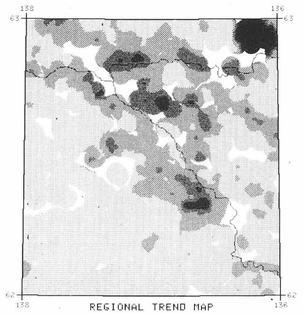
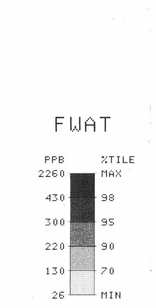
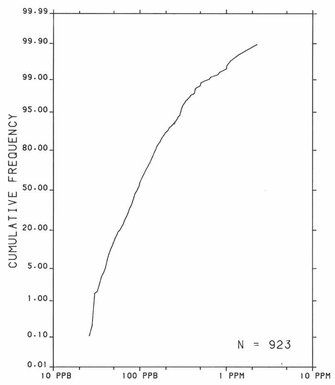
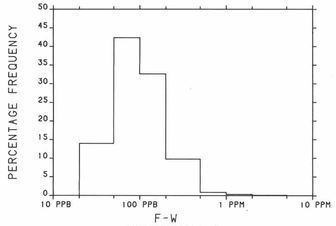
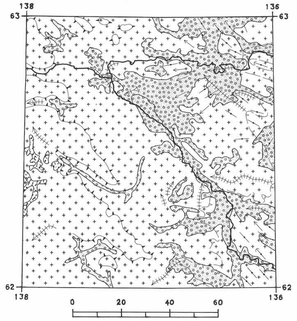




The regional geochemical trend map displayed above utilized a moving weighted average using an inverse distance function ($1/d^3$) to filter out minor irregularities and emphasize broad-scale regional features. Single point anomalies may be suppressed or eliminated, however, geological units which are 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 analysis 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
K1A 0E4

SURFICIAL GEOLOGY

Undivided surficial deposits; alluvium, glacial till and moraine, outwash and ice contact deposits, volcanic ash, loess, colluvium

Glaciers and permanent snowfields

Bedrock exposures; includes discontinuous veneer of undivided glacial drift

SYMBOLS

Surficial deposit boundary . . . . . .

Limit of Pre-Reid ice advance . . . . . .

Limit of McConnell (Ruby) ice advance . . . . . .

Meltwater channels, outwash deposits, indicating direction of flow . . . .

Glaciation lineation parallel to ice flow direction, includes fluting, crag and tail, roches moutonnees and drumlinoid forms, direction of flow indicated . . . . . .

Drumlinoid form, direction of movement inferred, not inferred . . . . . .

Sources of information:

Bostock, H.S. (1936) Geology - CARMACKS SHEET, Yukon Territory, Canada Department of Mines, Bureau of Economic Geology, Geological Survey, Map 340A (1:253,440 scale)

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

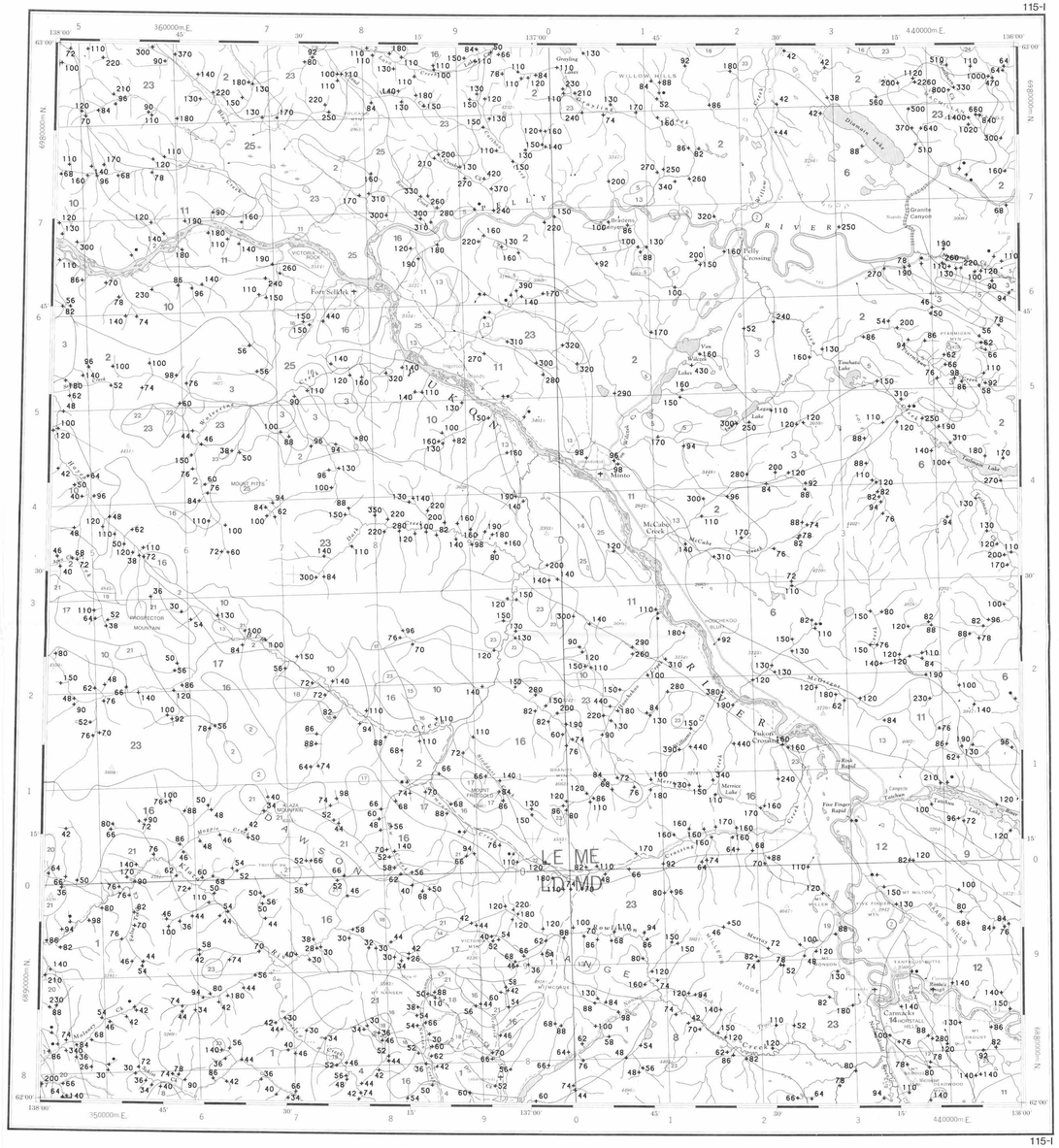
Prest, V.K., Grant, D.R., and Rampton, V.N. (1967) Glacial Map of Canada, Geological Survey of Canada (1:5 000 000 scale)

Canada

Contribution to the Canada/Yukon Subsidiary Agreement on Mineral Resources 1985-1989 under the Canada/Yukon Economic Development Agreement

Yukon Government

115-I



FLUORINE in water (ppb)

GSC OPEN FILE 1220

REGIONAL GEOHCEMICAL RECONNAISSANCE MAP 85-1985

CANADA-YUKON

MINERAL DEVELOPMENT AGREEMENT (1984-89)

STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
SOUTHERN YUKON TERRITORY, 1985

Elevation in feet above mean sea level

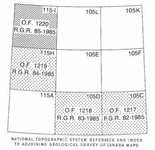
Mean magnetic declination 1986, 30°25' East, decreasing 13.6' annually. Readings vary from 30°14' E in the SE corner to 30°36' E in the NW corner of the map area

Base map at the same scale published by the Surveys and Mapping Branch in 1974
Streams were revised by the Geological Survey of Canada for this edition

Scale 1:250 000

Kilometres 5 0 5 10 15 20 Kilometres

Universal Transverse Mercator Projection



FLUORINE in water (ppb)

GSC OPEN FILE 1220

SOUTHERN YUKON TERRITORY, 1985

LEGEND

CENOZOIC

QUATERNARY

RECENT

SELKIRK GROUP

25 **RS 64*** Basalt, andesite flows, breccia, tuff

TERTIARY

LATE TERTIARY

24 **LTG 62** Rhyolite porphyry, granite, granodiorite

OLIGOCENE AND MIOCENE

CARMACKS GROUP

23 **OMCV 60** Andesite, basalt, breccia

OLIGOCENE

CARMACKS GROUP

22 **OCS 60** Conglomerate, sandstone, shale

EOCENE

MOUNT NANSEN GROUP

21 **EMN 59** Acid to intermediate tuff, breccia

LOWER TERTIARY

20 **TFP 58** Feldspar porphyry dykes, flows

19 **TVB 58** Basalt

EARLY TERTIARY

18 **ETF 57** Granite and syenite porphyry, rhyolite

CRETACEOUS

17 **KY 52** Syenite, monzonite

16 **KQM 52** Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite

JURASSIC AND CRETACEOUS

DEZADEASH GROUP

15 **JKD 51** Argillite, greywacke, conglomerate, volcanics

14 **JKT 51** TANTALUS: Conglomerate, siltstone, arkose, coal

13 **JKDI 51** Diorite, hornblende diorite

MESOZOIC

JURASSIC

LABERGE GROUP

12 **JL 47** Greywacke, arkose, conglomerate

TRIASSIC

11 **TV 42** Basaltic greenstone

10 **TGDN 42** Foliated hornblende granodiorite, quartz

UPPER TRIASSIC

LEWES RIVER GROUP

9 **UTC 45** Limestone

MESOZOIC UNDIVIDED

8 **MQM 41** Porphyritic quartz monzonite

7 **MGD 41** Granodiorite, quartz monzonite

6 **MGDN 41** Foliated hornblende granodiorite, quartz monzonite

PALEOZOIC

PALEOZOIC UNDIVIDED

5 **PC 09** Limestone

4 **PM 09** Amphibolite, schist, gneiss

3 **PGDN 09** PELLY GNEISS: Foliated to gneissic granodiorite

CARBONIFEROUS AND PERMIAN

2 **CPSN 35** Schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX

HADRYNIAN AND CAMBRIAN

1 **HCSN 08** Schist, gneiss, quartzite

*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

FLUORINE in water (ppb)
GSC OPEN FILE 1220
SOUTHERN YUKON TERRITORY, 1985