOLS

- Geological contact
- Unconformity (hatch marks indicate younger units)
- Fault
- Mineral occurrence, mine or quarry, locality reported but not confirmed during this study (refer to 1:50,000 scale maps and N.S.D.N.R. mineral occurrence cards for additional information)

SOURCES OF INFORMATION

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- 1989: Bedrock geological map of Halifax and Sable NTS sheets 11D/12 and part of 11D/05. Nova Scotia Department of Mines and Energy, Map 87-6, scale 1: 50 000.

Nova Scotia Department of Natural Resources: Metallic Mineral Occurrence Cards.

NOVA SCOTIA DEPARTMENT OF NATURAL RESOURCES

MINES AND ENERGY BRANCHES

MAP 94-01

GEOLOGICAL MAP OF THE

SOUTH MOUNTAIN BATHOLITH

WESTERN NOVA SCOTIA

COMPILED BY: M.A. MACDONALD
WITH CONTRIBUTIONS FROM: M.C. COREY,
L.J. HAM AND R.J. HOME

SCALE 1: 250 000

Base map derived from *A Book of Maps of Nova Scotia 1992* for the Nova Scotia Departments of Natural Resources, Mines and Energy Branch, Transportation and Communication.

NOVA SCOTIA DEPARTMENT OF NATURAL RESOURCES

HONOURABLE DONALD H. DOWNE
MINISTER

DARRELL D. HILZ
DEPUTY MINISTER

HALIFAX, NOVA SCOTIA
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