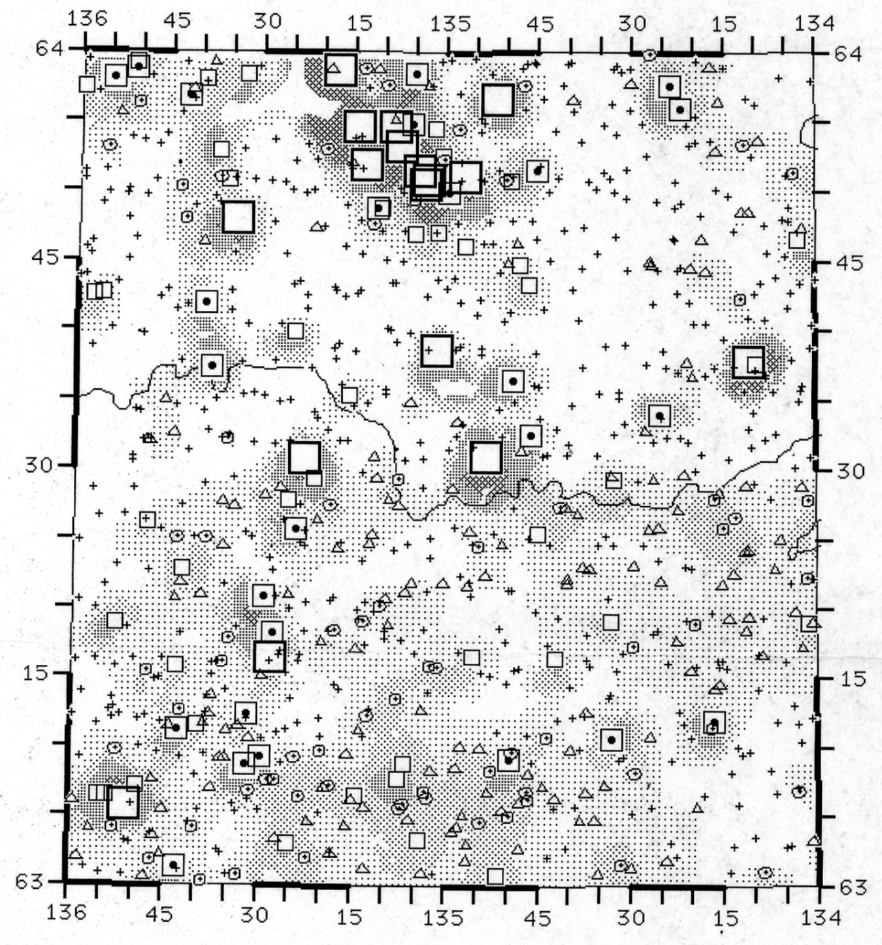
Energy, Mines and Resources Canada
Énergie, Mines et Ressources Canada

NTS 105M



REGIONAL TREND MAP

0 20 40 60
KILOMETERS - SCALE 1:1000000

GOLD
IN
STREAM SEDIMENTS

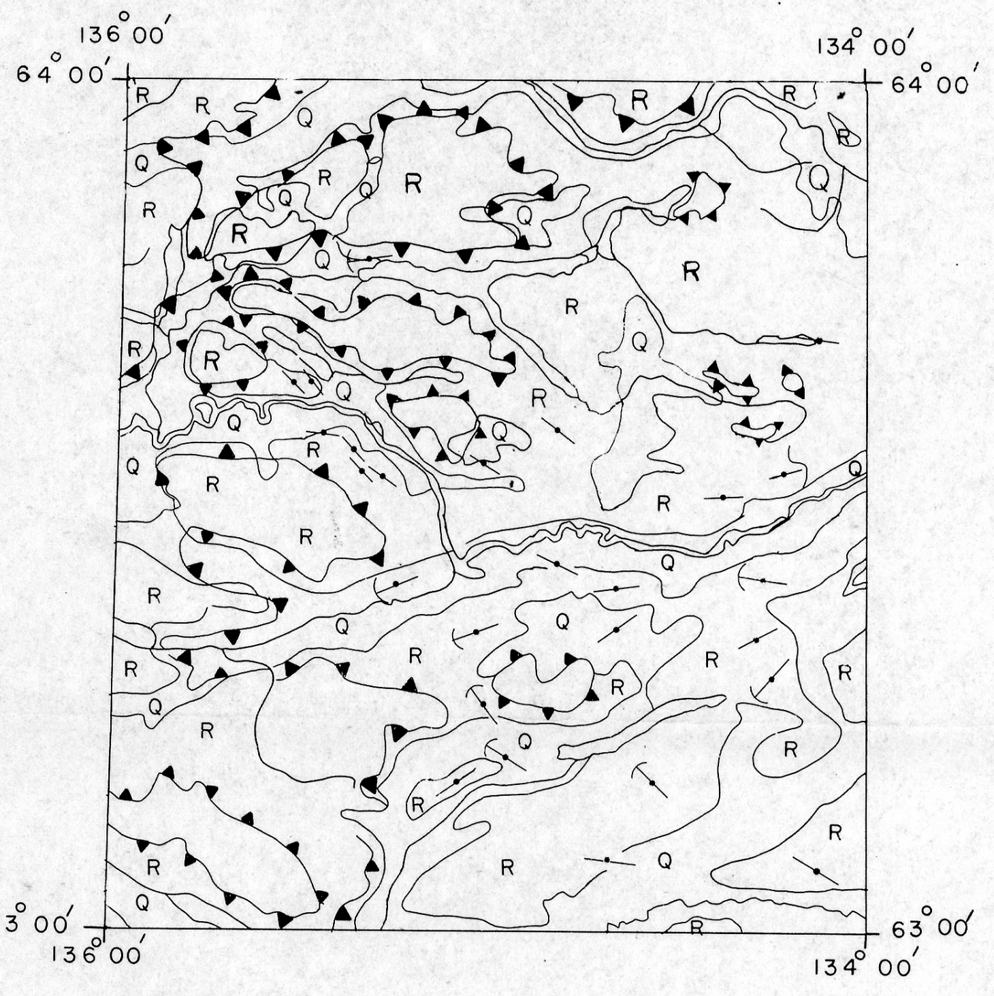
PPB		%TILE
294.0 -		- MAX
	□	
36.0 -		- 98
	⊡	
16.0 -		- 95
	□	
7.0 -		- 90
	⊕	
4.0 -		- 80
	△	
2.0 -		- 60
	+	
0.5 -		- MIN

859 SAMPLES

PPB		%TILE
294.0	▩	MAX
16.0	▨	95
7.0	▒	90
4.0	░	80
2.0	□	60
0.5		MIN

859 SAMPLES

GSC OPEN FILE 1962
CANADA - YUKON
MINERAL DEVELOPMENT
AGREEMENT (1985-1989)



0 20 40 60
KILOMETERS - SCALE 1:1000000

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:

Bostock, H.S. (1947) Geology - Mayo, Yukon Territory; Geological Survey of Canada, Map 890A, 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

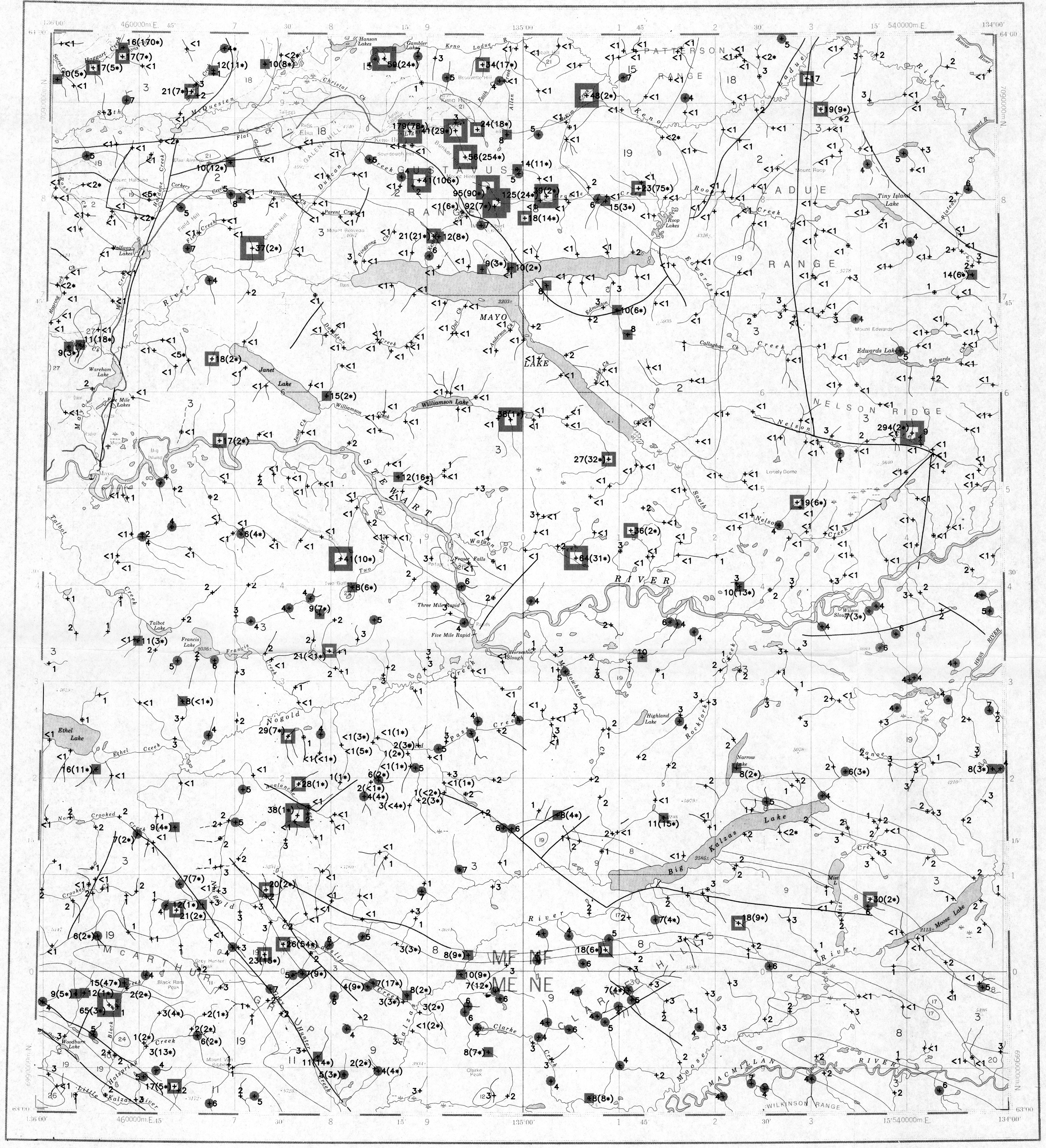
Prest, V.K., Grant, D.R., and Rampton, V.N. (1967) Glacial Map of Canada, Geological Survey of Canada Map 1253A; Scale 1: 5,000,000

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
Reproduction:	Ashley Reproductions Ltd., Ottawa

Copies of the OpenFile are available from:
Geological Survey of Canada
Publications Distribution
601 Booth Street
Ottawa, Ontario K1A 0E8
Tel.: (613) 995 – 4342



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

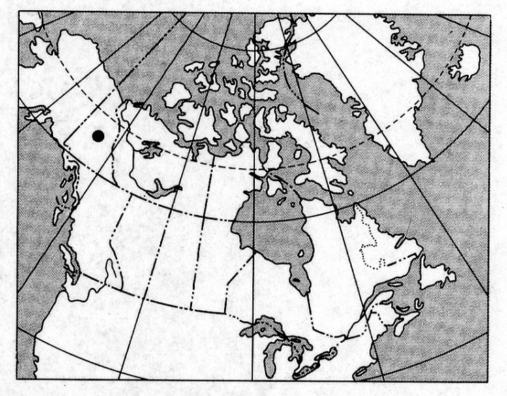
Contribution à l'Entente auxiliaire Canada/Yukon sur l'exploitation minérale 1985-89 dans le cadre de l'Entente Canada/Yukon sur le développement économiqué.

Yukon

Canada

This document was produced by scanning the original publication.
Ce document est le produit d'une numérisation par balayage de la publication originale.

CONCENTRATION		FREQUENCY
37 to 294	⊞	N= 17(2.0%)
17 to 36	⊞	N= 26(3.0%)
8 to 16	■	N= 43(5.0%)
4 to 7	●	N= 135(15.7%)
0 to 3	+	N= 640(74.3%)



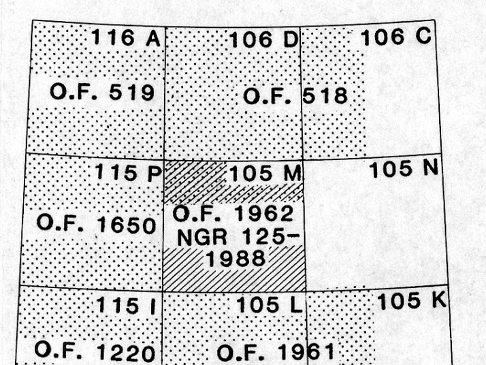
INDEX MAP - LIEU DE LA CARTE

GOLD (ppb)
STREAM SEDIMENTS
GSC OPEN FILE 1962
REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 125-88
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 5 0 5 10 15 20 Kilomètres

Universal Transverse Mercator Projection
© Crown copyrights reserved
Projection transverse universelle de Mercator
© Droits de la Couronne réservés



NATIONAL TOPOGRAPHIC SYSTEM REFERENCE AND INDEX TO ADJOINING GEOLOGICAL SURVEY OF CANADA MAPS

GOLD (ppb)
STREAM SEDIMENTS
GSC OPEN FILE 1962
CENTRAL YUKON, 1988

LEGEND

QUATERNARY

PLEISTOCENE AND RECENT

29	Qs	64*	Glacial and surficial deposits
28	Rs	64	SELKIRK GROUP: basalt, andesite flows, breccia, tuff

TERTIARY

MIOCENE

27	Mvr	61	Rhyolite, trachyte

LATE TERTIARY

26	LTg	61	Rhyolite porphyry, granite, granodiorite

OLIGOCENE AND MIOCENE

25	OMCV	60	CARMACKS GROUP: andesite, basalt, breccia

EARLY TERTIARY

24	ETf	59	Granite and syenite porphyry, rhyolite

LOWER TERTIARY

23	lTs	58	Conglomerate, sandstone, shale

CRETACEOUS

22	Ky	52	Syenite, monzonite
21	Kg	52	Granite
20	KSF	52	SOUTH FORK: andesite, dacite, basalt
19	Kqm	52	Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite

JURASSIC AND CRETACEOUS

18	JKKH	51	KENO HILL: quartzite (may be older)
17	JKdi	51	Diorite, hornblende diorite
16	JKb	51	Gabbro, diorite, some ultramafic rocks

JURASSIC

15	Jp	47	Graphitic phyllite, quartzite, greenstone

MESOZOIC

14	Mcg	41	Conglomerate, chert, tuff
13	Mvd	41	Andesite, trachyte

PALEOZOIC

12	Ps	36	Greywacke, argillite, limestone; includes local basic volcanics and volcaniclastic sediments

CARBONIFEROUS AND PERMIAN

11	CPAV	35	ANVIL RANGE GROUP: andesite, basalt, slate, chert, limestone
10	CPsn	35	Schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX

DEVONIAN AND MISSISSIPPIAN

9	DMCP	29	CRYSTAL PEAKS: chert pebble conglomerate

DEVONIAN

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

ORDOVICIAN, SILURIAN AND LOWER DEVONIAN

7	OSDR	19	ROAD RIVER: black graptolitic shale, chert

PALEOZOIC

6	Pgdn	09	PELLY GNEISS: foliated to gneissic granodiorite
5	Pc	09	Limestone

HADRYNIAN

4	Hc	07	Crystalline limestone
3	Hqp	07	Gritty quartzite, argillite, shale, phyllite
2	Hpq	07	Graphitic phyllite, quartzite
1	Hv	07	Greenstone

SYMBOLS

Geological boundary ....
Fault ....
Single analysis, 10g sample weight .... + 27
Single analysis, < 10g sample weight .... + 27*
Repeat analysis, both samples 10g .... + 27 (14)
Repeat analysis, first sample 10g, repeat < 10g .... + 27(14*)
Single analysis, 10g sample, less than detection limit of 1 ppb .... + < 1
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 (63°30'N; 135°E) in 1989 is 31°28'E decreasing 12.5' annually. Magnetic declination ranges from 30°36'E, decreasing 11.8' annually, in the southwest corner of the map area, to 31°43'E, decreasing 12.3' annually, in the northeast corner of the map area.

GOLD (ppb)
STREAM SEDIMENTS
GSC OPEN FILE 1962
CENTRAL YUKON, 1988