

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

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., Miller, 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 Klunne 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. (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.

Geological Survey of Canada
 Mineral Resources Division
 Exploration Geochemistry Subdivision

CONTRACTORS

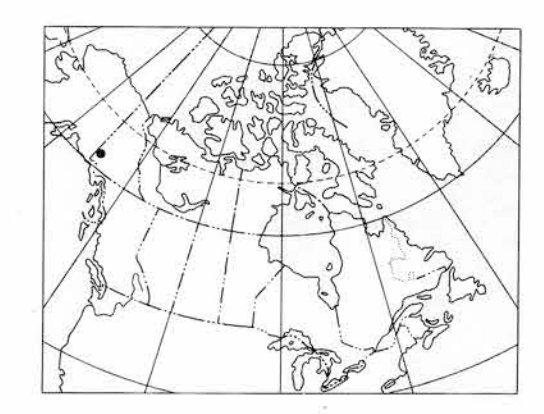
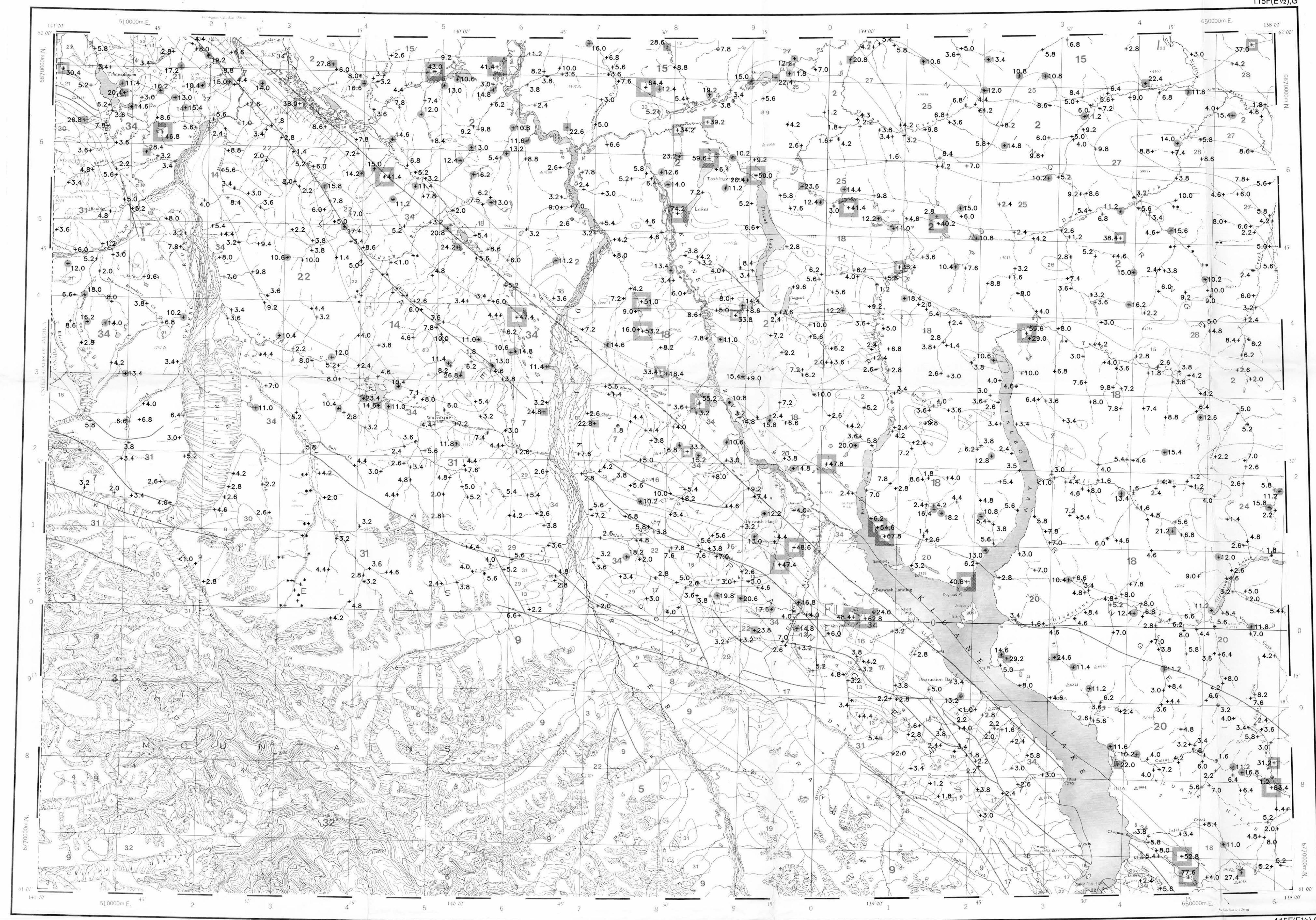
- Sample collection by Monaghan Delph Miller Limited, Don Mills, Ontario
- Sample preparation by Golder Associates, Ottawa
- Sediment chemical analyses by Bondar Clegg and Company Ltd., Ottawa, Ontario
- Au analyses by Chemex Labs Limited, Vancouver
- Water chemical analyses by Barringer Magenta Laboratories (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:

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 880 Wellington St.
 Bay 238
 Ottawa, Ontario
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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 | N | PERCENT |
|---------------|-----------|-----|---------|
| 40.1 to 83.4 | + | 26 | (2.7%) |
| 30.1 to 40.0 | ■ | 11 | (1.1%) |
| 20.1 to 30.0 | ■ | 27 | (2.8%) |
| 10.1 to 20.0 | ● | 134 | (13.7%) |
| <1.0 to 10.0 | + | 783 | (79.8%) |



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

LOSS ON IGNITION (%)
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

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 TQM 57 Quartz monzonite, granodiorite
- 32 TGD 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 Felsidsp. porphyry dykes, flows
- 27 TVD 58 Andesite, porphyritic basalt flows, dykes

EARLY TERTIARY

- 26 ETG 57 Granodiorite, granite
- 25 ETGA 57 Alaskite, granite, quartz monzonite
- 24 ETQM 57 Granite, quartz monzonite
- 23 PPPP 57 Felsidsp. porphyry dykes

CRETACEOUS

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

JURASSIC AND CRETACEOUS

DEZADEASH GROUP

- 21 JKD 51 Argillite, greywacke, conglomerate, volcanics
- 20 JKK 51 KLUNNE: Sericitic, biotitic schist, gneiss, amphibolite
- 19 JGD 51 Granodiorite, quartz diorite, quartz monzonite, diorite

TRIASSIC

- 18 TGD 42 RUBY RANGE: Granodiorite

UPPER TRIASSIC

- 17 UTS 45 CHITTSONE, 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 PMV 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 Gabbro complex

PERMIAN

SKOLAI GROUP

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

PENNSYLVANIAN AND PERMIAN

- 6 PPM 35 Quartz monzonite
- 5 PPD 35 Granodiorite, diorite, agmatite complex
- 4 PPD 35 Quartz diorite, diorite, granodiorite

DEVONIAN

- 3 DC 25 Limestone, marble

HARDYNIAN AND CAMBRIAN

- 2 HCSN 08 Schist, gneiss, quartzite

HARDYNIAN

- 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: Gabrielse, W., Tompkins-Kiatt, D.J., Blanton, S.L. and Campbell, R.B. (1980) Map 1398A, 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.

