

The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function (1/d<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

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  
 890 Wellington St.  
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 Ottawa, Ontario  
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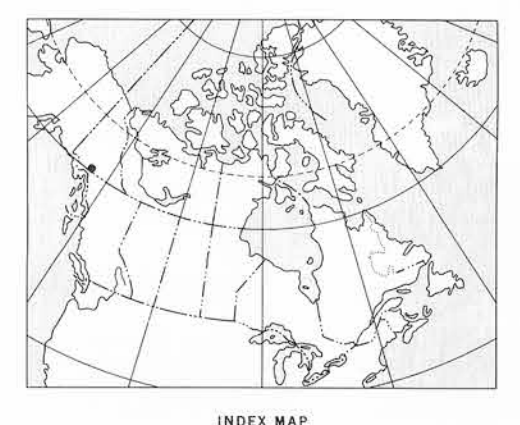
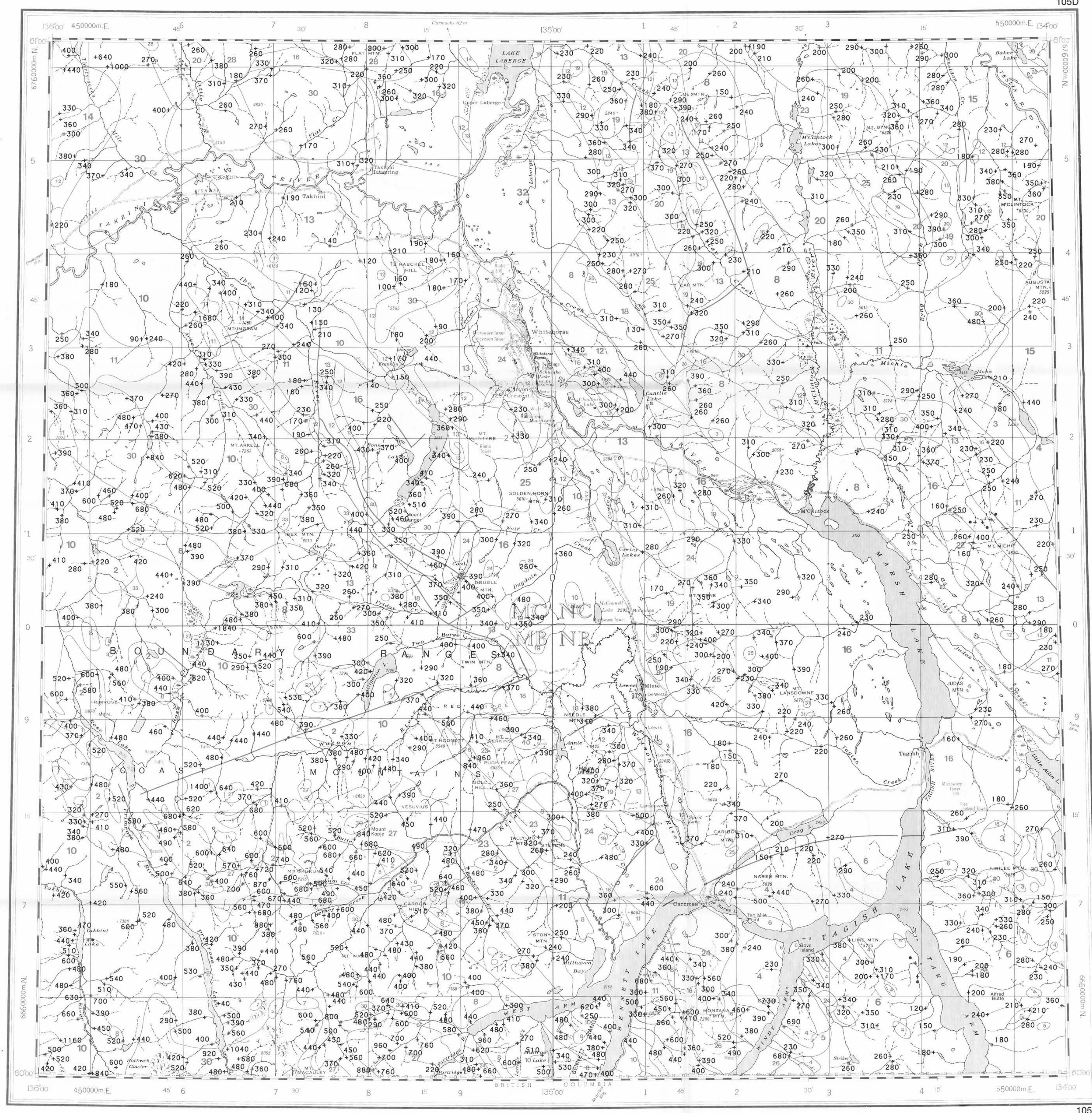
The data are also available in digital form. For further information please contact:

The Director  
 Computer Science Centre  
 Department of Energy, Mines and Resources  
 Ottawa, Ontario  
 K1A 0E4

- 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

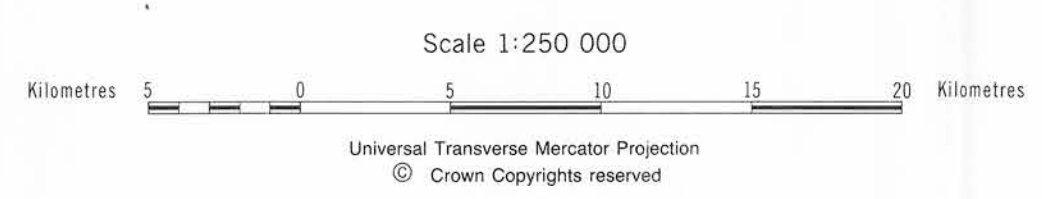
- SYMBOLS
- Surficial deposit boundary
  - Meltwater channels, outwash deposits, indicating direction of flow
  - Glaciation lineation parallel to ice flow direction, includes fluting, crag and tail, roches moutonnées and drumlinoid forms, direction of flow known, unknown
  - Drumlinoid form, direction 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 1093A (1:253 440 scale)

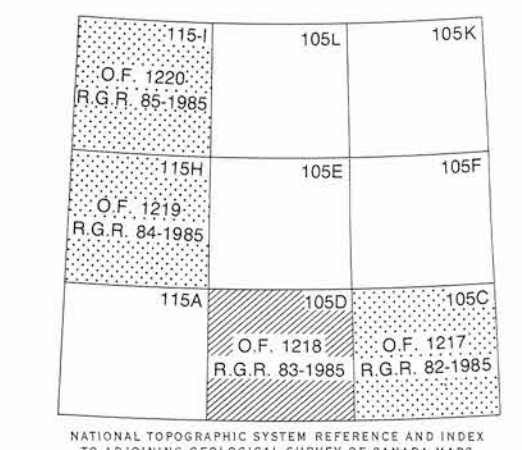


Elevation in feet above mean sea level  
 Mean magnetic declination 1985, 29°18' East, decreasing 14.2' annually. Readings vary from 29°06' E in the SE corner to 22°29' E in the NW corner of the map area

FLUORINE (ppm)  
 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 EMN 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 KTGD 56 Granodiorite, quartz diorite
  - 23 KTQD 56 Tonalite
- CRETACEOUS
  - 22 KY 52 Syenite, monzonite
  - 21 KQM 52 Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite
  - 20 KGD 52 Granodiorite
  - 19 KY 52 Basalt, andesite, quartz dacite
- JURASSIC AND CRETACEOUS
  - 18 JKD 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
    - LENES 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 PELY GNEISS: Foliated to gneissic granodiorite
- CARBONIFEROUS AND PERMIAN
  - 6 CPH 35 HORSEFEED: Limestone
  - 5 CPK 35 KEDAWA: 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 1399A, MACMILLAN RIVER, YUKON - DISTRICT OF MACKENZIE - ALASKA, NTS SHEET 109, 115. Compiled by H. Gabriele, 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