LEGEND

Age (numerical limits in Ma)

EON	ERA	SUB-ERA	STRATIFIED ROCKS (including metamorphosed extensions of units)	IGNEOUS ROCKS (including metamorphosed extensions of units)	METAMORPHIC ROCKS
PHANEROZOIC		Tertiary [T]	Tm Impact breccia and melt sheets *[Mistastin Lake crater; 39 Ma Ar-Ar age, northern SECP]*		
		Neo-proterozoic–Cambrian [NC]	NCs Sandstone and nodular limestone; local basalt at base of sequence *[Labrador Gp; Strait of Belle Isle area, southeastern GP]*		
545					
	NEO-PROTEROZOIC [N]		Ns Arkose and conglomerate *[Double Mer Fm., Lake Melville rift system, northeastern GP]* (dots indicate inferred extent under Quaternary cover)		
			900	*Grenville Province*	
	MESOPROTEROZOIC [M]	Late Mesoproterozoic [M_3]		M_3gs / M_3gs? Late- to posttectonic granite and syenite plutons *[1080 to 956 Ma, southern GP]*; M_3gs? - Inferred posttectonic granitoid plutons *[areas of southern GP mapped only at reconnaissance level]* M_3mg Monzonite to granite *[Pinware terrane, southeastern GP]* M_3gr Syenite to granite *[Pinware terrane, southeastern GP]* M_3g Granitoid rocks *[1133 to 1123 Ma]* M_3a Anorthosite and other, locally layered, mafic rocks M_3ga Gabbroic plutons Anorthosite – monzonite – charnockite-granite suite *[e.g., Atikonak River massif, western GP]*	
			1200		
		Middle Mesoproterozoic [M_2]	*Grenville, Southeastern Churchill and Nain provinces* M_2s Siltstone, shale and quartzite, minor dolomite M_2mv Subaerial basalt flows M_2aq Arkose, grading south into quartzite e.g., Seal Lake Gp., southern SECP and northern GP M_2pv Peralkaline felsic volcanic rocks *[e.g., Letitia Lake Gp., 1327 Ma, northern GP; Flowers River Igneous Suite, ca. 1291 Ma, northern NP]*	*Grenville, Southeastern Churchill and Nain provinces* M_2ga Gabbro sills *[e.g., Seal Lake Gp., 1250 to 1224 Ma, north-central GP]* M_2gr Granite plutons *[e.g., Upper North River pluton, ca.1296 Ma, GP]* M_2pg Peralkaline granite and syenite intrusions, locally with ring structure *[Strange Lake intrusion, 1240 Ma, SECP; Flowers River igneous suite, ca. 1290 Ma, NP; Red Wine Intrusive Suite, ca. 1337 Ma, north-central GP]* M_2as Alkaline syenite and metamorphic equivalent rocks *[Red Wine Intrusive Suite, north-central GP]* M_2g Granitoid rocks, including rapakivi varieties *[1351 to 1292 Ma]* M_2a Anorthositic rocks *[1331 to 1305 Ma]* M_2mga Intermediate rocks, chiefly ferrodiorite *[1333 to 1301 Ma]* M_2Iga Layered intrusions of troctolite, gabbro, norite and anorthosite *[1322 to1305 Ma]* Anorthorsite – monzonite – charnockite – granite suites *[Nain Plutonic Suite, NP and eastern SECP]*	
			1350		
		Early Mesoproterozoic [M_1]	*Grenville and Southeastern Churchill provinces* M_1aq Arkose, quartzite and minor conglomerate *[Sims Fm., northwestern GP, southern SECP]*	*Grenville and Southeastern Churchill provinces* M_1ga Olivine gabbro and metamorphic equivalents, including coronitic varieties *[Shabogamo and Michael gabbros, ca. 1460 to 1425 Ma, northern GP; southwestern SECP]* M_1g Granitoid rocks *[1500 to 1420 Ma]* M_1a Anorthosite and other, locally layered, mafic rocks M_1Iga Layered gabbro – anorthosite – ultramafite intrusions *[e.g., Kyfanan Lake intrusion]* Anorthosite – monzonite – charnockite – granite suites *[Harp Lake, Michikamau and Mistastin suites, SECP; Upper Paradise River intrusion, southeastern GP]* M_1qd Quartz diorite *[Rigolet quartz diorite, 1489 Ma, eastern GP]*	
			1600		
PROTEROZOIC	PALEO- AND/OR MESOPROTEROZOIC [P-M]		*Grenville Province* P- Msv Metasedimentary and felsic volcanic rocks *[1650 to 1450 Ma, Pinware terrane, southeastern GP]*	*Grenville Province* P- Mg K-feldspar-megacrystic granitoid plutons P- Msy Syenite, monzonite and diorite P- Mgs / P- Mgs? Granite, syenite, monzonite, diorite and derived gneiss *[1650 to 1450 Ma]*; P- Mgs? - rocks of inferred similar age and composition in areas mapped only at reconnaissance level *[southeastern GP]* Units occurring mainly in Pinware terrane *[southeastern GP]* P- Mga Gabbro and derived amphibolite *[southwestern GP]*	*Grenville Province* P- Mgn Gneisses of possible mixed composition and age *[area of southern GP mapped only at reconnaissance level]*
			1600		
	PALEOPROTEROZOIC [P]	Late Paleoproterozoic [P_3]	*Grenville Province* P_3fv Rhyolitic to andesitic volcanic rocks including ash-flow tuff and agglomerate *[e.g., Bruce River and Blueberry Lake gps., ca. 1650 Ma]* P_3vs Volcaniclastic sandstone, arkose and conglomerate *[e.g., Bruce River and Blueberry Lake gps.]* *Volcanogenic rocks related to Trans-Labrador batholith; ca.1650 Ma, northern GP*	*Grenville, Nain and Makkovik provinces* P_3gr Granite, quartz monzonite, granodiorite, syenite and minor quartz diorite *[e.g., ca. 1650 Ma; Trans-Labrador batholith and coeval rocks in GP and MP]* P_3g Granitoid rocks *[1645 to 1626 Ma; including some ca. 1780 to 1720 Ma rocks]* P_3a Anorthosite and other, locally layered, mafic components *[1645 to 1625 Ma]* Anorthosite – monzonite – charnockite – granite suites *[Mealy Mountains and North West River intrusive suites, GP]* P_3ga Mafic intrusive suites (gabbronorite, lesser diorite), some metamorphosed at amphibolite to granulite facies *[e.g., Adlavik Intrusive Suite, 1649 Ma, MP; White Bear Arm and Ossok Mountain suites, ca. 1650 to1623 Ma, GP]* P_3Iga Layered gabbro, troctolite and anorthosite, generally recrystallized *[Bridges intrusion, 1667 Ma Sm-Nd age, central NP]* P_3t Quartz diorite to granodiorite plutons P_3gm K-feldspar megacrystic granite and other granitoid plutonic rocks Early Labradorian rocks *[1680 to 1660 Ma; eastern GP and central SECP]* P_3eg High-level, locally fluorite-bearing granites *[1776 to 1719 Ma, northeastern NP and MP]*	*Grenville Province* P_3ggn / P_3ggn? Granitic orthogneiss, commonly migmatitic, locally includes pre-Labradorian ca. 1780 to 1720 Ma rocks in the Mealy Mountains terrane; P_3ggn? - inferred granitic orthogneiss P_3gdn / P_3gdn? Granodioritic orthogneiss (lesser quartz dioritic and granitic orthogneiss), commonly migmatitic; P_3gdn? - inferred granodioritic orthogneiss (s.l.); may include Mesoproterozoic rocks P_3mgn Mafic gneiss, probably of supracrustal origin, mainly at granulite facies *[e.g., Beaver gneiss]* P_3sgn Pelitic, migmatitic metasedimentary gneiss and minor psammitic gneiss at amphibolite to granulite facies *[e.g., Disappointment Lake gneiss, central GP]* P_3dm Dolomitic marble and calc-silicate rock Early Labradorian rocks *[1680 to 1660 Ma, eastern and central GP]*
			1800		
		Middle Paleoproterozoic [P_2]	*Southeastern Churchill, Makkovik, Nain and Grenville provinces* P_2mfv Basalt, andesite, dacite and conglomerate *[Ingrid Gp., ca. 1900 Ma, eastern SECP]* P_2fv Rhyolite, ash-flow tuff, breccia and hypabyssal rhyolite intrusions; volcaniclastic siltstone and sandstone; minor basalt *[e.g., Upper Aillik Gp., ca. 1860 to 1807 Ma, MP]* P_2mmv Basaltic flows, breccias and pyroclastic rocks of predominantly subaerial origin *[Mugford Gp., ca. 1950 Ma, northern NP]* P_2pmv Pillow basalt, basaltic pyroclastic rocks; minor siltstone and greywacke *[Doublet Gp., western SECP; Petscapiskau Gp., central SECP]* P_2mva Schistose amphibolite derived from mafic volcanic rocks *[Moran Lake and Lower Aillik gps., MP]* P_2as Arkosic siltstone and sandstone, locally dolomitic *[Knob Lake Gp., western SECP]* P_2st / P_2sts st - Siltstone – shale – greywacke sequences of deep water, turbiditic origin *[upper Knob Lake Gp. western SECP]*. sts - Schistose equivalent rocks *[upper Knob Lake Gp., western GP]* P_2amv Alkalic basalt flows, pyroclastic rocks and local peralkaline felsic volcanic rocks; minor ultramafic rocks *[Knob Lake Gp., 1877 Ma, western SECP]* P_2I / is I - Cherty ironstone and underlying quartzite *[Knob Lake Gp., western SECP]* is - Schistose to gneissic equivalent rocks *[Knob Lake Gp., western GP]* P_2d/dm d - Dolomite and chert breccia *[Knob Lake Gp., western SECP]* dm - Equivalent dolomitic marble *[Knob Lake Gp., western SECP]* P_2mv Massive to pillowed basalt flows *[Knob Lake Gp., ca. 2142 Ma, western SECP]* P_2sh / P_2ss sh - Shale and sandstone of shallow- to deep-water origin *[lower Knob Lake Gp., western SECP; Ramah, Mugford and Snyder gps., northern SECP and NP; Moran Lake Gp., MP]* ss - Equivalent pelitic schist *[lower Knob Lake Gp., GP; Petscapiskau Gp., central SECP; Lake Harbour Gp., northern SECP; lower Aillik Gp., MP]* P_2ac Arkose and conglomerate *[Knob Lake Gp., western SECP]*	*Southeastern Churchill, Makkovik and Nain provinces* P_2t Tonalite, granodiorite and lesser granite *[1910 to 1885 Ma, northern SECP; Island Harbour Bay Plutonic Suite, ca.1805 Ma, MP]* P_2g Granite and granodiorite *[1840 to 1795 Ma, central SECP and MP]* P_2cg Orthopyroxene-bearing tonalite to granite plutons *[Killinek suite, 1909 to 1830 Ma, northern SECP; De Pas batholith, 1830 to 1810 Ma, central SECP]* P_2u Ultramafic sills *[Retty Peridotite, western SECP]* P_2ga Gabbro and leucogabbro sills *[e.g., Wakuach Gabbro, ca. 1884 to 1874 Ma, western SECP; MP]* P_2eg Granite plutons *[ca. 2134 Ma, locally 2032 Ma, northern NP; 1973 to 1891 Ma, MP]*	*Southeastern Churchill and Makkovik provinces* P_2ggn Granitic gneiss *[northern SECP]* P_2tgn Tonalite, granodiorite and monzogranite gneiss; minor amphibolite, calc-silicate and felsic (metavolcanic?) gneiss *[Cape Harrison Metamorphic Suite,MP]* P_2mgn Mafic gneisses of mixed intrusive and extrusive origin *[SECP]* P_2cg-gn Mixture of granitic to tonalitic metaplutonic rocks, supracrustal gneiss and tonalitic gneiss, at granulite facies *[Lac Lomier complex, ca. 1840 to 1830 Ma, northern SECP]* P_2sgnT Migmatitic, quartz – feldspar – garnet – sillimanite – biotite – graphite metasedimentary gneiss, mainly mylonitic *[Tasiuyak gneiss, 1940 to 1895 Ma detrital ages, northern SECP]* P_2sgn Pelitic metasedimentary gneiss, minor marble and calc-silicate rock *[northern SECP]*
			2100		
		Early Paleoproterozoic [P_1]		*Southeastern Churchill Province* P_1ga Gabbronorite and derived gneiss *[part of the granitic to gabbroic Pallatin intrusive suite; ca. 2300 Ma; central SECP]*	
2500					
	ARCHEAN- AND/OR PALEOPROTEROZOIC [A-P]			*Southeastern Churchill Province* A- Pa Anorthosite, leucogabbro, leuconorite and derived gneiss *[e.g., Hutton anorthositic suite, northern SECP]* A- Pg Granite *[central SECP]*	*Southeastern Churchill Province* A- Pggn Granitic gneiss *[northern SECP]* A- Ptgn Orthogneiss and associated migmatite of tonalite – granodiorite – granite composition *[northern SECP]* A- Pmgn Mafic gneisses derived from gabbroic intrusions and metavolcanic rocks *[northern SECP]* A- Psgn Pelitic gneiss, minor marble and calc-silicate rock *[northern SECP]* A- Pgn Undifferentiated gneiss *[parts of northern SECP mapped only at reconnaissance level]*
2500					
	UNDIVIDED ARCHEAN [A]		*Southeastern Churchill Province* Amv Mafic metavolcanic, metasedimentary and metagabbroic rocks *[central SECP]*	*Southeastern Churchill and Makkovik provinces* Aa Anorthosite and leucogabbroic rocks *[central SECP and MP]*	
ARCHEAN [A]	NEOARCHEAN [AN]			*Nain and Superior provinces* ANcg Late- to posttectonic charnockite plutons *[Kammarsuit granite, northern NP]* ANg Granitoid plutons and derived gneiss *[Ashuanipi Complex, SP]* ANga Gabbroic plutons *[Ashuanipi Complex, SP]* ANt Tonalite, quartz diorite and minor diorite *[Ashuanipi Complex, SP]*	*Superior, Southeastern Churchill and Grenville provinces* ANrgn Tonalitic and other gneisses reworked under retrograde metamorphic conditions during Grenvillian orogenesis *[rocks equivalent to the Ashuanipi Complex, western GP]* ANmt Metatonalite and tonalite gneiss at granulite facies *[Ashuanipi Complex, 2696 to 2669 Ma, SP]* ANggn Granitic gneiss *[central SECP]* ANdgn Diatexite of granodiorite – monzogranite composition; minor metasedimentary gneiss, tonalite and mafic gneiss; generally at granulite facies *[Ashuanipi Complex, 2685 to 2650 Ma, SP]* ANtgn Metatonalite and tonalite gneiss *[2682 to 2675 Ma, central SECP]* ANsgn Metasedimentary quartz – feldspar – biotite ± garnet gneiss; generally migmatitic and at granulite facies *[ca. 2700+ Ma detrital ages, SP; central SECP]*
			2800		
	MESO-ARCHEAN [AM]		*Southern Nain and Makkovik provinces* AMmv Mafic volcanic and volcaniclastic rocks, lesser sedimentary and felsic volcanic rocks, and mafic – ultramafic sills; at greenschist to amphibolite facies *[Florence Lake and Hunt River gps., ca. 3000 Ma; southern NP and equivalent rocks in northern MP]*	*Southern Nain Province (Hopedale block)* AMgd Granodiorite, tonalite and minor granite *[Kanairiktok Intrusive Suite, ca. 2850 to 2830 Ma]*	*Southern Nain and Makkovik provinces* AMrgn Tonalitic and other gneisses reworked and retrograded during Makkovikian orogenesis *[MP]* AMtgn Tonalitic to granodioritic migmatitic orthogneiss containing abundant mafic to ultramafic inclusions and relict mafic dykes *[e.g., Maggo gneiss, ca. 3200 to 2800 Ma, southern NP]* AMmgn Mafic gneisses including rocks of intrusive and extrusive origin *[southern NP]*
			3200		
	EO- to PALEO-ARCHEAN [AP]			*Northern Nain Province (Saglek block)* APa Anorthosite, leucogabbroic and minor ultramafic rocks, usually in deformed, layered suites	*Northern Nain and Southeastern Churchill provinces* APrgn Tonalitic and other gneisses reworked and retrograded during Paleoproterozoic orogenesis *[northern SECP]* APtgn Tonalitic to granodioritic migmatitic gneisses containing abundant mafic to ultramafic inclusions and relict mafic dykes *[e.g., Uivak gneiss, ca. 3800 to 3600 Ma]*, plus minor Mesoarchean rocks *[northern NP]* APmgn Mafic gneisses including rocks of intrusive and extrusive origin *[northern NP]* APsgn Pelitic metasedimentary gneiss, lesser marble, quartzite, ironstone and amphibolite-mafic granulite *[e.g., Upernavik and Nulliak suites, northern NP]*
			4000		

NOTES

1. The legend is primarily lithostratigraphic; geological units having been established on the basis of their principal rock-type association, (stratified, igneous or metamorphic), and stratigraphic age. Metamorphosed extensions or equivalents of stratified or igneous rocks have been grouped with the respective stratified or igneous units in the legend. The colour scheme has been chosen to place primary emphasis on rock type, each colour range representing a particular rock class, e.g., mafic volcanic rocks are shown in light to medium shades of green; granites are generally red to magenta. In general, but not exclusively, the darker the shade of a particular colour, the older the stratigraphic age.

2. Unit descriptions are followed in brackets by the names of major representatives of the unit (where preceded by "e.g.", these are provided only as examples), then by the representative age and finally by the approximate location in terms of tectonic province. SP = SUPERIOR PROVINCE; SECP = SOUTHEASTERN CHURCHILL PROVINCE; MP = MAKKOVIK PROVINCE; NP = NAIN PROVINCE; GP = GRENVILLE PROVINCE. The tectonic province location refers to the distribution of the complete unit, not just its named representatives.

3. Numerical ages, or age ranges, are based upon U-Pb determinations unless otherwise stated. They are not necessarily indicative of the age range of the entire map unit.

4. For this map, the time scale and subdivisions of the Precambrian are those adopted by the International Union of Geological Sciences (Plumb, 1991) with the modifications that i) the Paleoarchean (3600 to 3200 Ma) and Eoarchean (4000 to 3600 Ma) eras are considered as one due to the difficulty of distinguishing between units of these respective ages at the 1:1 million scale, ii) the Mesoproterozoic/Neoproterozoic boundary has been placed at 900 Ma following Bally and Palmer (1989, p. 601) rather than 1000 Ma to avoid unnecessary subdivision of the plutonic units that straddle this boundary, and iii) the Precambrian-Cambrian boundary is defined at 545 Ma rather than 570 Ma following the U-Pb dating of Tucker and McKerrow (1995).

   The map unit identifiers (e.g. P_3ga) have been devised specifically for this map. The first one or two capital letters designate the era (AP = Eo-Paleoarchean, AM = Mesoarchean, AN = Neoarchean, P = Paleoproterozoic, M = Mesoproterozoic and N = Neoproterozoic); the subscripts $_1$, $_2$ and $_3$ indicate suberas (Early, Middle and Late); the letter combination at the end of the identifier represent the rock type(s) as described in the legend.