

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/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.

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., 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 Klwan 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, Generc River - Yukon Territory, Geological Survey of Canada, Map 7-1978, 1:100 000 scale.
 Surficial Geology and Geomorphology, Gcondon Creek - Yukon Territory, Geological Survey of Canada, Map 8-1978, 1:100 000 scale.

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CONTRACTORS

Sample collection by Monaghan Delph Miller Limited, Don Mills, Ontario
 Sample preparation by Golder Associates, Ottawa

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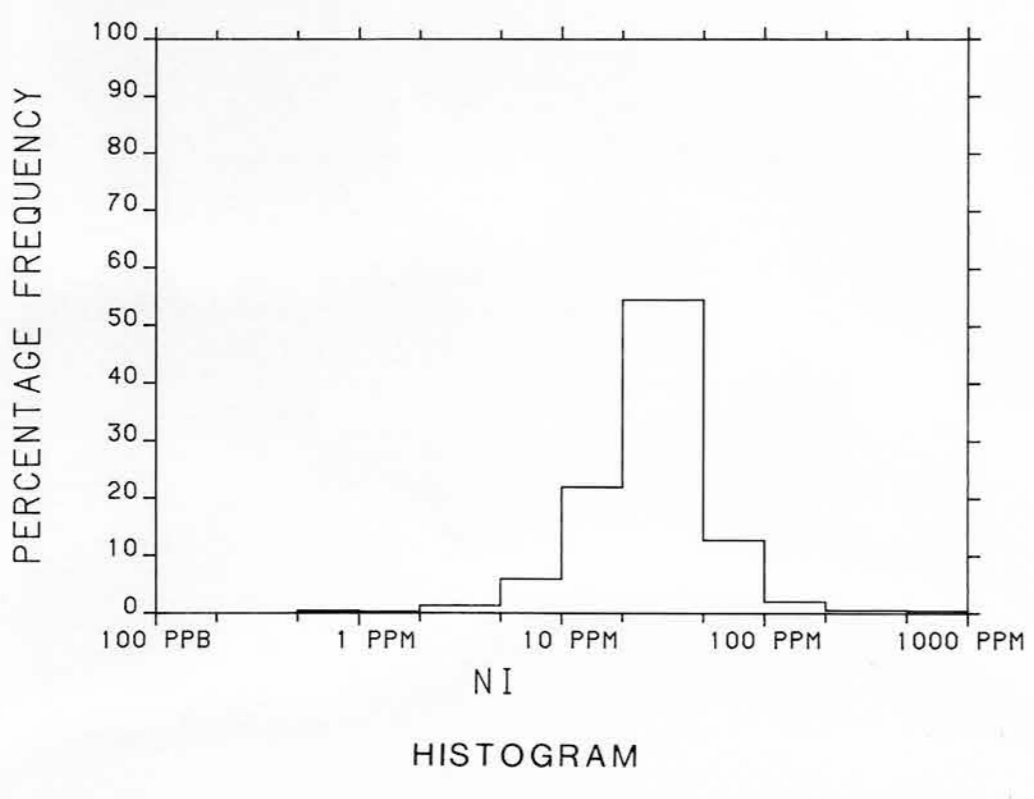
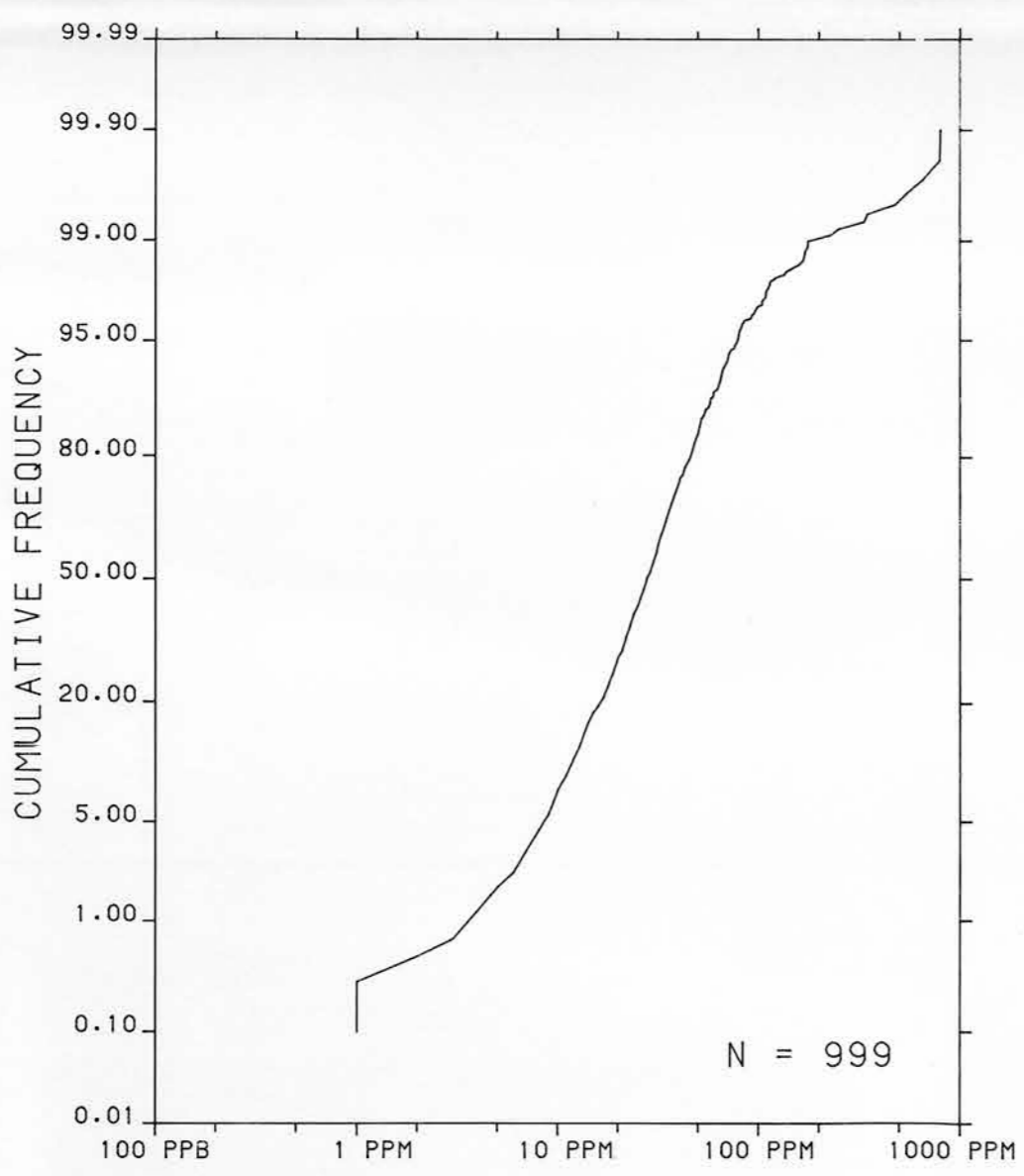
All analyses by Chemex Labs Limited, Vancouver
 Water chemical analyses by Barringer Magenta Laboratories (Alberta) Ltd., Calgary

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

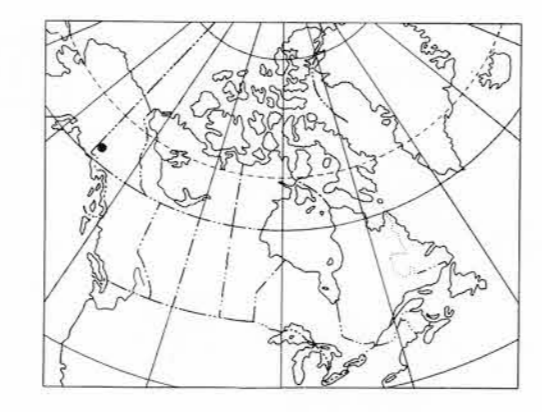
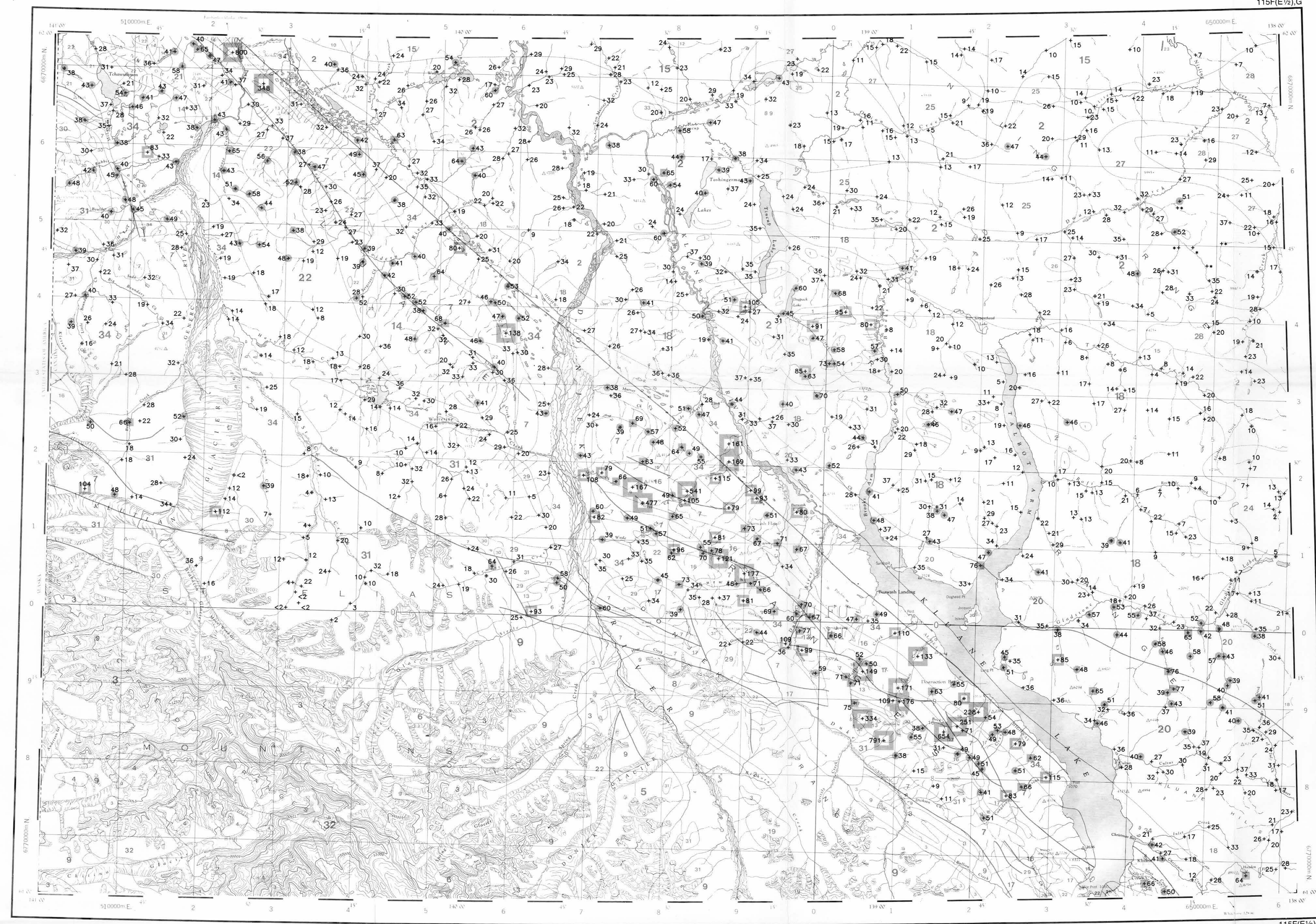
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Digital data are available on IBM-PC compatible diskette from:

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CONCENTRATION	FREQUENCY
116 to 800	N = 19 (1.9%)
79 to 115	N = 31 (3.1%)
61 to 78	N = 47 (4.7%)
38 to 60	N = 201 (20.1%)
<2 to 37	N = 701 (70.2%)

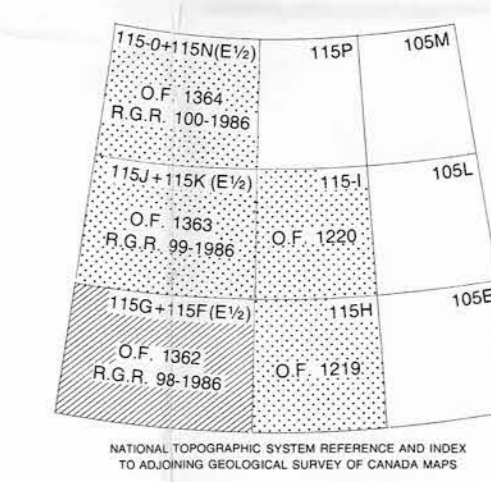


Elevation in feet above mean sea level

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

NICKEL (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

Base map at the same scale published by the Surveys and Mapping Branch in 1961



LEGEND

QUATERNARY

PLEISTOCENE AND RECENT

34 Q5 64+ Glacial and surficial deposits

TERTIARY

33 TQM 57 Quartz monzonite, granodiorite

32 TGD 57 Quartz diorite, granodiorite

MIOCENE AND PLEIOENE

31 MPV 62 WIRANGELL: 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 Felspar 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 ETOM 57 Granite, quartz monzonite

23 FPPP 57 Felspar porphyry dykes

CRETACEOUS

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

JURASSIC AND CRETACEOUS

DEZADASH GROUP

21 JKD 51 Argillite, greywacke, conglomerate, volcanics

JKX 51 KLWAN: Sericitic, siltitic schist, gneiss, amphibolite

19 JGD 51 Granodiorite, quartz diorite, quartz monzonite, diorite

TRIASSIC

18 TGD 42 RUBY RANGE: Granodiorite

UPPER TRIASSIC

17 UTS 45 CHITISSON, MCCARTHY: Limestone, dolomite, shale

16 UTS 45 NIKOLAI: Greenstone, basalt, andesite, limestone

MESOZOIC UNDIVIDED

15 MGD 41 Granodiorite, quartz monzonite

PERMIAN AND TRIASSIC

14 PTV 40 Greenstone, diorite

13 PTB 40 Pyroxenite, serpentinite

PALEOZOIC AND MESOZOIC UNDIVIDED

12 PW 40 Basic to intermediate volcanic rocks

PALEOZOIC UNDIVIDED

11 PN 09 NASINA: Graphitic quartzite, schist

10 PTP 09 Chert, argillite, quartzite

9 PS 09 Greywacke, argillite, limestone; local basalt, andesite, volcanoclastic sediments

EARLY PALEOZOIC

8 EPUB 09 Gaboro complex

PERMIAN

SKOLAI GROUP

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

PENNSYLVANIAN AND PERMIAN

6 PPM 35 Quartz monzonite

5 PPG 35 Granodiorite, diorite, agmatite complex

4 PPD 35 Quartz diorite, diorite, granodiorite

DEVONIAN

3 DC 25 Limestone, marble

HADRYNIAN AND CAMBRIAN

2 HCSM 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

Field duplicate sample sites

Geological base and legend are derived from: Gabrielle, H., Templeton-Kluge, J.J., Blusson, S.L. and Campbell, S.B. (1980) Map 1362A, 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.