

L E G E N D

Legend acronyms

(G) = Group; (F) = Formation; (M) = Member; (R) = Rock type; (Qc) = Quebec province; (Vt) = Vermont state; (NY) = New York state

ADIRONDACK MASSIF

MESOPROTEROZOIC

	<b>a</b> (NY): Metanorthosite and anorthositic gneiss (R)
	<b>ach</b> (NY): Hybrid rock, mangeritic to charnockitic gneiss (R)
	<b>gb</b> (NY): Olivine metagabbro (R)
	<b>hbg</b> (NY): Biotite and or hornblende granite gneiss (R)
	<b>mb</b> (NY): Calcitic and dolomitic marble, variably siliceous (R)
	<b>phgs</b> (NY): Charnockite, granitic and quartz syenite gneiss (R)

ST. LAWRENCE PLATFORM

UPPER ORDOVICIAN

	<b>Obe</b> (Qc): Queenston (G); Bécancour (F); Red shale and green sandstone (R)
	<b>Oni</b> (Qc): Lorraine (G); Nicolet (F); Shale and sandstone (R)
	<b>Opo</b> (Qc): Lorraine (G); Pontgravé (F); Limestone and shale (R)

MIDDLE ORDOVICIAN

	<b>Out</b> (Qc): Utica shale, calcareous shale (R) <b>Ocum</b> (NY): Cumberland Head (F); Argillite (R) <b>Otbr</b> (NY): Dolgeville (F)
	<b>Osp</b> (Qc): Stony Point (F); Calcareous mudstone (R) <b>Osp</b> (Vt,NY): Stony Point (F); Calcareous shale (R)
	<b>Oha</b> (Qc): Havelock breccia (F); Sandstone blocks (R) <b>Oha</b> (Vt): Hathaway (F); Shale (R)
	<b>Ola</b> (Qc): Lacolle breccia (F); Sandstone, dolostone and limestone blocks (R) <b>Oha</b> (Vt): Hathaway (F); Shale (R)
	<b>Oss</b> (Qc): Sainte-Rosalie (G); Sainte-Sabine et de Les Fonds (F); Shale and dolostone (R)
	<b>Oib</b> (Qc): Sainte-Rosalie (G); Iberville (F); Mudstone and dolomitic siltstone (R) <b>Oib</b> (Vt): Iberville (F); Shale (R)
	<b>Otr</b> (Qc): Trenton (G); Undifferentiated limestone and shale (R) <b>Ot</b> (NY): Trenton (G)
	<b>Otv</b> (Qc): Trenton (G); Tétreauville, Montreal region (F); Argillaceous limestone and shale (R) <b>Ochd</b> (Vt): Cumberland Head (F); Limestone (R)
	<b>Omo</b> (Qc): Trenton (G); Montreal and Neuville (F); Limestone and shale (R) <b>Ogf</b> (Vt): Glens Falls Limestone (F); Limestone (R)
	<b>Obr</b> (Qc): Black River (G); Leray, Lowville and Pamela (F); Limestone, dolostone and sandstone (R) <b>Oo</b> (Vt): Orwell limestone (F); Limestone (R) <b>Obr</b> (Vt): Black River Group undivided (F); Dolostone (R)
	<b>Olv</b> (Qc): Chazy (G); Laval (F); Limestone, and shale (R) <b>Ov</b> (Vt): Valcour (F); Limestone (R) <b>Odp</b> (Vt): Day Point (F); Sandstone (R) <b>Ocp</b> (Vt): Crown Point (F); Limestone (R) <b>Ocgu</b> (Vt): Chazy Group undivided (G); Limestone (R)

LOWER ORDOVICIAN

	<b>Obh</b> (Qc): Beekmantown (G); Beauharnois (F); Dolostone and limestone (R) <b>Opi</b> (Vt): Providence Island Dolostone (F); Dolostone and limestone (R)
	<b>Oth</b> (Qc): Beekmantown (G); Theresa (F); Dolomitic sandstone and dolostone (R)
	<b>Ob</b> (Qc): Beekmantown (G); Undifferentiated dolomitic sandstone, dolostone, limestone (R) <b>Obku</b> (Vt): Beekmantown Group undivided (F); Limestone and dolostone (R)

CAMBRIAN

	<b>Cca</b> (Qc,NY): Postdam (G); Caimside (F); Quartzitic sandstone (R)
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EXTERNAL HUMBER ZONE – DISTAL, CLASTIC AND CARBONATE SEQUENCE

EAST OF LOGAN - CHAMPLAIN THRUST

MIDDLE ORDOVICIAN

	<b>Ood</b> (Qc): Olistostrome of Drummondville (F); Blocky shale (R).
	<b>Obo</b> (Qc): Laurier (G); Bourret (F); Slate, argillaceous limestone, sandstone and conglomerate (R)
	<b>Obm</b> (Qc): Bulstrode and Melbourne (F); Calcareous slate and graphitic limestone (R)
	<b>Ost3</b> (Qc): Stanbridge (G); Slate and limestone (R)
	<b>Ost2</b> (Qc): Stanbridge (G); Siltstone and mudstone (R)
	<b>Ost1</b> (Qc): Stanbridge (G); Limestone and slate (R)
	<b>Ost</b> (Qc): Stanbridge (G); Undifferentiated: slate, siltstone and mudstone (R)
	<b>Oss</b> (Qc): Sainte-Rosalie (G); Sainte-Sabine and Les Fonds (F); Shale and dolostone (R)

CAMBRIAN - ORDOVICIAN

	<b>Coph</b> (Qc): Philisburg (G); Limestone and dolostone (R) <b>Cw</b> (Vt): Winooski Dolostone (F); Dolostone (R) <b>Ob</b> (Vt): Bascom, undifferentiated Luke Hill, Naylor Ledge and Hastings Creek (F); Dolostone, limestone, and siltstone (R) <b>OCg</b> (Vt): Gorge (G); Dolostone (R) <b>Ocu</b> (Vt): Cutting Dolostone (F); Dolostone (R) <b>Ohg</b> (Vt): Highgate (F); Limestone (R) <b>Os</b> (Vt): Shelburne Marble, Whitehall, and Strites Pond (F); Marble (R)
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NEOPROTEROZOIC - ORDOVICIAN

	<b>Csh2</b> (Qc): Shefford (G); Granby (F); Feldspathic sandstone and slate (R)
	<b>Csh1</b> (Qc): Shefford (G); Mawcook (F); Red, green and grey slate (R)
	<b>Coh7</b> (Qc): Oak Hill (G); Sweetsburg (F); Slate, conglomerate and quartzite (R) <b>Ocsw</b> (Vt): Sweetsburg (F); Phyllite (R)
	<b>Coh6</b> (Qc): Oak Hill (G); Dunham (F); Dolostone (R) <b>Cdu</b> (Vt): Dunham Dolostone (F); Dolostone (R)
	<b>Coh5b</b> (Qc): Oak Hill (G); Gilman (F); Cheshire (M); Quartzite (R) <b>Cd</b> (Vt): Danby (F); Quartzite (R) <b>Cc</b> (Vt): Cheshire Quartzite (F); Quartzite (M); Quartzite (R) <b>Cca</b> (Vt): Cheshire Quartzite (F); Argillaceous quartzite (M); Quartzite (R)
	<b>Coh5a</b> (Qc): Oak Hill (G); Gilman (F); Frelighsburg (M); Phyllite and schist (R)
	<b>Coh5</b> (Qc): Oak Hill (G); Gilman (F); Phyllite, schist and quartzite (R)
	<b>CZwb</b> (Vt): White Brook (F); Dolostone (R)
	<b>CZpq</b> (Vt): Pinnacle (F); Quartzite and quartz-pebble conglomerate (M); Conglomerate (R) <b>Czpu</b> (Vt): Pinnacle (F); Undivided (M); Schist (R) <b>Czpv</b> (Vt): Pinnacle (F); Metabasalt and volcaniclastic rocks, undifferentiated (M); Greenstone (R)
	<b>CZth</b> (Vt): Tibbit Hill (F); Greenstone (R)
	<b>Coh</b> (Qc): Oak Hill (G); Undifferentiated: phyllite and schist (R) <b>Cm</b> (Vt): Monkton Quartzite (F); Sandstone (R) <b>Cp</b> (Vt): Parker Slate (F); Black slate (M); Slate (R) <b>Cpc</b> (Vt): Parker Slate (F); Dark conglomerate (M); Conglomerate (R) <b>Cpdo</b> (Vt): Parker Slate (F); Dolostone (M); Dolostone (R) <b>Cpq</b> (Vt): Parker Slate (F); Sandstone (M); Calcareous sandstone (R) <b>Cps</b> (Vt): Parker Slate (F); Sandy dolostone (M); Dolostone (R); <b>Cpsc</b> (Vt): Parker Slate (F); Calcareous sandy conglomerate (M); Conglomerate (R) <b>Cpsh</b> (Vt): Parker Slate (F); Conglomerate (M); Conglomerate (R) <b>Csp</b> (Vt): Clarendon Springs (F); Dolostone (R) <b>CZfp</b> (Vt): Fairfield Pond (F); Phyllite (R) <b>OCsk</b> (Vt): Skeels Corners Slate (F); Black slate (M); Slate (R) <b>OCskl</b> (Vt): Skeels Corners Slate (F); Limestone matrix conglomerate (M); Limestone (R) <b>OCsks</b> (Vt): Skeels Corners Slate (F); Sandy matrix conglomerate (M); Limestone (R) <b>Oml</b> (Vt): Morses Line Slate (F); Calcareous slate (R)

INTERNAL HUMBER ZONE – VOLCANICS AND TRANSITIONAL MARGIN ROCKS (WEST PART)

EAST OF BROME SUD - UNDERHILL THRUST

NEOPROTEROZOIC - ORDOVICIAN

	<b>Coh7</b> (Qc): Oak Hill (G); Sweetsburg (F); Slate, conglomerate and quartzite (R) <b>OCsw</b> (Vt): Sweetsburg (F); Phyllite (R)
	<b>Coh4a</b> (Qc): Oak Hill (G); West Sutton (F); Chlorite schist (R) <b>CZun</b> (Vt): Underhill (F); Schist and phyllite (M); Schist (R) <b>CZunw</b> (Vt): Underhill (F); Metawacke (M); Metawacke (R) <b>Owb</b> (Vt): West Bridgewater (F); Black to dark-gray phyllite (M); Phyllite (R)
	<b>Coh4</b> (Qc): Oak Hill (G); Pinnacle (F); Schist and phyllite (R)
	<b>Coh3</b> (Qc): Oak Hill (G); White Brook (F); Dolostone (R) <b>CZwb</b> (Vt): White Brook (F); Dolostone (R)
	<b>Coh2</b> (Qc): Oak Hill (G); Pinnacle (F); Quartzite and schist (R) <b>Czpu</b> (Vt): Pinnacle (F); Undivided (M); Schist (R) <b>Czpv</b> (Vt): Pinnacle (F); Metabasalt and volcaniclastic rocks, undifferentiated (M); Greenstone (R) <b>CZpva</b> (Vt): Pinnacle (F); Amphibolitic greenstone (M); Greenstone (R) <b>CZpvc</b> (Vt): Pinnacle (F); Calcareous greenstone (M); Greenstone (R) <b>CZpvf</b> (Vt): Pinnacle (F); Feldspathic greenstone (M); Greenstone (R) <b>CZpw</b> (Vt): Pinnacle (F); Metawacke (M); Metawacke (R)
	<b>Coh1</b> (Qc): Oak Hill (G); Tibbit Hill (F); Schist and greenstone (R) <b>CZth</b> (Vt): Tibbit Hill (F); Greenstone (R)
	<b>CZfp</b> (Vt): Fairfield Pond (F); Phyllite (R)

INTERNAL HUMBER ZONE – VOLCANICS AND TRANSITIONAL MARGIN ROCKS (EAST PART)

EAST OF STUKELY - HONEY HOLLOW THRUST

NEOPROTEROZOIC - CAMBRIAN

	<b>Coh7</b> (Qc): Oak Hill (G); Sweetsburg (F); Slate, conglomerate and quartzite (R)
	<b>Coh4a</b> (Qc): Oak Hill (G); West Sutton (F); Chlorite schist (R) <b>CZf</b> (Vt): Fayston (F); Albite schist (M); Schist (R) <b>CZfa</b> (Vt): Fayston (F); Greenstone schist (M); Greenstone (R) <b>CZfs</b> (Vt): Fayston (F); Schist (M); Schist (R) <b>Czhn</b> (Vt): Hazens Notch (F); Undivided (M); Schist (R) <b>CZhng</b> (Vt): Hazens Notch (F); Greenstone and amphibolite (M); Greenstone (R) <b>CZhnn</b> (Vt): Hazens Notch (F); Schist (M); Schist (R) <b>CZun</b> (Vt): Underhill (F); Schist and phyllite (M); Schist (R) <b>CZung</b> (Vt): Underhill (F); Greenstone and amphibolite (M); Greenstone (R) <b>CZunw</b> (Vt): Underhill (F); Metawacke (M); Metawacke (R) <b>Owb</b> (Vt): West Bridgewater (F); Black to dark-gray phyllite (M); Phyllite (R)
	<b>Coh4</b> (Qc): Oak Hill (G); Pinnacle (F); Schist and phyllite (R) <b>Coa</b> (Vt): Ottawaquchee (F); Amphibolite and greenstone (M); Amphibolite (R) <b>Copw</b> (Vt): Ottawaquchee (F); Metawacke (M); Metawacke (R) <b>Coq</b> (Vt): Ottawaquchee (F); Schist and quartzite (M); Schist (R) <b>CZj</b> (Vt): Jay Peak (F); Schist (M); Phyllite (R) <b>CZjg</b> (Vt): Jay Peak (F); Greenstone (M); Greenstone (R)
	<b>CZwb</b> (Vt): White Brook (F); Dolostone (R)
	<b>Czpu</b> (Vt): Pinnacle (F); Pinnacle undivided (M); Schist (R) <b>CZpw</b> (Vt): Pinnacle (F); Metawacke (M); Metawacke (R)
	<b>Co</b> (Vt): Ottawaquchee (F); Carbonaceous phyllite (M); Phyllite (R) <b>CZfp</b> (Vt): Fairfield Pond (F); Phyllite (R)

DUNNAGE ZONE (OCEAN DOMAIN)

EAST OF BAIE VERTE-BROMPTON – BURGESS BRANCH THRUST

CAMBRIAN - ORDOVICIAN

	<b>Cosd</b> (Qc): Saint-Daniel (F); Melange with blocks and slices of volcanic rocks, serpentinite or blocky slate (R) <b>Ochv</b> (Vt): Cram Hill (F); Felsic and intermediate metavolcanic (M); Metadacite (R) <b>Ochcv</b> (Vt): Cram Hill of the Newport Center Area (F); Coburn Hill Metabasalt (M); Greenstone (R) <b>Ochp</b> (Vt): Cram Hill of the Newport Center Area (F); Phyllite (M); Phyllite (R) <b>Ochpq</b> (Vt): Cram Hill of the Newport Center Area (F); Phyllite and quartzite (M); Phyllite (R) <b>Ochs</b> (Vt): Cram Hill (F); Carbonaceous schist (M); Schist (R) <b>Ochsb</b> (Vt): Cram Hill of the Newport Center Area (F); Phyllite-chip conglomerate and slate conglomerate (M); Phyllite (R) <b>Ochu</b> (Vt): Cram Hill (F); Undivided (M); Phyllite (R) <b>Ochuc</b> (Vt): Cram Hill of the Newport Center Area (F); Umbrella Hill conglomerate (M); Conglomerate (R) <b>Omp</b> (Vt): Moretown (F); Pinstriped granofels (M); Granofels (R) <b>Omw</b> (Vt): Moretown (F); Truland Brook (M); Quartzite (R)
	<b>CCo</b> (Qc): Ophiolitic complex (F); Serpentinite, mafic volcanic rocks and gabbro (R) <b>Czu</b> (Vt): Ultramafic rocks (F); Meta-ultramafic rocks, undifferentiated (M); Schist (R) <b>CZutc</b> (Vt): Ultramafic rocks (F); Talc-carbonate schist (M); Schist (R)

NEOPROTEROZOIC - CAMBRIAN

	<b>CZbu</b> (Vt): Ultramafic rocks (M); Serpentinite (R)
	<b>CZbg</b> (Vt): Mafic schist (M); Schist (R) <b>CZbs</b> (Vt): Spangly schist (M); Schist (R) <b>CZtm</b> (Vt): Mafic schist and amphibolite (M); Blueschist (R) <b>CZtp</b> (Vt): Pelitic schist (M); Schist (R)
	<b>CZbc</b> (Vt): Coarse-grained amphibolite (M); Amphibolite (R) <b>CZbf</b> (Vt): Fine-grained amphibolite (M); Amphibolite (R)
	<b>CZbagn</b> (Vt): Albite gneiss (M); Gneiss (R) <b>CZtagn</b> (Vt): Albite gneiss (M); Gneiss (R)
	<b>Ccw2</b> (Qc): Caldwell (G); Feldspathic sandstone (R)
	<b>CZs</b> (Vt): Stowe (F); Schist and phyllite (M); Phyllite (R) <b>CZsbg</b> (Vt): Stowe (F); Carbonaceous phyllite (M); Phyllite (R) <b>CZsd</b> (Vt): Stowe (F); Schist and phyllite (M); Phyllite (R) <b>CZsg</b> (Vt): Stowe (F); Amphibolite and greenstone (M); Greenstone (R) <b>CZswa</b> (Vt): Stowe (F); Amphibolite (M); Amphibolite (R) <b>CZsws</b> (Vt): Stowe (F); Kyanite schist (M); Schist (R)

GASPE BELT

EAST OF LA GUADELOUPE - COBURN HILL FAULT

UPPER SILURIAN - DEVONIAN

	<b>Sgl1</b> (Qc): Glenbrooke (G); Glenbrooke (F); Argillaceous calcareous mudstone (R) <b>Dgqs</b> (Vt): Gile Mountain (F); Quartzite and metapelite (M); Quartzite (R) <b>Dgr</b> (Vt): Gile Mountain (F); Rhythmically graded (M); Schist (R) <b>DSw</b> (Vt): Waits River (F); Carbonaceous phyllite and limestone (M); Phyllite (R) <b>Sn</b> (Vt): Northfield (F); Carbonaceous phyllite (M); Phyllite (R)
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INTRUSIVE ROCKS

LOWER CRETACEOUS

	<b>Cmo</b> (Qc): Montereian Hills (F); Alkaline intrusive rocks, kimberlite (R)
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DEVONIAN

	<b>Dbg</b> (Vt): Devonian intrusive rocks (F); Biotite granite and granodiorite (M); Granite (R)
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UPPER SILURIAN

	<b>Sng</b> (Vt): Granodiorite (F); Granodiorite (R)
	<b>Snd</b> (Vt): Diorite and trondhjemite (F); Diorite (R)

INDETERMINATE

	<b>d</b> (Qc): Diorite (R)
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CONTACT METAMORPHIC ROCKS

	<b>H</b> (Qc): Hornfels around Montereian Hills (F)
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