

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 ($1/r^2$) 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, D.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 Klunene Lake - Yukon Territory, Geological Survey of Canada Map 1177A, (1:253 440 scale), to accompany GSC Memoir 340.
 Prest, V.K., Grant, D.R., and Rampton, V.N. 91967) 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, Generc 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.

Geological Survey of Canada
 Mineral Resources Division
 Exploration Geochemistry Subdivision

CONTRACTORS

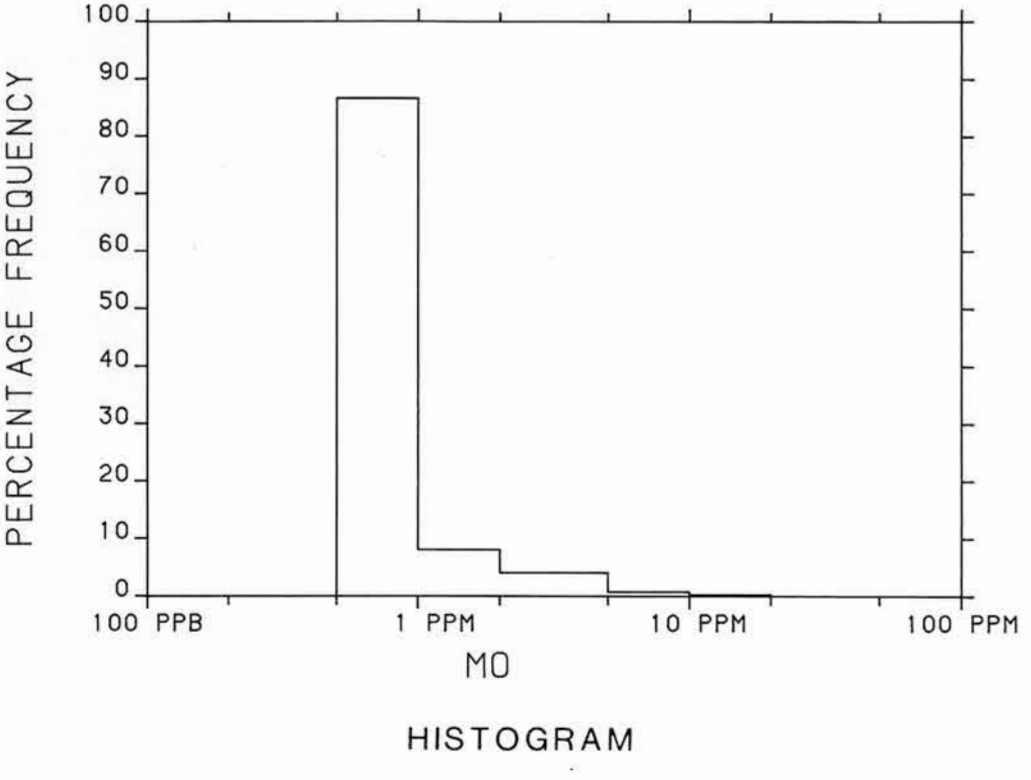
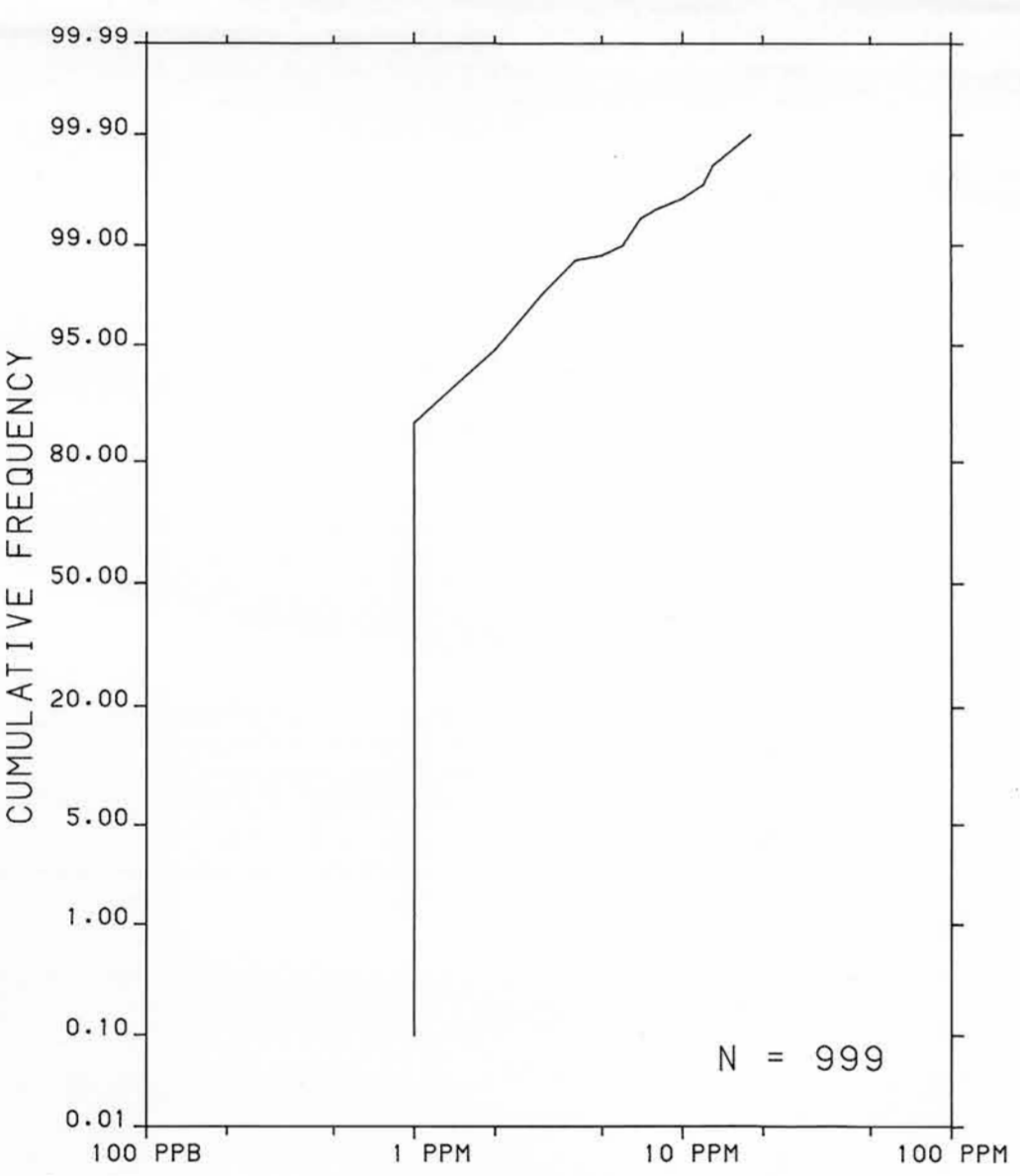
- Sample collection by Monaghan Delph Miller Limited, Don Mills, Ontario
- Sample preparation by Golder Associates, Ottawa
- Sediment chemical analyses by Bondar Clegg and Company Ltd., Ottawa, Ontario

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

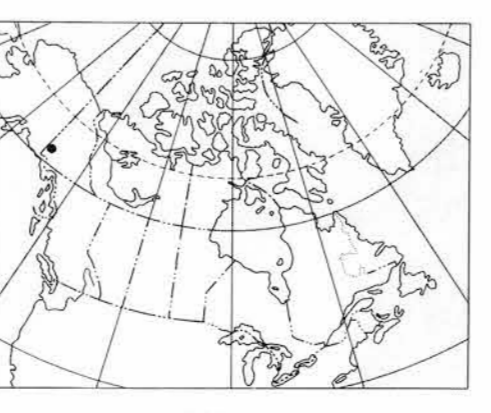
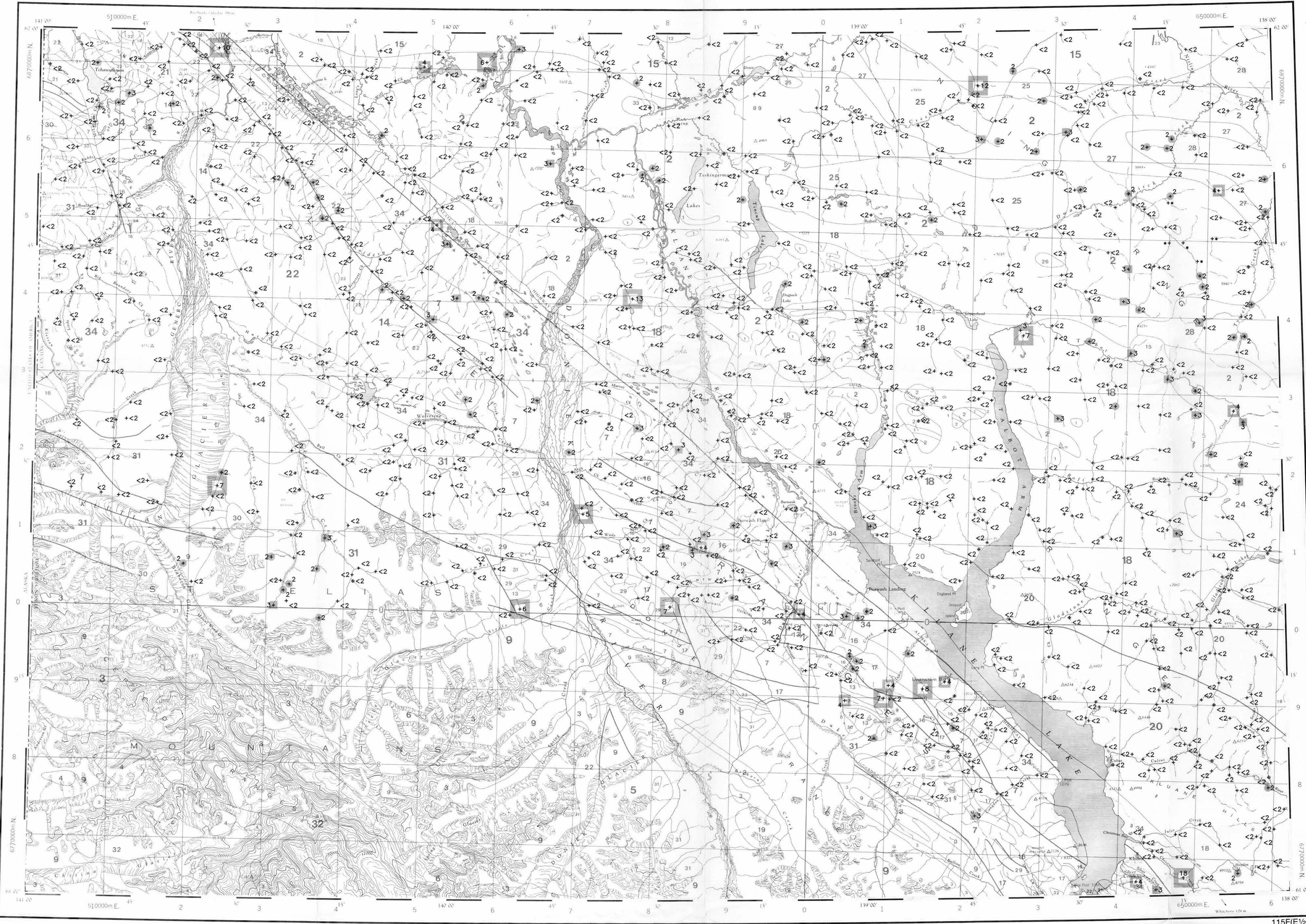
Copies of map material and listings of field observations, analytical data and methods, from which the open file was prepared, are available from:

K.G. Campbell Corporation
 880 Wellington St.
 Bay 235
 Ottawa, Ontario
 K1R 6K7

Digital data are available on IBM-PC compatible diskette from:
 Geological Survey of Canada
 Publications Distribution
 601 Booth St.
 Ottawa, Ontario K1A 0E8
 Tel.: (613)995-4342



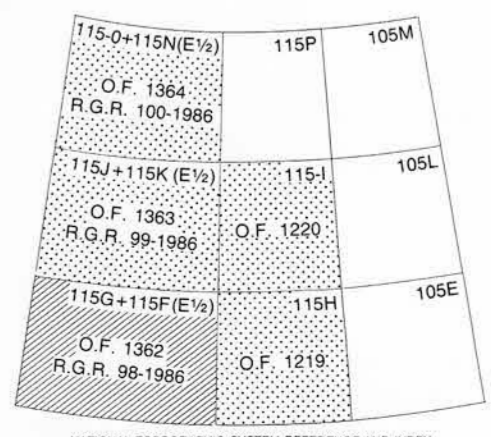
| CONCENTRATION | FREQUENCY |
|---------------|-----------------|
| 5 to 18 | N = 12 (1.2%) |
| 4 | N = 10 (1.0%) |
| 3 | N = 30 (3.0%) |
| 2 | N = 81 (8.1%) |
| <2 | N = 866 (86.7%) |



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

MOLYBDENUM (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

PLEISTOCENE AND RECENT

- 34 QS 64* Glacial and surficial deposits

TERTIARY

- 33 TOM 57 Quartz monzonite, granodiorite
- 32 TOD 57 Quartz diorite, granodiorite

MIOCENE AND PLEIOCENE

- 31 MPV 62 WRANGELL: 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 ETM 57 Granite, quartz monzonite
- 23 FPPP 57 Feldspar porphyry dykes

CRETACEOUS

- 22 KGDN 52 Granodiorite, quartz diorite, diorite, agmatite complex

JURASSIC AND CRETACEOUS

DEADASH GROUP

- 21 JKD 51 Argillite, greywacke, conglomerate, volcanics
- 20 JKK 51 KLUNENE: Serpentine, biotitic schist, gneiss, amphibolite
- 19 JKG 51 Granodiorite, quartz diorite, quartz monzonite, diorite

TRIASSIC

- 18 TOD 42 RUBY RANGE: Granodiorite

UPPER TRIASSIC

- 17 UTS 45 CHITISONE, McARDY: Limestone, dolomite, shale
- 16 UTM 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 PM 09 NASINA: Graphitic quartzite, schist
- 10 PTP 09 Chert, argillite, quartzite
- 9 PS 09 Greywacke, argillite, limestone; local basalt, andesite, volcaniclastic sediments

EARLY PALEOZOIC

- 8 EPUB 09 Gabro complex

PERMIAN

SKOLAI GROUP

- 7 PS 36 Andesite, basalt, ultramafics, pyroclastics, phyllite, chert, limestone, conglomerate

PENNSYLVANIAN AND PERMIAN

- 6 PPRQ 35 Quartz monzonite
- 5 PPGD 35 Granodiorite, diorite, agmatite complex
- 4 PPRQ 35 Quartz diorite, diorite, granodiorite

DEVONIAN

- 3 DC 25 Limestone, marble

HARRYNIAN AND CAMBRIAN

- 2 HCSM 09 Schist, gneiss, quartzite

HARRYNIAN

- 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:
 Gabrielle, R., Templeman-Kluit, D., Blusson, S.L. and Campbell, R.B. (1980) Map 1368A, MacMillan River, Yukon - District of Mackenzie - Alaska, NTS Sheet 109, 115, Geological Survey of Canada, Energy, Mines and Resources Canada, 1:1,000,000 Scale.