

- SURFICIAL GEOLOGY**
- Thermokarst depression developed on alluvial floodplain
  - Pits and kettles developed on gravelly glaciofluvial plain
  - Organic deposits mantling lacustrine floodplain, glaciofluvial plain, or less commonly, moraine deposits
  - Undivided surficial deposits; includes alluvium, glacial till, glaciofluvial and glaciolacustrine deposits, ice contact deposits, colluvium, volcanic ash, loess, and scattered bedrock exposures.
  - Colluvium; poorly sorted blanket of rubble commonly <3 m thick overlying bedrock, ubiquitous in unglaciated terrain.
  - Bedrock exposures; includes discontinuous veneer of undivided glacial drift, local alpine glaciation features.

- Symbols**
- Surficial deposit boundary
  - Limit of Reid ice advance, maximum extent of glaciation
  - Major meltwater channels, outwash deposits, indicating direction of flow
  - Drumlinoid form; rock drumlin, crag and tail, fluted bedrock or till, direction of movement not inferred
  - Esker, direction of flow indicated

**Sources of information:**  
Hughes, D.L., Campbell, R.B., Muller, J.E., and Wheeler, J.O. (1966) Glacial Map of Yukon Territory, Geological Survey of Canada, Map 6-1966, (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).  
Rampton, V.N. (1977) Surficial Geology and Geomorphology, Koldern Mountain - Yukon Territory, Geological Survey of Canada, Map 5-1978, 1:100,000 scale.  
(1977) Surficial Geology and Geomorphology, Mirror Creek - Yukon Territory, Geological Survey of Canada, Map 4-1978, 1:100,000 scale.  
Templeman-Kluit, D.J. (1973) Geology, Snag - Yukon Territory, Geological Survey of Canada, Map 16-1973 (1:250,000 scale) to accompany GSC Paper 73-41.

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

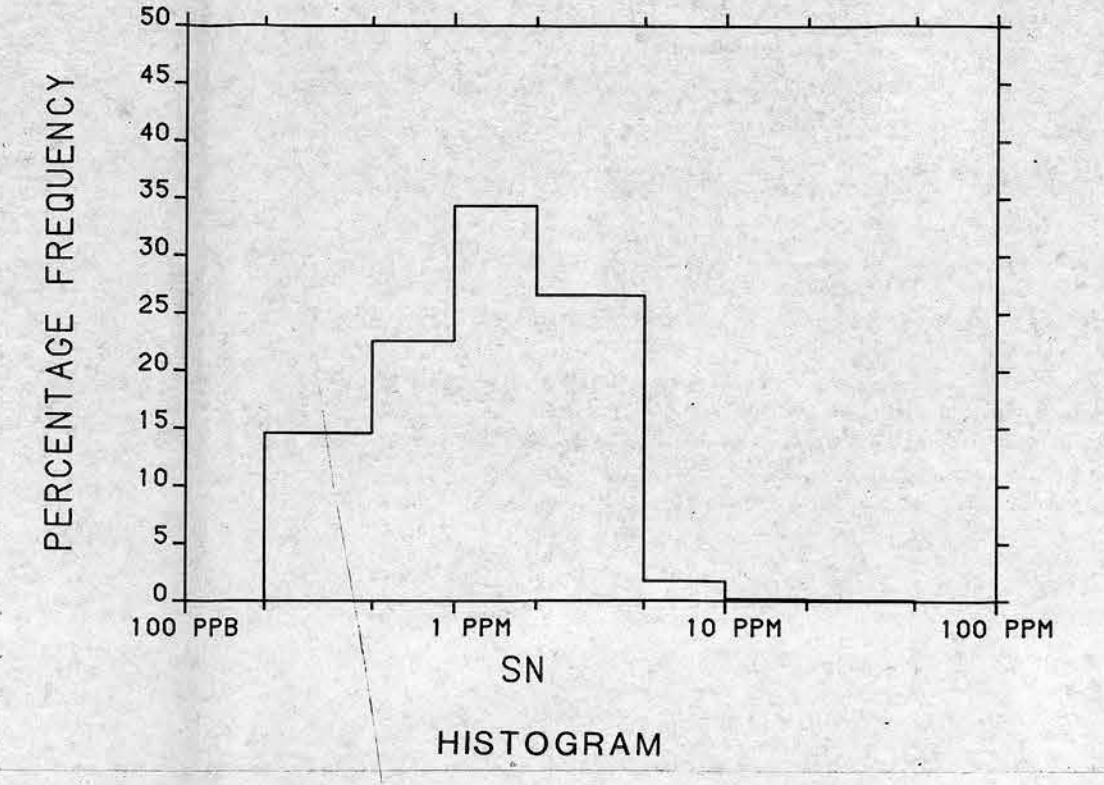
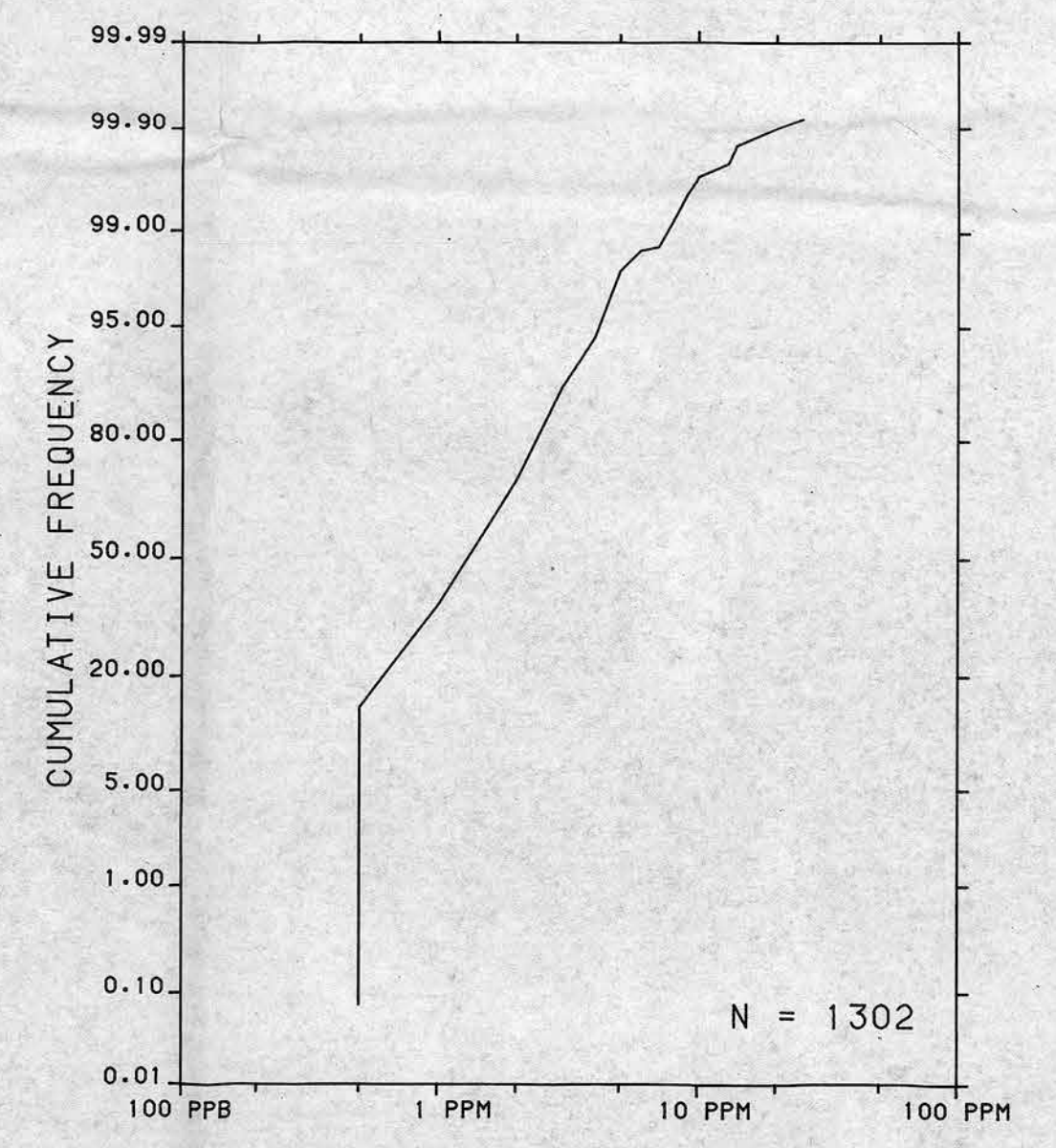
Copies of map material and listings of field observations, analytical data and methods, from which the open file was prepared, are available from:

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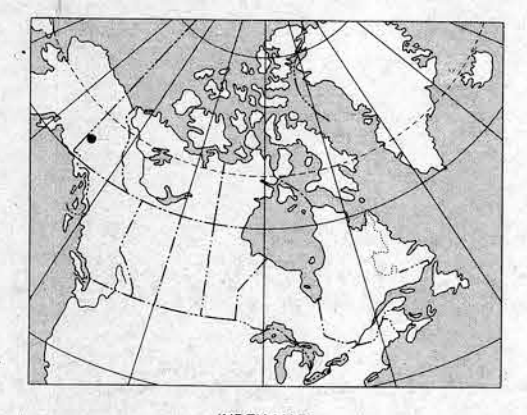
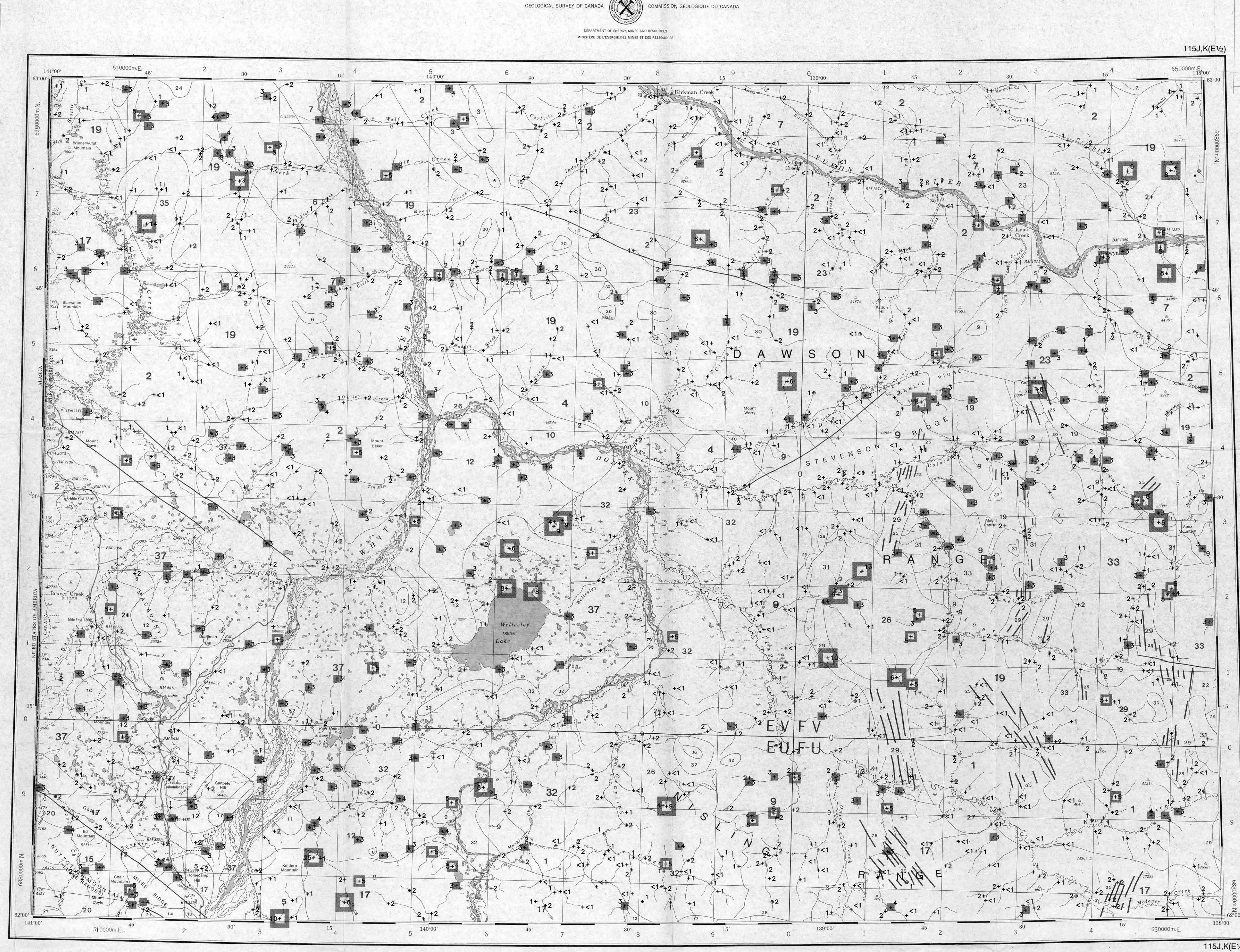
Digital data are available on IBM-PC compatible diskette from:

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The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function (1/r<sup>2</sup>) 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.



CONCENTRATION	FREQUENCY
6 to 25	N = 25 (1.9%)
5	N = 47 (3.6%)
3 to 4	N = 299 (23.0%)
<1 to 2	N = 931 (71.5%)



Elevation in feet above mean sea level

Mean magnetic declination 1987, 29°37' East, decreasing 13.4' annually. Readings vary from 29°37' E in the SE corner to 29°32' E in the NW corner of the map area

**TIN (ppm)**  
**STREAM SEDIMENTS**  
GSC OPEN FILE 1363  
REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 99-1986  
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 1971

Universal Transverse Mercator Projection  
Projection transverse universelle de Mercator  
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- LEGEND**
- QUATERNARY**
- PLEISTOCENE AND RECENT
    - 37 QS 64\* Glacial and surficial deposits
  - TERTIARY AND QUATERNARY
    - PLIOCENE AND PLEISTOCENE
      - 36 PPF 63 Olivine basalt
    - LATE TERTIARY
      - 35 LIG 62 Rhyolite porphyry, granite, granodiorite
    - OLIGOCENE AND MIOCENE
      - 34 OMA 61 AMPHITHEATRE: Sandstone, conglomerate, shale, coal
    - CARMACKS GROUP
      - 33 OMCV 61 Andesite, basalt, breccia
      - 32 OMD 61 DONJERK: Tuff, breccia
    - Eocene
      - MOUNT NASEN GROUP
        - 31 ENM 59 Acid to intermediate tuff, breccia
    - LOWER (?) TERTIARY
      - 30 TC 58 CASINO: Tuff, ignimbrite, breccia
      - 29 TFP 58 Feldspar porphyry dykes, flow
      - 28 TWD 58 Andesite, porphyritic basalt flows and dykes
    - EARLY TERTIARY
      - 27 ET6 57 Granodiorite, granite
      - 26 ET6A 57 Alaska, granite, quartz monzonite
      - 25 FPPP 57 Feldspar porphyry dykes
  - CRETACEOUS
    - 24 KY 52 Syenite, monzonite
    - 23 KG 52 Granite
    - 22 KOM 52 Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite
    - 21 KGM 52 Granodiorite, quartz diorite, diorite, egmatite complex
  - JURASSIC AND CRETACEOUS
    - DEZADEASH GROUP
      - 20 JXD 51 Argillite, greywacke, conglomerate, volcanics
    - TRIASSIC
      - 19 TGM 42 Foliated hornblende granodiorite, quartz
  - MESOZOIC UNDIVIDED
    - 18 MM 41 Porphyritic quartz monzonite
    - 17 MGD 41 Granodiorite, quartz monzonite
    - 16 MOI 41 Diorite
  - PERMIAN AND TRIASSIC
    - 15 PTV 40 Greenstone, greywacke, shale, limestone
    - 14 PTB 40 Pyroxenite, serpentinite
  - PALEOZOIC AND MESOZOIC UNDIVIDED
    - 12 PW 40 Basic to intermediate volcanic rocks
    - 11 PWB 40 Hornblende gabbro
    - 10 PWB 40 Ultramafic rocks
  - PALEOZOIC UNDIVIDED
    - 9 PA 09 WASINA: Graphitic quartzite, schist
    - 8 PC 09 Limestone
    - 7 PGM 09 PELLY GNEISS: Foliated to gneissic granodiorite
    - 6 PA 09 Amphibolite, schist, gneiss
    - 5 PTP 09 Chert, argillite, quartzite
    - 4 PV 09 Greenstone, amphibolite
  - CARBONIFEROUS AND PERMIAN
    - 3 CPS 35 Quartz-muscovite schist
    - 2 CPS 35 Schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX
  - HADRIANIAN AND CAMBRIAN
    - 1 HCS 08 Schist, gneiss, quartzite

\*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: Gabriel, R., Templeman-Kluit, D.J., Blusson, S.L., and Campbell, R.B. (1983) Map 1396A, MacMillan River, Yukon - District of Yukon, Alaska, NTS Sheet 105, 115, Geological Survey of Canada, Energy, Mines and Resources Canada, 1:1,000,000 Scale.

