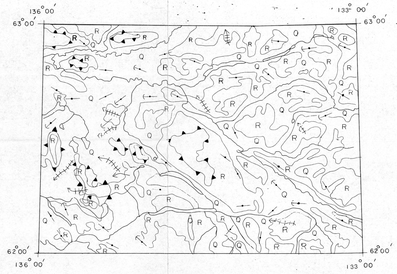
GEOLOGICAL SURVEY OF CANADA COMMISSION GÉOLOGIQUE DU CANADA

Energy, Mines and Resources Canada / Énergie, Mines et Ressources Canada

NTS 105L, 105K (W½)



SURFICIAL GEOLOGY

Q — Undivided surficial deposits, includes unconsolidated gravels, sands, silt, alluvium, colluvium, till, glaciofluvial deposits, kames, eskers and outwash deposits

R — Bedrock; includes discontinous veneer of undivided glacial drift

SYMBOLS

Surficial deposit boundary .....

Limit of ice advance .....

Major meltwater channels, indicating direction of flow .....

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

Sources of information:

Cockfield, W.E. (1935) Laberge Sheet - Yukon Territory, Geological Survey of Canada Map 372A, Scale 1: 253,440

Hughes, O.L., Campbell, R.B., Muller, J.E., and Wheeler, J.O. (1969) Glacial Map of Yukon Territory - South of 65 degrees north latitude; Geological Survey of Canada Map 6-1968; Scale 1: 1,000,000

Prest, V.K., Grant, D.R., and Rampton, V.N. (1967) Glacial Map of Canada, Geological Survey of Canada Map 1253A; Scale 1: 5,000,000

GEOLOGICAL SURVEY OF CANADA
MINERAL RESOURCES DIVISION
EXPLORATION GEOCHEMISTRY SUBDIVISION

CONTRACTORS

Collection: Northway Map Technology, Ltd.,Don Mills, Ontario

Preparation: Golder Associates, Ottawa

Sediment Analysis: Bondar-Clegg and Company Ltd., Ottawa
Chemex Labs Limited, Vancouver (Au only)

Water Analysis: Chemex Labs Limited, Vancouver

Cartography: GSC – Geological Information Division
Terra Surveys Ltd., Ottawa

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Copies of the OpenFile are available from:
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Contribution to the Canada/Yukon Subsidiary Agreement on Mineral Resources 1985-1989 under the Canada/Yukon Economic Development Agreement

Contribution à l'Entente auxiliaire Canada/Yukon sur l'exploitation minérale 1985-89 dans le cadre de l'Entente Canada/Yukon sur le développement économique.

Yukon

Canada

SAMPLE LOCATION STREAM SEDIMENTS

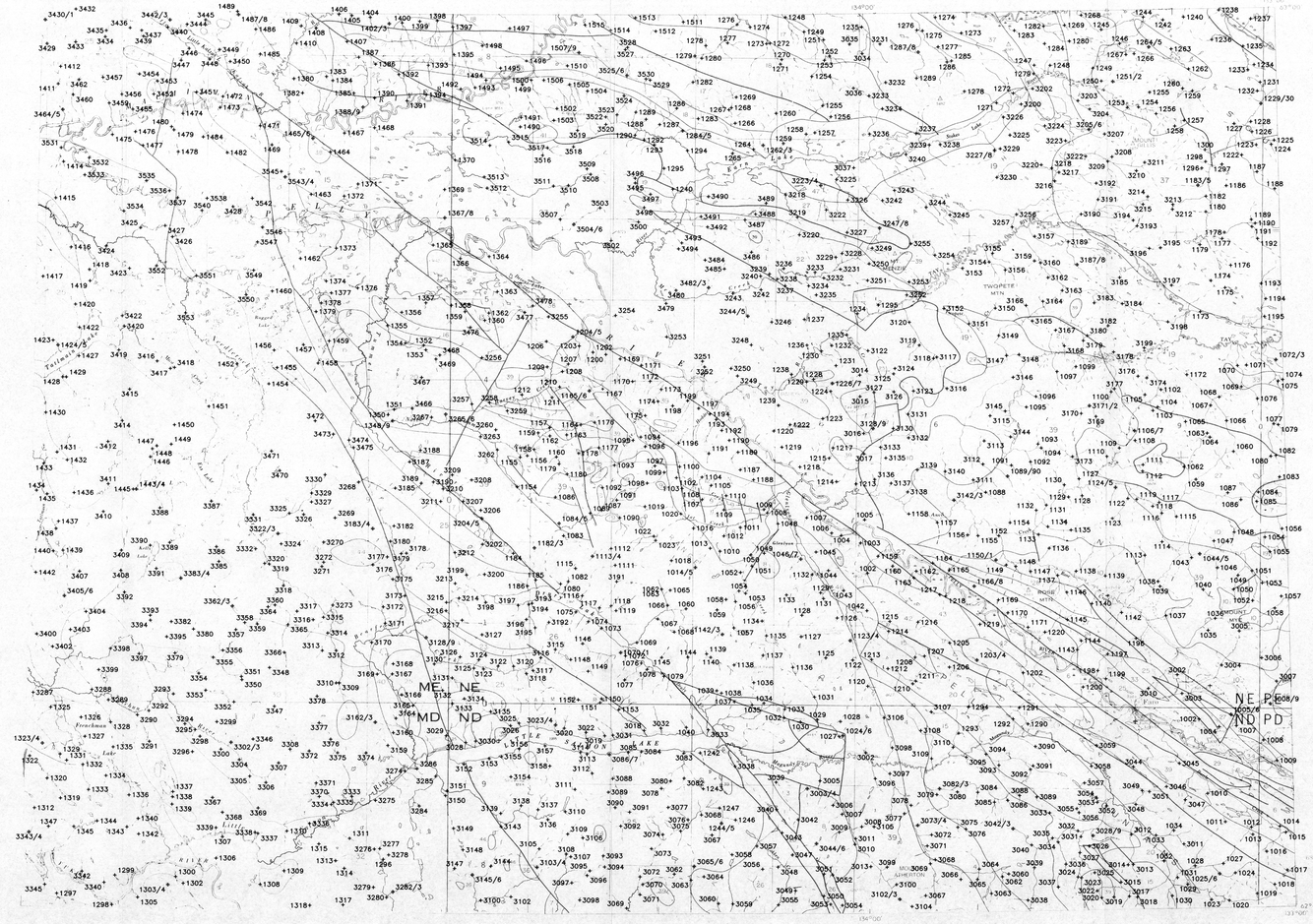
GSC OPEN FILE 1961

REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 124-88

CANADA – YUKON

MINERAL DEVELOPMENT AGREEMENT (1985 – 1989)

STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY
CENTRAL YUKON, 1988



Scale 1:250 000 - Échelle 1/250 000

Kilometres 0 5 10 15 20 Kilomètres

Universal Transverse Mercator Projection
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Projection transverse universelle de Mercator
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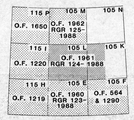

LEGEND

QUATERNARY

PLEISTOCENE AND RECENT

47* Qs 64** glacial and surficial deposits

TERTIARY

PLIOCENE

46 Pv 62 basalt

LATE TERTIARY

45 LTg 62 rhyolite porphyry, granite, granodiorite

EARLY TERTIARY

44 ETf 57 granite and syenite porphyry

LOWER TERTIARY

43 lTs 58 conglomerate, sandstone, and shale

42 lTfp 58 feldspar porphyry dykes and flows

41 lTvr 58 rhyolite, quartz feldspar porphyry

CRETACEOUS

40 Ky 52 syenite, monzonite

39 Kqm 52 quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite

38 Kgdp 52 granodiorite and monzonite porphyry
JKdi 51 diorite, hornblende diorite

37 KSF 52 SOUTH FORK: andesite, dacite, basalt

JURASSIC AND CRETACEOUS

36 JKT 51 TANTALUS: conglomerate, siltstone, arkose, coal

JURASSIC

35 JL 47 LABERGE GROUP: greywacke, arkose, conglomerate

TRIASSIC

34 Tcg 42 polymictic conglomerate

33 Ts 42 sandstone, siltstone

32 Tv 42 basaltic greenstone

UPPER TRIASSIC

31 uTLW 45 LEWES RIVER GROUP: greywacke, argillite, conglomerate
uTc 45 LEWES RIVER GROUP: limestone

MESOZOIC

30 Mgdn 41 foliated hornblende granodiorite, quartz monzonite

PENNSYLVANIAN AND PERMIAN

29 PPAc 35 ANVIL RANGE GROUP: limestone

28 PPAt 35 ANVIL RANGE GROUP: chert

CARBONIFEROUS AND PERMIAN

27 CPAv 35 ANVIL RANGE GROUP: andesite, basalt, slate, chert, limestone

26 CPv 35 andesite, basalt, chert, tuff

25 CPsn 35 schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX

PALEOZOIC AND MESOZOIC

24 PTub 40 pyroxenite, serpentinite
PMub 40 ultramafic rocks
CPub 35 serpentinite, diorite, pyroxenite, peridotite

CARBONIFEROUS

23 Cc 30 limestone

MISSISSIPPIAN

22 MEu 34 EARN GROUP (upper): chert, argillite, quartzite, limestone

21 MK 34 KALZAS: limestone, argillite, chert

DEVONIAN AND MISSISSIPPIAN

20 DMS 29 SYLVESTER GROUP: shale, chert arenite, conglomerate, basic volcanic rocks

19 DME 29 EARN GROUP: undivided; shale, chert arenite, conglomerate

18 DMCP 29 CRYSTAL PEAKS: chert pebble conglomerate

DEVONIAN

17 DEl 25 EARN GROUP (lower): slate, quartzite, limestone

SILURIAN AND DEVONIAN

16 SDAc 24 ASKIN GROUP: dolomite, limestone

15 SDAq 24 ASKIN GROUP: quartzite, shale

14 SDcq 24 dolomite, quartzite, argillite

ORDOVICIAN, SILURIAN, AND LOWER DEVONIAN

13 OSDR 19 ROAD RIVER: black graptolitic shale, chert

CAMBRIAN AND ORDOVICIAN

12 COH 14 HARVEY GROUP: shale, phyllite

11 COK 14 KECHIKA GROUP: phyllite, limestone

10 COp 14 shale, limestone

LOWER CAMBRIAN

9 lCHC 11 HARVEY GROUP: limestone

8 lCHq 11 HARVEY GROUP: quartzite, schist

PALEOZOIC AND MESOZOIC

7 PTc 40 limestone
Pc 09 limestone

6 Pv 09 greenstone, amphibolite

PALEOZOIC

5 Pgdn 09 PELLY GNEISS: foliated to gneissic granodiorite

HADRYNIAN AND CAMBRIAN

4 HCsn 08 schist, gneiss, quartzite

HADRYNIAN

3 Hc 07 crystalline limestone

2 Hqp 07 gritty quartzite, argillite, shale, phyllite (may include lower Cambrian)

1 Hp 07 shale, phyllite

* Map unit number for rock type

**A mnemonic code assigned to rock type and age recorded as part of field observations.

SYMBOLS

Geological boundary .....

Fault .....

No analytical results .....

Field duplicate site .....

Geology base and legend are derived from:

Gabrielse, H., Tempelman-Kluit, D.J., Blusson, S.L., and Campbell, R.B., (1980) Map 1398A, MacMillan River, Yukon - District of Mackenzie - Alaska, NTS Map area 105, Geological Survey of Canada: Energy, Mines and Resources Canada, Scale 1:1,000,000

Elevation in feet above mean sea level

Magnetic declination at the center of the map area (62°30'N; 134°30'E) in 1989 is 30°29'E decreasing 12.2' annually. Magnetic declination ranges from 29°47'E, decreasing 11.6'annually, in the southwest corner of the map area, to 31°12'E, decreasing 12.9' annually, in the northeast corner of the map area.

SAMPLE LOCATION
STREAM SEDIMENTS
GSC OPEN FILE 1961
CENTRAL YUKON, 1988