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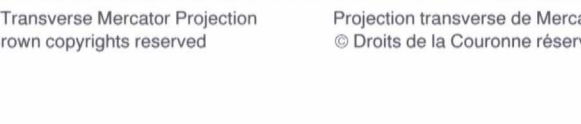


Surficial geology by L.E. Jackson Jr. 1988-1992, Geological Survey of Canada
 Digital cartography by J.D. Narraway, Geoscience Information Division

Any revisions or additional geological information known to the user would be welcomed by the Geological Survey of Canada

MAP 1877A
 SURFICIAL GEOLOGY
VICTORIA ROCK
 YUKON TERRITORY

Scale 1:100 000 - Échelle 1/100 000



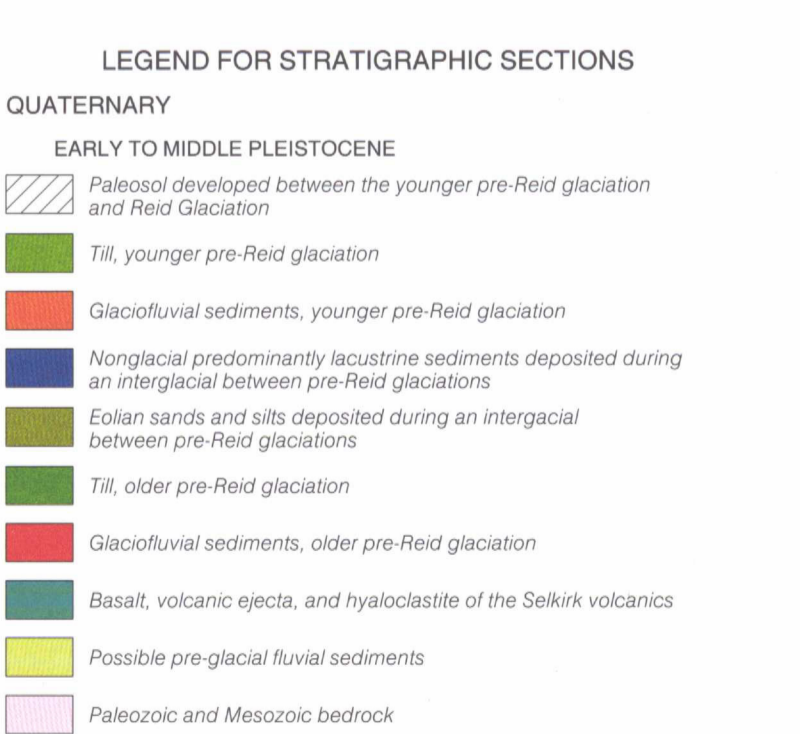
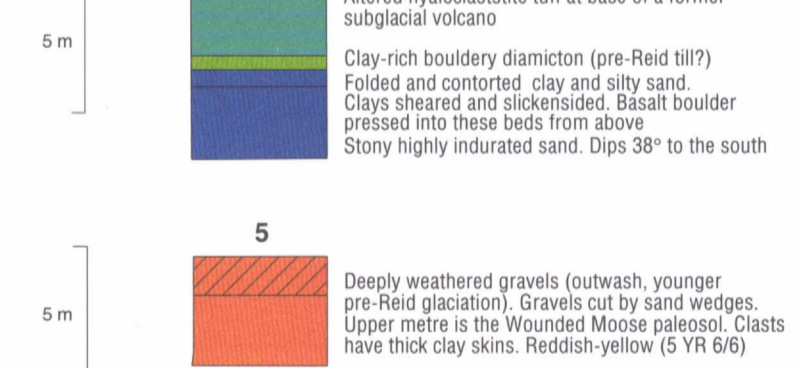
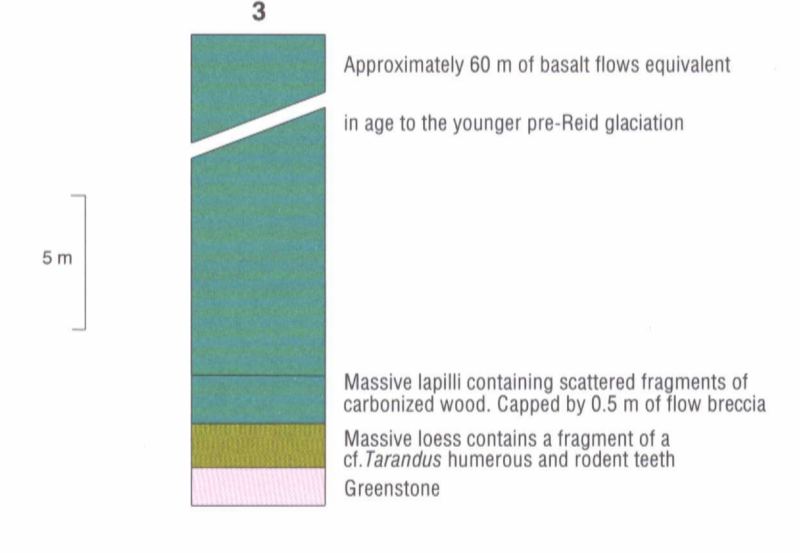
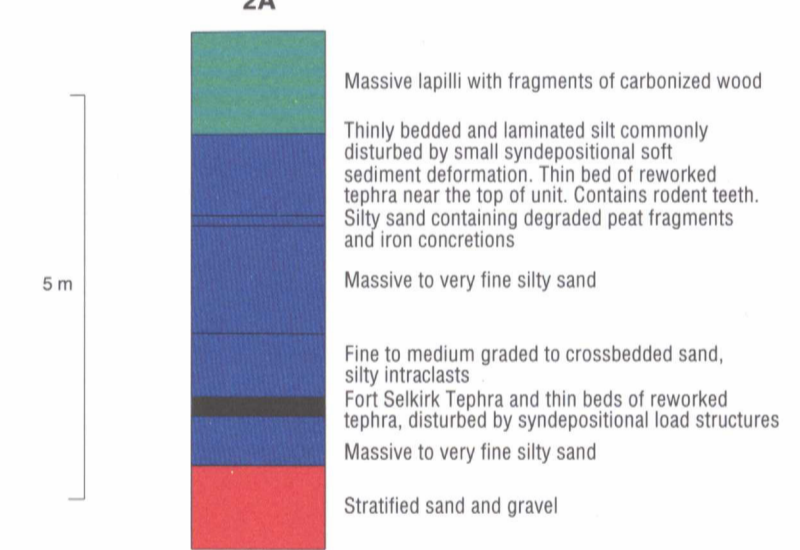
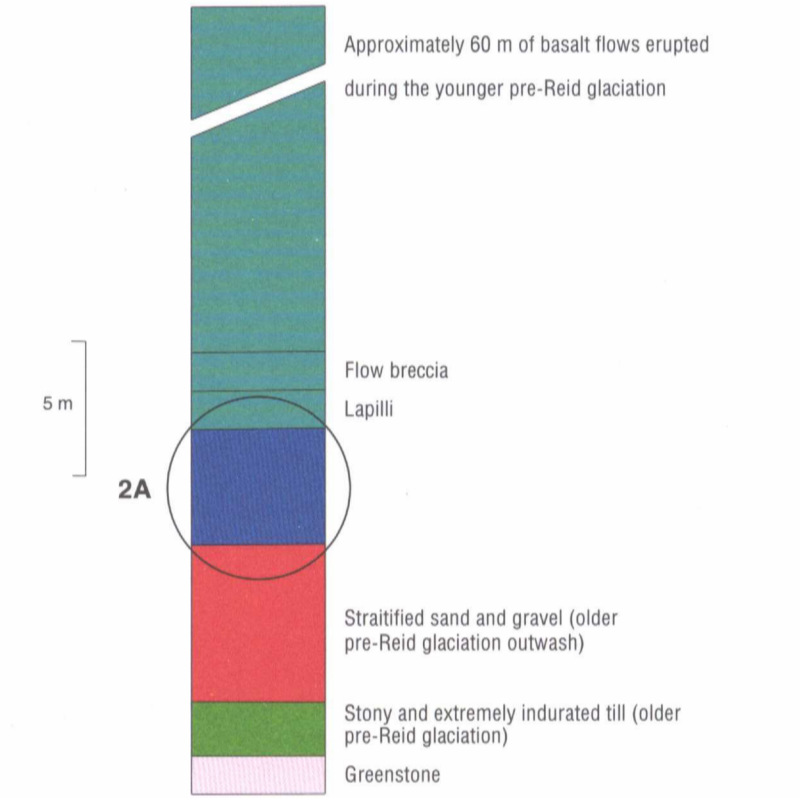
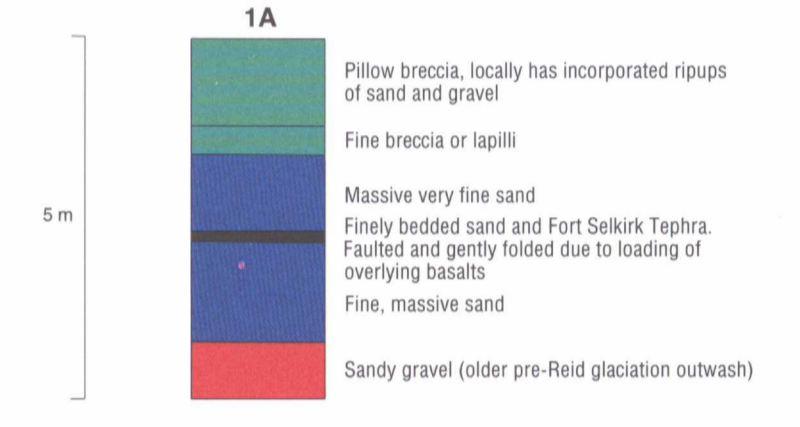
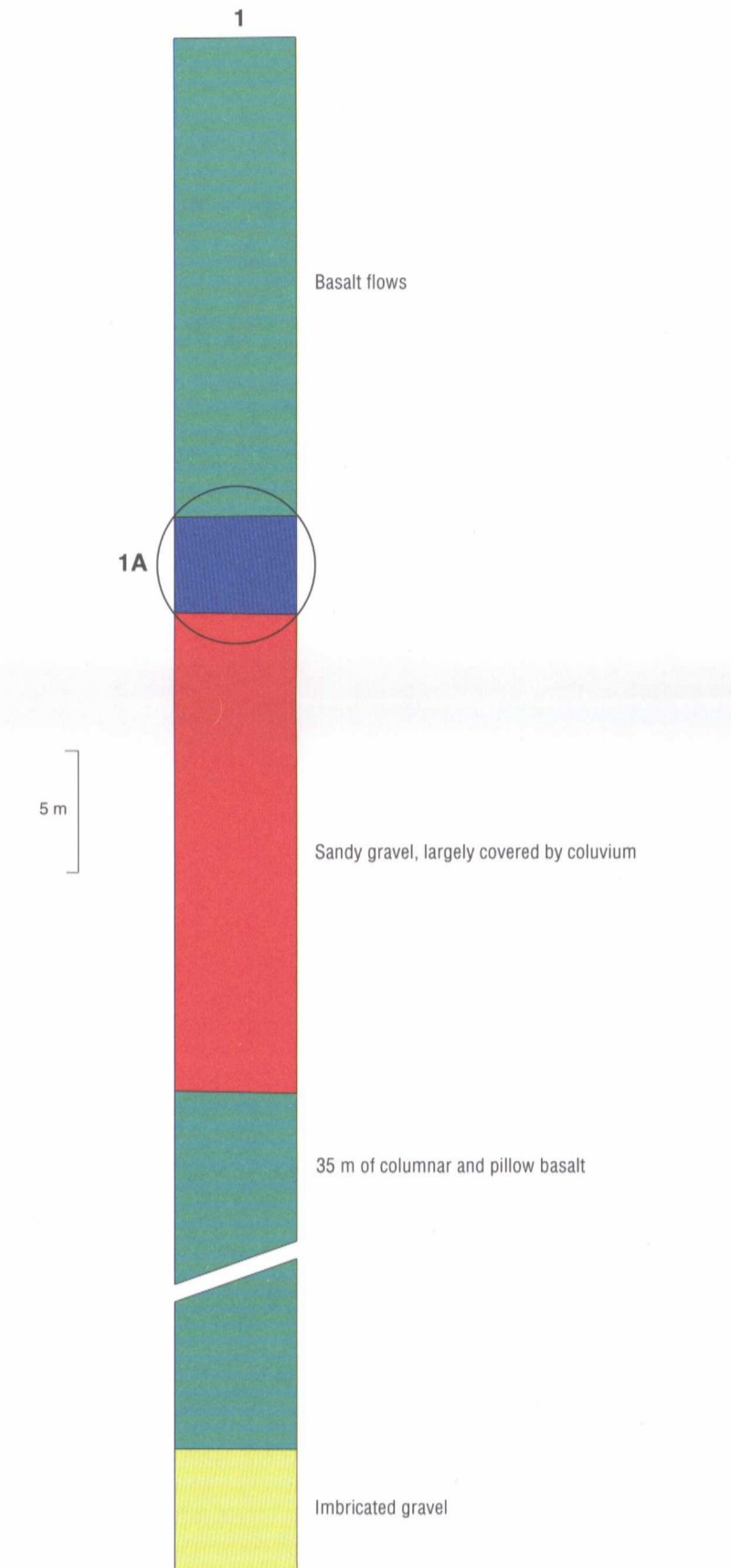
Base map assembled and modified by the Geoscience Information Division from maps 115-912 (1970), 115-911, 115-914 (1961) published at the scale of 1:50 000 by the Surveys and Mapping Branch
 Copies of the topographical editions covering this map area may be obtained from the Canada Map Office, Natural Resources Canada, Ottawa, Ontario, K1A 0E9

Mean magnetic declination 1997: 28°16' E, decreasing 11.9" annually. Readings vary from 28°11' E in the SE corner to 28°21' E in the NW corner of the map

Elevations in feet above mean sea level

| | | | |
|---------|---------|---------|---------|
| 115-913 | 115-914 | 115-915 | 115-916 |
| 1877A | 1878A | | |
| 115-912 | 115-911 | 115-910 | 115-909 |
| 115-905 | 115-906 | 115-907 | 115-908 |
| 1876A | 1878A | | |
| 115-904 | 115-903 | 115-902 | 115-901 |

NATIONAL TOPOGRAPHICAL SYSTEM REFERENCE AND LINK TO CANADIAN GEOLOGICAL SURVEY OF CANADA MAPS



LEGEND FOR STRATIGRAPHIC SECTIONS

QUATERNARY
 EARLY TO MIDDLE PLEISTOCENE
 Paleosol developed between the younger pre-Reid glaciation and Reid Glaciation
 Tilt, younger pre-Reid glaciation
 Glacioluvial sediments, younger pre-Reid glaciation
 Nonglacial predominantly lacustrine sediments deposited during an interglacial between pre-Reid glaciations
 Eolian sands and silts deposited during an interglacial between pre-Reid glaciations
 Till, older pre-Reid glaciation
 Glacioluvial sediments, older pre-Reid glaciation
 Basalt, volcanic ejecta, and hyaloclastite of the Selkirk volcanics
 Possible pre-glacial fluvial sediments
 Paleozoic and Mesozoic bedrock

LEGEND
 Coloured legend blocks indicate map units that appear on the map. The legend is common to maps 1876A-1878A

- CENOZOIC**
QUATERNARY
HOLOCENE - POST-McCONNELL GLACIATION
ORGANIC DEPOSITS: peat and muck formed predominantly by the accumulation of vegetative material in bogs, ferns and swamps situated on valley bottoms and blanket bogs on hillsides (see SYMBOLS below). Peat/muck is commonly encountered within 1 m of the surface. Clean system bogs are common in blanket bog and thermokarst collapse and peat grown are common in bogs, ferns, and swamps
O Bog, fern, and swamp deposits: undivided; thickness < 1 m to 10 m
Ap Alluvial deposits: gravel to silt size sediments deposited by streams
Floodplain sediments: gravel, cobble to pebble; massive to thick bedded deposits in abandoned channels and backswamp areas subject to periodic inundation and reworking by floods; thickness 1 to 5 m
At Alluvial terrace sediments: gravel, cobble to pebble with a sandy matrix; massive to thick bedded; capped by sand and silt; sediments are of flood plain origin; free of debris from flooding by stream incision; thickness 1 m to 10 m or more
Af Alluvial fan sediments: gravel, sand, silt, and diamiction, poorly sorted; thick bedded to massive; sediments form fan-shaped landforms at the confluence of tributary streams with lower gradient trunk streams; subject to flooding accompanied by sudden stream migration and incision by debris flows or fans with gradients in excess of 4%; thickness up to 10 m or more
Au Alluvial sediments, undivided: sediments forming floodplains, fans, and terraces as above that cannot be subdivided at the map scale
PLEISTOCENE AND HOLOCENE (UNDIVIDED)
EOLIAN DEPOSITS: well sorted medium sand to coarse silt transported and deposited by wind action during the early postglacial and McConnell Glaciation. Thin deposits of very fine sand and coarse silt < 1 m thick are distributed discontinuously throughout low lying areas (see SYMBOLS below)
Eb Eolian sands: sand, well sorted; massive; forms crescent shape and linear dunes and hummocks or gently undulating inter-dune eolian plains; thickness 1 to 5 m
COLLUVIAL DEPOSITS: stony diamiction resulting from the physical and chemical breakdown of bedrock and reworking and transportation by creep, solifluction, debris flow, snow avalanching, and scabbling. It also includes diamiction created by landsliding. Colluvial deposits may contain reworked glacial sediments within the limits of ice cover during the Reid and McConnell glaciations. Colluvial deposits beyond the limits of the McConnell Glaciation ice cover are likely the product of continuous formation and reworking over a significant part of the Pleistocene
Cb Colluvial blanket sediments: diamiction, stony with a sandy matrix; massive; thickness > 1 m to 50 m or more in large landforms
Cv Colluvial veneer sediments: diamiction, stony with a sandy matrix; massive; thickness < 1 m to discontinuous over bedrock
Ca Colluvial apron sediments: diamiction, bouldery diamiction and bouldery sandy gravel; poorly sorted; massive; sediments form a wedge-like slope-like complex of small steep debris flow and avalanche-dominated fans and solifluction deposits; thickness < 1 m up and down slope and up to up to 5 m or more in the thickest part of the apron
bcCa Rockfall sediments: boulders, angular, massive; deposits form as rockfall accumulations along the bases of steep bedrock slopes; thickness ranges from < 1 m at margins to up to 10 m
LATE PLEISTOCENE (WISCONSINAN) - McCONNELL GLACIATION
GLACIOLACUSTRINE DEPOSITS: well stratified sand, silt, clay, deposited in lakes ponded by glacial ice. Glaciolacustrine sediments may have regular diamiction and drapings; surface is hummocky, pitted, and ridged; thickness > 5 m
GLACIOLUVIAL DEPOSITS: sands, gravels and minor silts < 1 m thick deposited by streams flowing away from, or in contact with glacial ice including debris graded to former glacial lakes. Sorting ranges from good to poor and stratification from thin bedded to massive. Sediments commonly display evidence of syndepositional collapse due to meltout of buried or supporting ice
Gp Glacioluvial plain sediments: pebble to cobble gravel; massive to thick bedded; capped by sand and silt; planar surface; thickness 1 to > 10 m
Gt Glacioluvial terrace sediments: pebble to cobble gravel; massive to thick bedded; incised into flights of terraces by glacial streams; thickness 1 to > 10 m
Gd Glacioluvial delta sediments: sand, gravel, and minor silt and clay; moderately to well sorted; texture becomes finer downward; massive to thick bedded; deposit has a planar surface and delta form in plan view; thickness > 5 m
Gx Glacioluvial ice stagnation complex sediments: gravel, sand, diamiction, poorly to moderately sorted, and minor silt and clay; bedding thick to massive and commonly bedded and faulted from syndepositional ice meltout; surface consists of hummocks, kettles, esker and crevasse fill ridges with minor elements of units Gp, Gd, and Gt
Gu Discontinuous glacioluvial sediments: gravel and sand including elements of units Gp and Gx; discontinuously distributed in areas of units Mb and Mv
MORAINAL DEPOSITS (TLL): glacial diamiction, mainly silt, generally consisting of a matrix ranging from sand to clay that supports clasts ranging from boulders to pebbles in size; deposited either directly from glacial ice or by gravity flow from glacial ice
Mb Till blanket: diamiction, stony with a silty, sandy matrix; massive to crudely stratified; surface conforms to the underlying topography; thickness 1 to 5 m
Mv Till veneer: diamiction, stony with a silty, sandy matrix; massive to crudely stratified; surface conforms to the underlying topography; thickness < 1 m to patchy colluvium over bedrock
MIDDLE PLEISTOCENE - PRE-McCONNELL GLACIATION (UNDIVIDED)
ALLUVIAL DEPOSITS: gravel and sand deposited by streams that were not fed by glacial meltwater. Sediments may represent several cycles of alluviation and erosion. Sediments are not presently correlative to past glaciations but presumably pre-McConnell Glaciation due to the presence of McConnell age loess overlying them. Basalt gravels within these sediments commonly contain placer gold in basins draining Cretaceous granitoides and andesite
A^MY Alluvial fans: single fans or aprons of coalesced fans formed of gravel and sand; poorly to moderately sorted, thick bedded. Sediments disturbed by cryoturbation and clasts commonly wind scoured. Thickness up to 10 m or more
A^MX Alluvial complex sediments: gravel and sand, poorly to moderately sorted; thin to thick bedded; interstratified with colluvial diamiction, reworked loess, peat, and woody debris; sediments underlie the floors and margins of narrow, alluvial valleys and grade laterally (upslope) into colluvial blankets. They contain segregated ice lenses and ice wedges and are normally capped by blanket bog sediments that represent several depositional cycles; thicknesses may exceed 10 m in mid-valley locations

- EARLY PLEISTOCENE - YOUNGER PRE-REID GLACIATION**
GLACIOLUVIAL DEPOSITS: gravel and sand deposited by streams flowing away from glacial ice in meltwater channels and outwash plains. Thick bedded to massive; clasts, except for quartz, granite, and chert are disaggregated or weathered to clay over the upper 2 m of the sediments where they underlie the surface; clasts near the surface of the unit are irregularly wind scoured and this interval is cut by ice wedge pseudomorphs and sand wedges; thickness 1 m to > 5 m
G^Mp Glacioluvial plain sediments: gravel and sand, deeply weathered; forms an unbedded terrace
G^Mt Glacioluvial terrace sediments: gravel and sand, deeply weathered; incised into flights of terraces
MORAINAL DEPOSITS (TLL): glacial diamiction, mainly silt, generally consisting of a matrix ranging from sand to clay that supports clasts ranging from boulders to pebbles in size; deposited either directly from glacial ice or by gravity flow from glacial ice
M^Mv Till veneer: patchy, deeply weathered diamiction. Matrix silty sandy clay. Formerly feltspar-rich stones are weathered to clay
EARLY PLEISTOCENE
VOLCANIC ROCK AND INTERSTRATIFIED SEDIMENTS
V Pleistocene volcanics (undivided): basalt, breccia, volcanic ejecta and hyaloclastite of the Selkirk volcanics erupted during the early and late Pleistocene or early Holocene epochs in the Fort Selkirk area. Cumulative basalt flow thicknesses exceed 100 m where they have filled valleys. Deposits of late Pleistocene pre-Reid glaciation and at least one nonglacial period are locally interstratified with the volcanics and are exposed only in sections
PALEOZOIC AND MESOZOIC
R Pre-Quaternary bedrock: basalt, andesite, gneiss, schist, gneiss, gneiss, granitoides and monzonite; includes areas of thin, colluvial cover, blockfields, sorted stone polygons in alpine areas
R-A AVALANCHE MODIFIED PRE-QUATERNARY BEDROCK: bedrock areas subject to rapid mass wasting processes (rockfall and snow avalanches)

- SYMBOLS**
 Note: pR - pre-Reid glaciation, R - Reid Glaciation, pM - pre-McConnell Glaciation, (no designer, assume McConnell Glaciation)
 Geological boundary
 Blanket bog covering generally less than 1 m thick
 Discontinuous eolian sands or silts, thickness locally up to 2 m
 Open system pingo, collapsed open system pingo
 Thermokarst collapse actively
 Landslide, arrow(s) indicate direction of movement
 Cirque: degraded cirque active prior to McConnell Glaciation
 Arête: degraded arête active prior to McConnell Glaciation
 Streamlined glacial bedforms: ice flow direction known, unknown
 Meltwater channel, large, small, ice-walled channel, arrow indicates flow direction
 Esker: flow direction defined, unknown
 End moraine
 Recessional moraine
 Ice-contact face in stratified drift (heel on ice side)
 Ice limit
 Cryoplanation terrace
 Tor
 Vertebrate fossil locality
 Stratigraphic section
 Radiocarbon date in years (GSC Lab No.)

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 Extent of Selkirk volcanics from:
 Frances, D. and Ludlow, J.
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 1979. Geology of the Laberge (105E) and Carmacks (115-I) Yukon. Geological Survey of Canada, Open File 1101

- REFERENCES**
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 1997. Surficial geology, Victoria Rock, Yukon Territory. Geological Survey of Canada, Map 1877A, scale 1:100 000