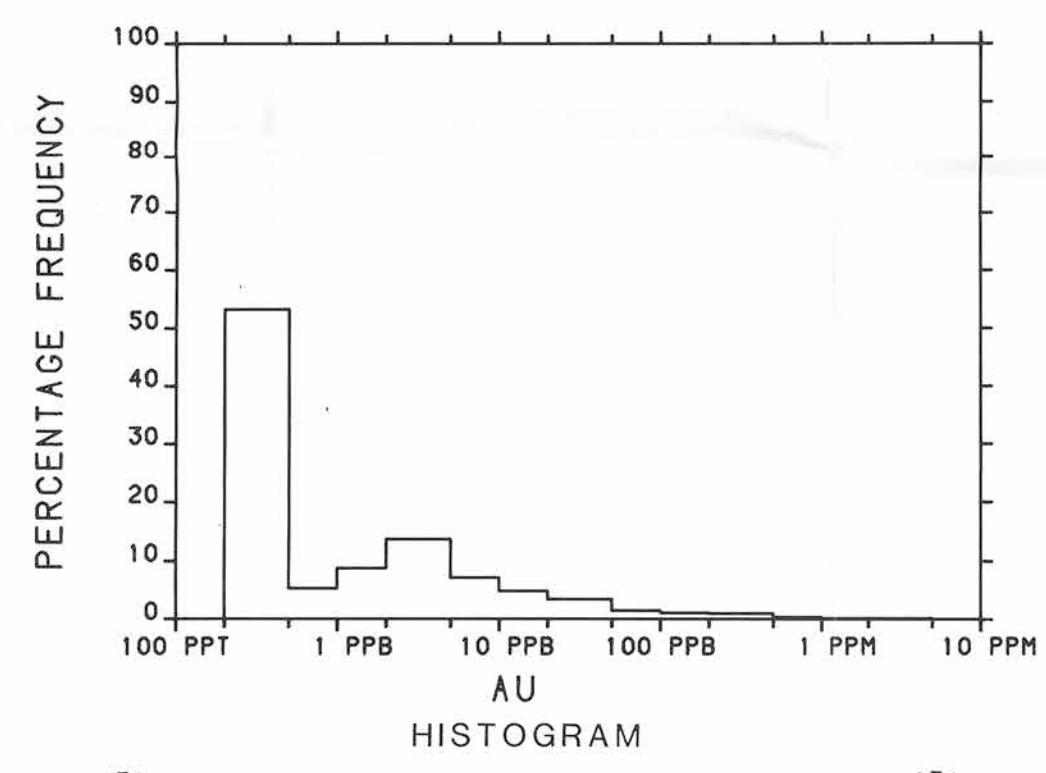
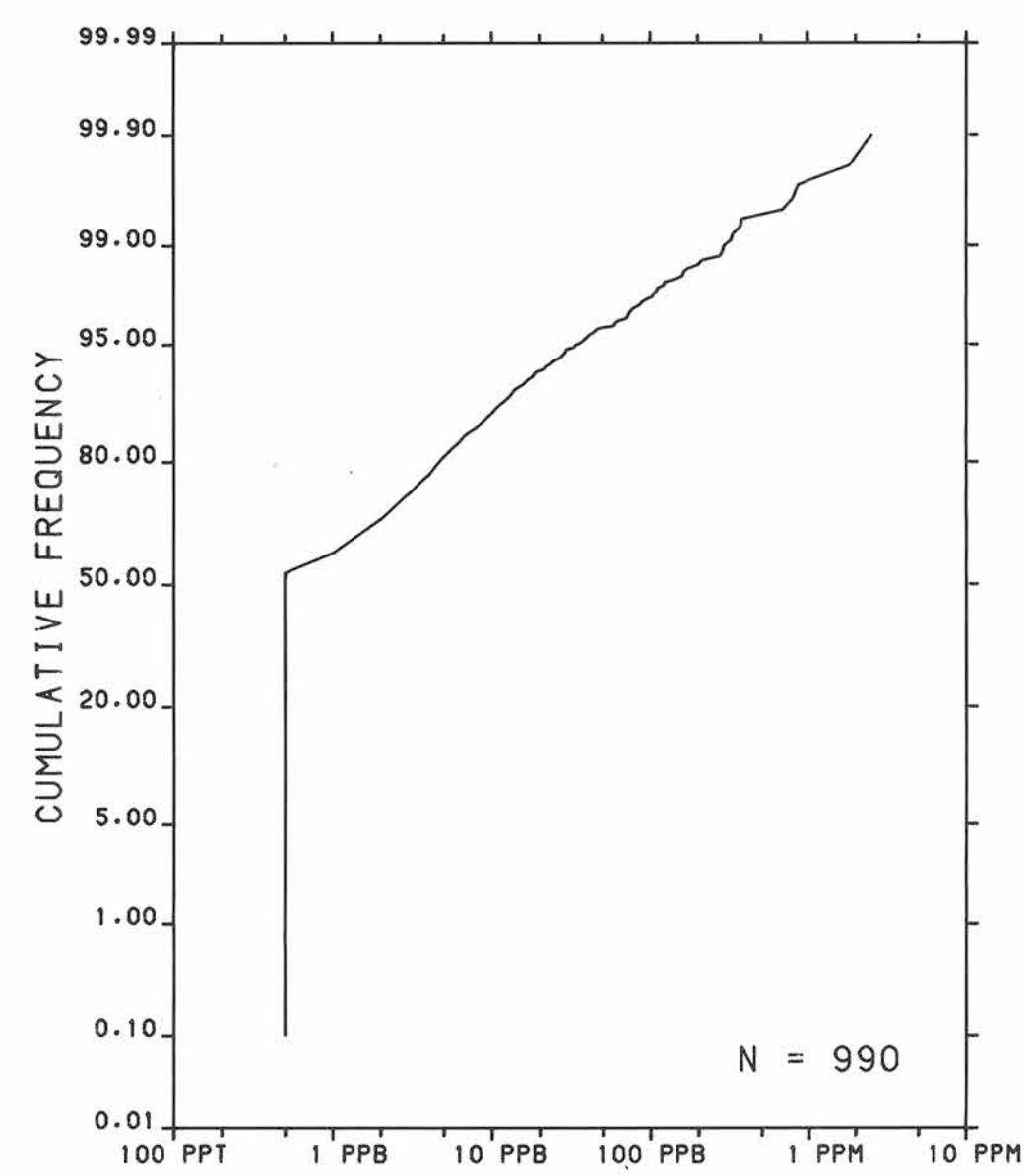


The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function (1/d²) to filter out minor irregularities and emphasize broad-scale regional features. Single point anomalies may be suppressed or eliminated, however, geological units which are chemically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



Geological Survey of Canada
 Resource Geophysics and Geochemistry Division
 CONTRACTORS
 Sample collection by Rogers Exploration Services Ltd., Whitehorse
 Sample preparation by Golder Associates, Ottawa
 Gold analysis by Chemex Labs Limited, Vancouver, B.C.
 Sediment chemical analyses by Barringer Magenta Ltd., Rexdale, Ontario
 Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

This map forms one of a series of maps released by the Geological Survey of Canada, Open Files 1217 to 1220. Each Open File consists of maps of various geochemical variables: 21 for stream sediment, 3 for stream water and 1 sample site location.

Copies of map material and listings of field observations and analytical data, from which the material was prepared, may be available at users expense by application to:

K.G. Campbell Corporation
 880 Wellington St.
 Bay 238
 Ottawa, Ontario
 K1R 6K7

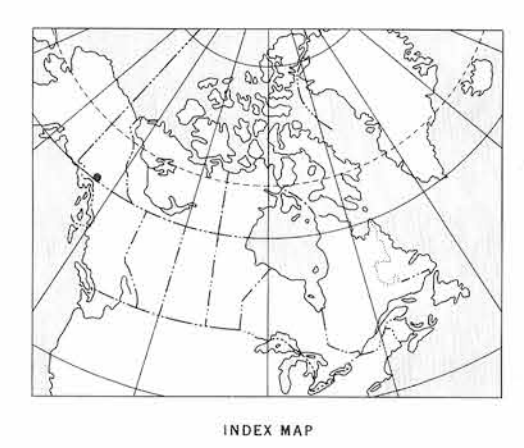
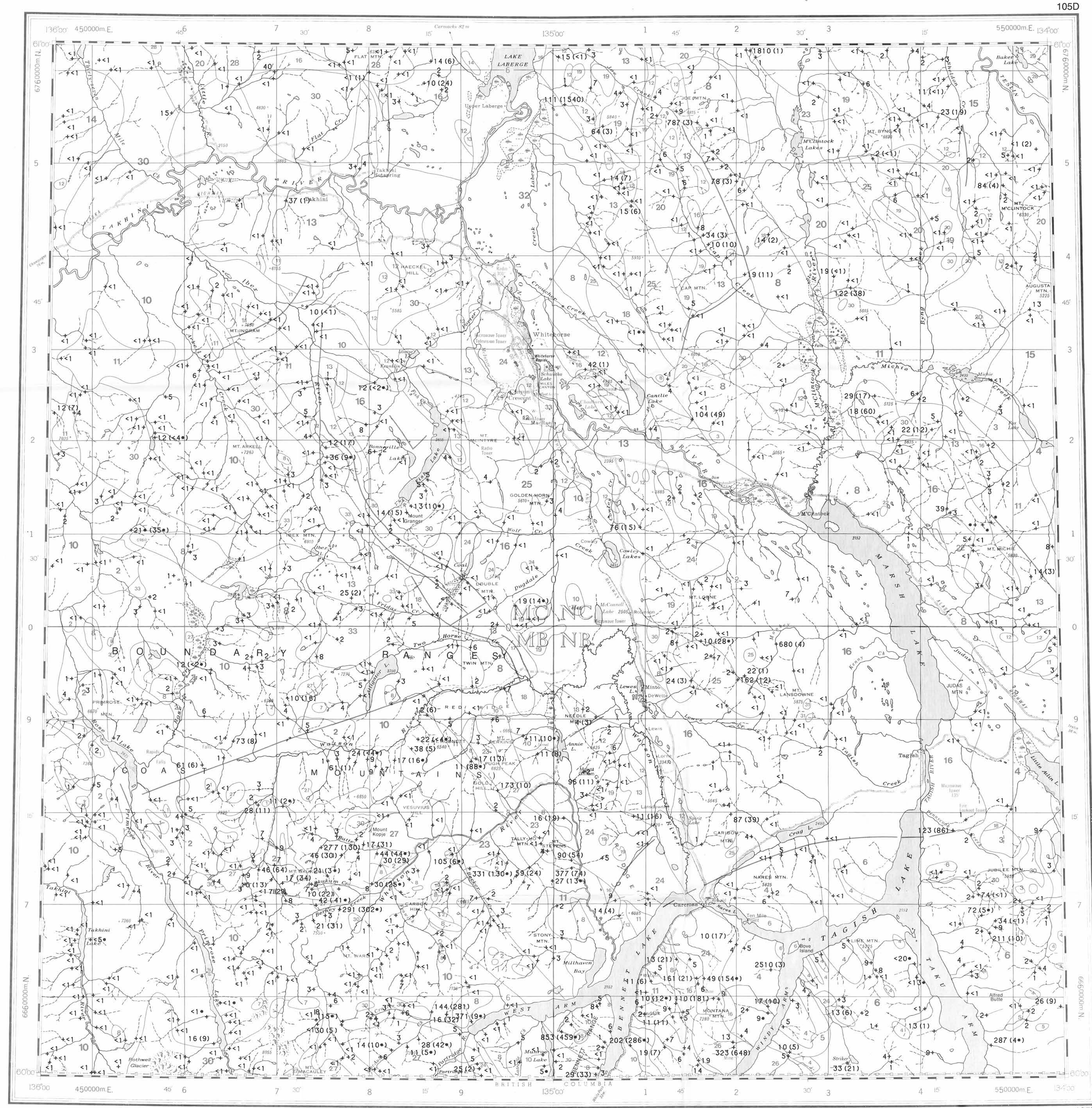
The data are also available in digital form. For further information please contact:

The Director
 Computer Science Centre
 Department of Energy, Mines and Resources
 Ottawa, Ontario
 KIA 0E4

Please refer to Open File text for discussion of gold presentation format and geochemical interpretation

- SYMBOLS**
- Glaciolacustrine deposits
 - Undivided surficial deposits; alluvium, glacial till and moraine, outwash and ice contact deposits, volcanic ash, loess, colluvium
 - Bedrock exposures; includes discontinuous veneer of undivided glacial drift, local alpine glaciation features
- Surficial deposit boundary
- Meltwater channels, outwash deposits, indicating direction of flow
- Glaciation lineation parallel to ice flow direction, includes fluting, crag and tail, roches moutonnées and drumlinoid forms, direction of flow known, unknown
- Drumlinoid form, direction of movement inferred, not inferred
- Glacial striae, direction inferred
- Esker and/or kame complex
- Boulder train, direction of movement

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
 Prest, V.K., Grant, D.R., and Rampton, V.N. (1967) Glacial Map of Canada, Geological Survey of Canada (1:5 000 000 scale)
 Wheeler, J.O. (1960) Geology - WHITEHORSE, Yukon Territory, Geological Survey of Canada, Map 1039A (1:253 440 scale)

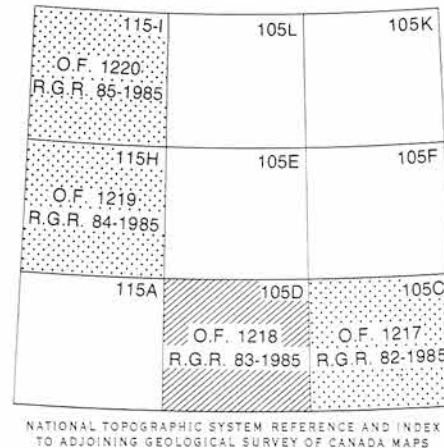
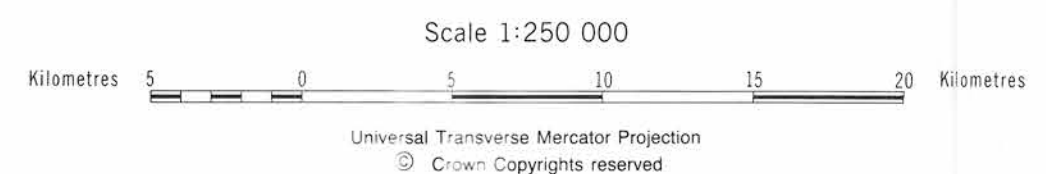


Elevation in feet above mean sea level

Mean magnetic declination 1985, 29°18' East, decreasing 14.2' annually. Readings vary from 29°06' E in the SE corner to 22°29' E in the NW corner of the map area

GOLD (ppb)
 GSC OPEN FILE 1218
 REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 83-1985
 CANADA-YUKON
 MINERAL DEVELOPMENT AGREEMENT (1984-89)
 STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
 SOUTHERN YUKON TERRITORY, 1985

Base map at the same scale published by the Surveys and Mapping Branch in 1979. Streams were revised by the Geological Survey of Canada for this edition



- QUATERNARY**
- 33 RMC 64* Miles Canyon: Basalt
 - 32 QS 64 Glacial and surficial deposits
- TERTIARY**
- 31 TOM 62 Quartz monzonite, granodiorite
- LATE TERTIARY**
- 30 LTG 62 Rhyolite porphyry, granite, granodiorite
- PLIOCENE**
- 29 PV 62 Basalt
- Eocene**
- MOUNT NANSEN GROUP
 - 28 ENM 59 Acid to intermediate tuff, breccia
 - SKUKUM GROUP
 - 27 ESK 59 Andesite, basalt, breccia
 - SLOKO GROUP
 - 26 ESL 59 Rhyolite, trachyte
- CRETACEOUS AND TERTIARY**
- 25 KTG 56 Granite, quartz monzonite
 - 24 KTD 56 Granodiorite, quartz diorite
 - 23 KTQ 56 Tonalite
- CRETACEOUS**
- 22 KY 52 Syenite, monzonite
 - 21 KQM 52 Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alkali
 - 20 KGD 52 Granodiorite
 - 19 KW 52 Basalt, andesite, quartz dacite
- JURASSIC AND CRETACEOUS**
- 18 JKDI 51 Diorite, hornblende diorite
 - 17 JKT 51 TANTALUS: Conglomerate, siltstone, arkose, coal
- JURASSIC**
- 16 JL 47 Greywacke, arkose, conglomerate
- TRIASSIC AND JURASSIC**
- 15 TJS 46 Argillite, sandstone, siltstone
- TRIASSIC**
- 14 TGDN 42 Foliated hornblende granodiorite, quartz
- UPPER TRIASSIC**
- LEWES RIVER GROUP (UTLW, UTC, UTLV)
 - 13 UTLW 45 Greywacke, argillite, conglomerate
 - 12 UTC 45 Limestone
 - 11 UTLV 45 Andesite, basalt
- MESOZOIC UNDIVIDED**
- 10 MGD 41 Granodiorite, quartz monzonite
 - 9 MGDN 41 Foliated hornblende granodiorite, quartz monzonite
 - 8 MV 41 Andesite, basalt, tuff
- PALEOZOIC UNDIVIDED**
- 7 PGDN 09 PELLY GNEISS: Foliated to gneissic granodiorite
- CARBONIFEROUS AND PERMIAN**
- 6 CPH 35 HURSEFEED: Limestone
 - 5 CPK 35 KEDAHDA: Chert, argillite
 - 4 CPV 35 Andesite, basalt, chert, tuff
 - 3 CPUB 35 Serpentine, diorite, pyroxenite, peridotite
- HADRYNIAN AND CAMBRIAN**
- 2 HCSN 08 Schist, gneiss, quartzite
- HADRYNIAN**
- 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

Geological base and legend are derived from: Map 1398A, MACMILLAN RIVER, YUKON - DISTRICT OF MACKENZIE - ALASKA, NTS SHEET 105, 115. Compiled by H. Gabrielse, D.J. Tempelman-Kluit, S.L. Blusson and R.B. Campbell, Geological Survey of Canada, Energy, Mines and Resources Canada, 1980, 1:1 000 000 scale

Au value (ppb) +17

() denotes an analysis performed on a sample weight <10 g. identifies Au values corresponding to repeat analyses.

<n denotes a result less than detection level n (ppb).

* consult text for actual sample weight when Au values denoted by * or < detection level

Examples:

- *21* Au value of 21 ppb determined on sample weight <10 g.
- +38(27*) Au value of 38 ppb on first analysis; Au value of 27 ppb on repeat analysis for sample weighing <10 g.
- <4 Au value less than detection limit of 4 ppb.