

- SURFICIAL GEOLOGY**
- Thermokarst depression developed on alluvial floodplain
 - Organic deposits mantling lacustrine floodplain of silt and clay, or less commonly, moraine or eolian deposits
 - Undivided surficial deposits; includes alluvium, glacial till, glaciofluvial and glaciolacustrine deposits, ice contact deposits, colluvium, volcanic ash, loess, and scattered bedrock exposures.
 - Glacial ice, snow, and firn veneer with seasonal bedrock exposures.
 - Bedrock exposures; includes discontinuous veneer of undivided glacial drift, local alpine glaciation features.

The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function (1/d²) to filter out minor irregularities and emphasize broad-scale regional features. Single point anomalies may be suppressed or eliminated, however, geological units which are chemically enriched, or large metallic deposits undergoing weathering would be expected to produce identifiable anomalies.

- Symbols**
- Surficial deposit boundary
 - Major meltwater channels, outwash deposits, indicating direction of flow
 - Glacial lineation parallel to ice flow direction, includes fluting, crag and tail, roches moutonnées and drumlinoid forms, direction of flow indicated
 - Drumlinoid form; rock drumlin, crag and tail, fluted bedrock or till, direction of movement inferred, not inferred
 - Esker, direction of flow indicated

Sources of information:
 Hughes, O.L., Campbell, R.B., Muller, J.E., and Wheeler, J.O. (1968) Glacial Map of Yukon Territory, Geological Survey of Canada, Map 6-1968, (1:1 000 000 scale) to accompany GSC Paper 68-34.
 Muller, J.E. (1966) Geology Klunane Lake - Yukon Territory, Geological Survey of Canada Map 1177A, (1:253 440 scale), to accompany GSC Memoir 340.
 Prest, V.K., Grant, D.P., and Rampton, V.N. (1967) Glacial Map of Canada, Geological Survey of Canada (1:5 000 000 scale).
 Rampton, V.N. (1977) Surficial Geology and Geomorphology, Burwash Creek - Yukon Territory, Geological Survey of Canada, Map 6-1978, 1:100 000 scale.
 Surficial Geology and Geomorphology, Genere River - Yukon Territory, Geological Survey of Canada, Map 7-1978, 1:100 000 scale.
 Surficial Geology and Geomorphology, Congdon Creek - Yukon Territory, Geological Survey of Canada, Map 8-1978, 1:100 000 scale.

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CONTRACTORS
 Sample collection by Monaghan Delph Miller Limited, Don Mills, Ontario
 Sample preparation by Golder Associates, Ottawa

Sediment chemical analyses by Bondar Clegg and Company Ltd., Ottawa, Ontario

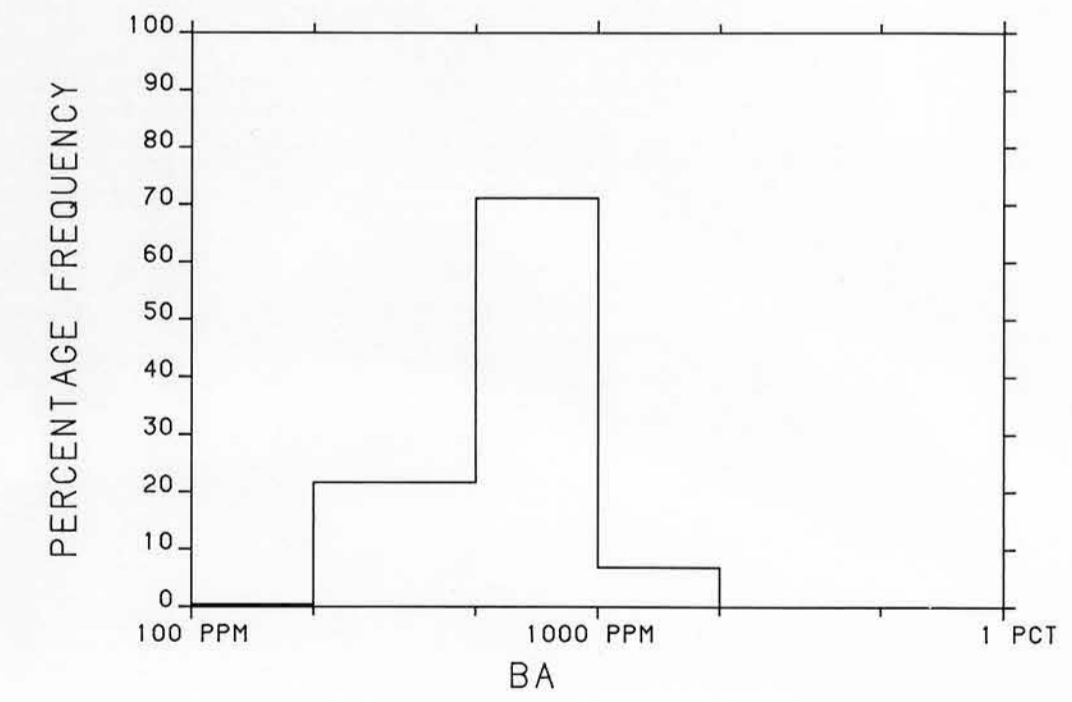
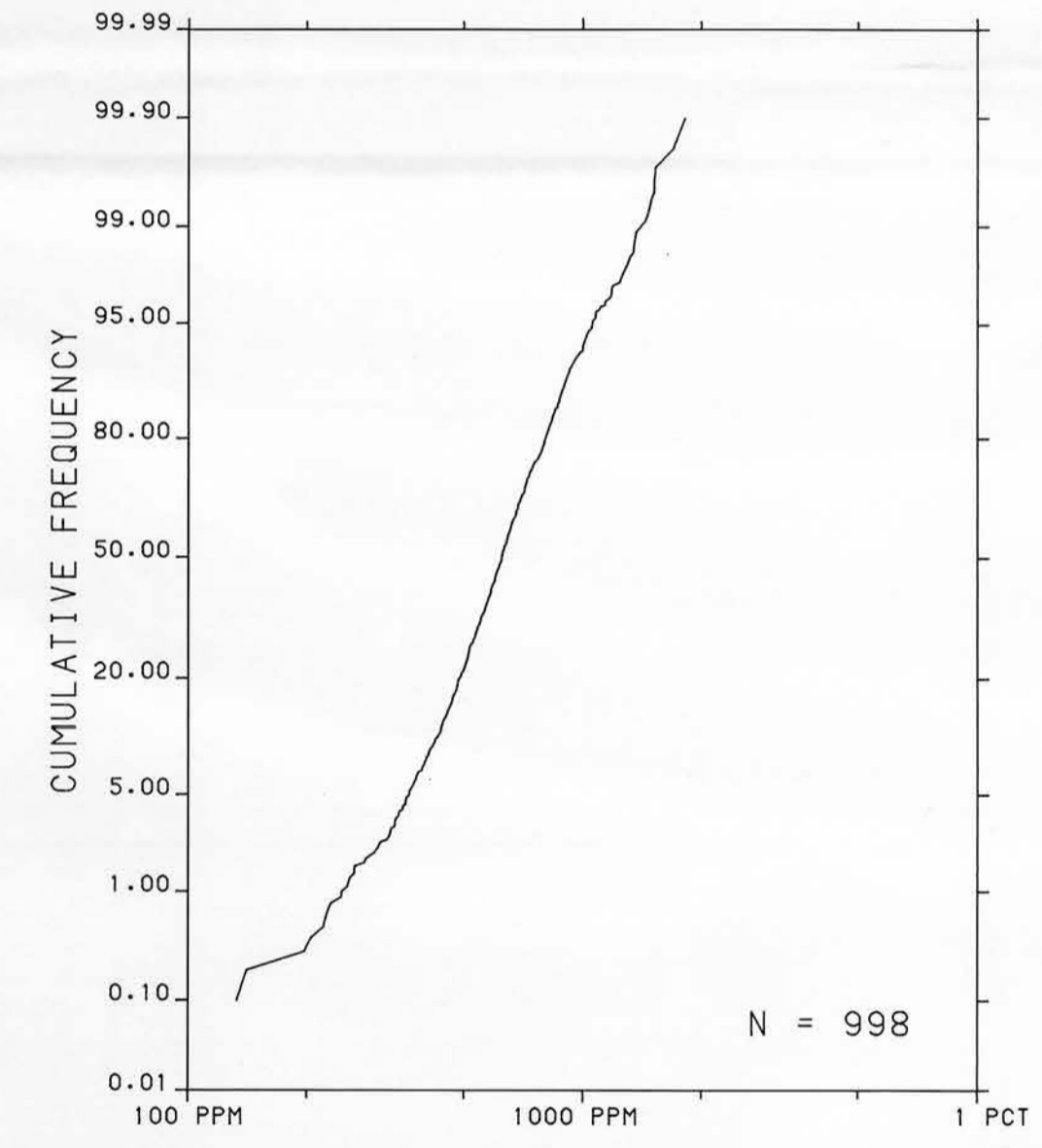
Au analyses by Chemex Labs Limited, Vancouver
 Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

Copies of map material and listings of field observations, analytical data and methods, from which the open file was prepared, are available from:

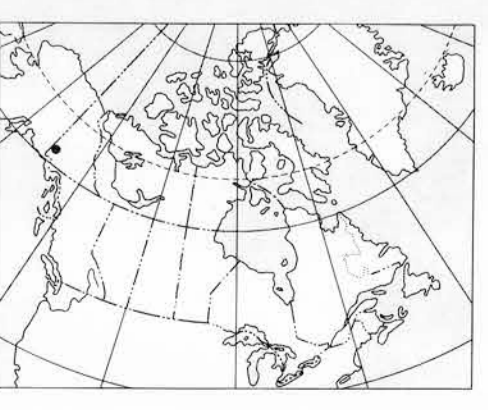
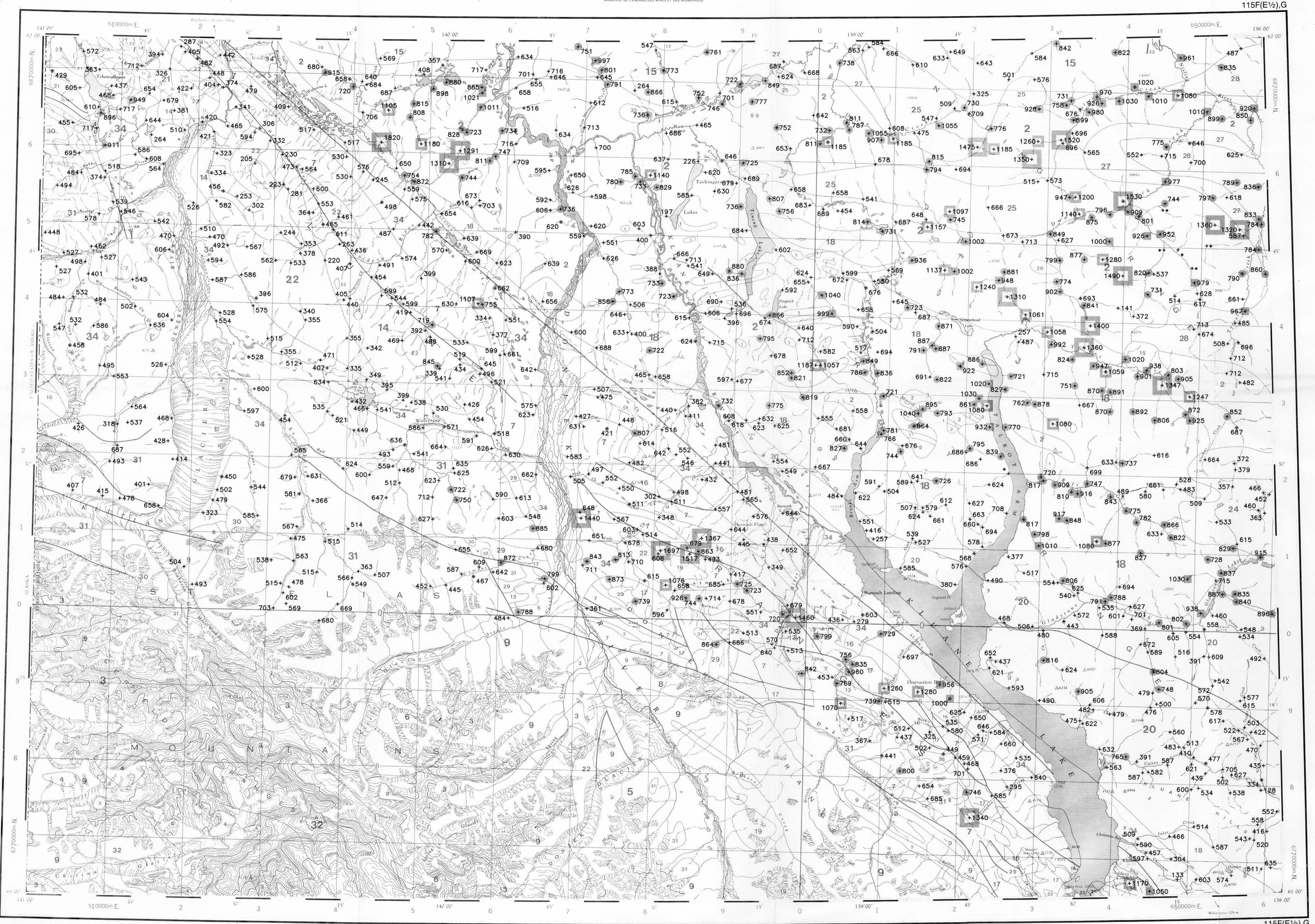
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Digital data are available on IBM-PC compatible diskette from:

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CONCENTRATION	FREQUENCY
1281 to 1820	N = 20 (2.0%)
1056 to 1280	N = 30 (3.0%)
916 to 1055	N = 49 (4.9%)
718 to 915	N = 200 (20.0%)
128 to 717	N = 699 (70.0%)



Elevation in feet above mean sea level
 Mean magnetic declination 1987, 28°52' East, decreasing 13.3' annually. Readings vary from 28°52' E in the SE corner to 28°46' E in the NW corner of the map area

BARIUM (ppm)
STREAM SEDIMENTS
 GSC OPEN FILE 1362
 REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 98-1986
 CANADA - YUKON
 SUBSIDIARY AGREEMENT ON MINERAL RESOURCES (1985-1989)
 STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
 SOUTH-WEST YUKON, 1986
 Scale 1:250 000 - Echelle 1/250 000

Base map at the same scale published by the Surveys and Mapping Branch in 1961



- LEGEND**
- QUATERNARY**
- 34 Q5 64* Glacial and surficial deposits
- TERTIARY**
- 33 TQM 57 Quartz monzonite, granodiorite
 - 32 TQD 57 Quartz diorite, granodiorite
- MIOCENE AND PLEISTOCENE**
- 31 MPV 62 VRANGELLI: Basalt, andesite pyroclastics, sediments
- LATE TERTIARY**
- 30 LTF 62 Felsite, granite porphyry
- OLIGOCENE AND MIOCENE**
- 29 OMA 61 AMPHITHEATRE: Sandstone, conglomerate, shale, coal
- LOWER (?) TERTIARY**
- 28 TFP 58 Feldspar porphyry dykes, flows
 - 27 TFD 58 Andesite, porphyritic basalt flows, dykes
- EARLY TERTIARY**
- 26 ETG 57 Granodiorite, granite
 - 25 ETGA 57 Alaskite, granite, quartz monzonite
 - 24 ETGM 57 Granite, quartz monzonite
 - 23 FPPP 57 Feldspar porphyry dykes
- CRETACEOUS**
- 22 KGM 52 Granodiorite, quartz diorite, diorite, agmatite complex
- JURASSIC AND CRETACEOUS**
- 21 JKD 51 Argillite, greywacke, conglomerate, volcanics
 - 20 JKS 51 KLUNANE: Sericitic, biotitic schist, gneiss, amphibolite
 - 19 JKG 51 Granodiorite, quartz diorite, quartz monzonite, diorite
- TRIASSIC**
- 18 TUD 42 RUBY RANGE: Granodiorite
- UPPER TRIASSIC**
- 17 UT5 45 CHITLSONE, MCCARTHY: Limestone, dolomite, shale
 - 16 UTN 45 NIKOLAI: Greenstone, basalt, andesite, limestone
- MESOZOIC UNDIVIDED**
- 15 MGD 41 Granodiorite, quartz monzonite
- PERMIAN AND TRIASSIC**
- 14 PTV 40 Greenstone, diorite
 - 13 PTUB 40 Pyroxenite, serpentinite
- PALEOZOIC AND MESOZOIC UNDIVIDED**
- 12 PMW 40 Basic to intermediate volcanic rocks
- PALEOZOIC UNDIVIDED**
- 11 PN 09 NASINA: Graphitic quartzite, schist
 - 10 PTP 09 Chert, argillite, quartzite
 - 9 PS 09 GOROKAN, argillite, limestone; local basalt, andesite, volcanoclastic sediments
- EARLY PALEOZOIC**
- 8 EPUB 09 Gabro complex
- PERMIAN**
- 7 PS 36 Andesite, basalt, ultramafics, pyroclastics, phyllite, chert, limestone, conglomerate
- PENNSYLVANIAN AND PERMIAN**
- 6 PPM 35 Quartz monzonite
 - 5 PPGD 35 Granodiorite, diorite, agmatite complex
 - 4 PPD 35 Quartz diorite, diorite, granodiorite
- DEVONIAN**
- 3 DC 25 Limestone, marble
- HADRYANIAN AND CAMBRIAN**
- 2 HCSM 08 Schist, gneiss, quartzite
- HADRYANIAN**
- 1 HC 07 Crystalline limestone

*A mnemonic code assigned to rock types and recorded as part of field observations.

Geological boundary
 Fault
 No analytical result
 Field duplicate sample sites

Geological base and legend are derived from: Gaborite, H., Thompson-Carter, D., Blanton, S.L., and Campbell, R.B. (1980) Map 1362A, MacMillan River, Yukon - District of Mackenzie - Alaska, NTS Sheet 105, 115, Geological Survey of Canada, Energy, Mines and Resources Canada, 1:1,000,000 Scale.