

**SURFICIAL GEOLOGY**

- Thermokarst depression developed on alluvial floodplain
- Pits and kettles developed on gravelly glaciofluvial plain
- Organic deposits mantling lacustrine floodplain, glaciofluvial plain, or less commonly, moraine deposits
- Undivided surficial deposits; includes alluvium, glacial till, glaciofluvial and glaciolacustrine deposits, ice contact deposits, colluvium, volcanic ash, loess, and scattered bedrock exposures.
- Colluvium; poorly sorted blanket of rubble commonly <3 m thick overlying bedrock, ubiquitous in unglaciated terrain.
- Bedrock exposures; includes discontinuous veneer of undivided glacial drift, local alpine glaciation features.

**Symbols**

- Surficial deposit boundary
- Limit of Reid ice advance, maximum extent of glaciation
- Major meltwater channels, outwash deposits, indicating direction of flow
- Drumlinoid form; rock drumlin, crag and tail, fluted bedrock or till, direction of movement 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.  
 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, Koidern Mountain - Yukon Territory, Geological Survey of Canada, Map 5-1978, 1:100,000 scale.  
 (1977) Surficial Geology and Geomorphology, Mirror Creek - Yukon Territory, Geological Survey of Canada, Map 4-1978, 1:100,000 scale.  
 Templeman-Kluit, D.J. (1973) Geology, Snag - Yukon Territory, Geological Survey of Canada, Map 16-1973 (1:250,000 scale) to accompany GSC Paper 73-41.

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

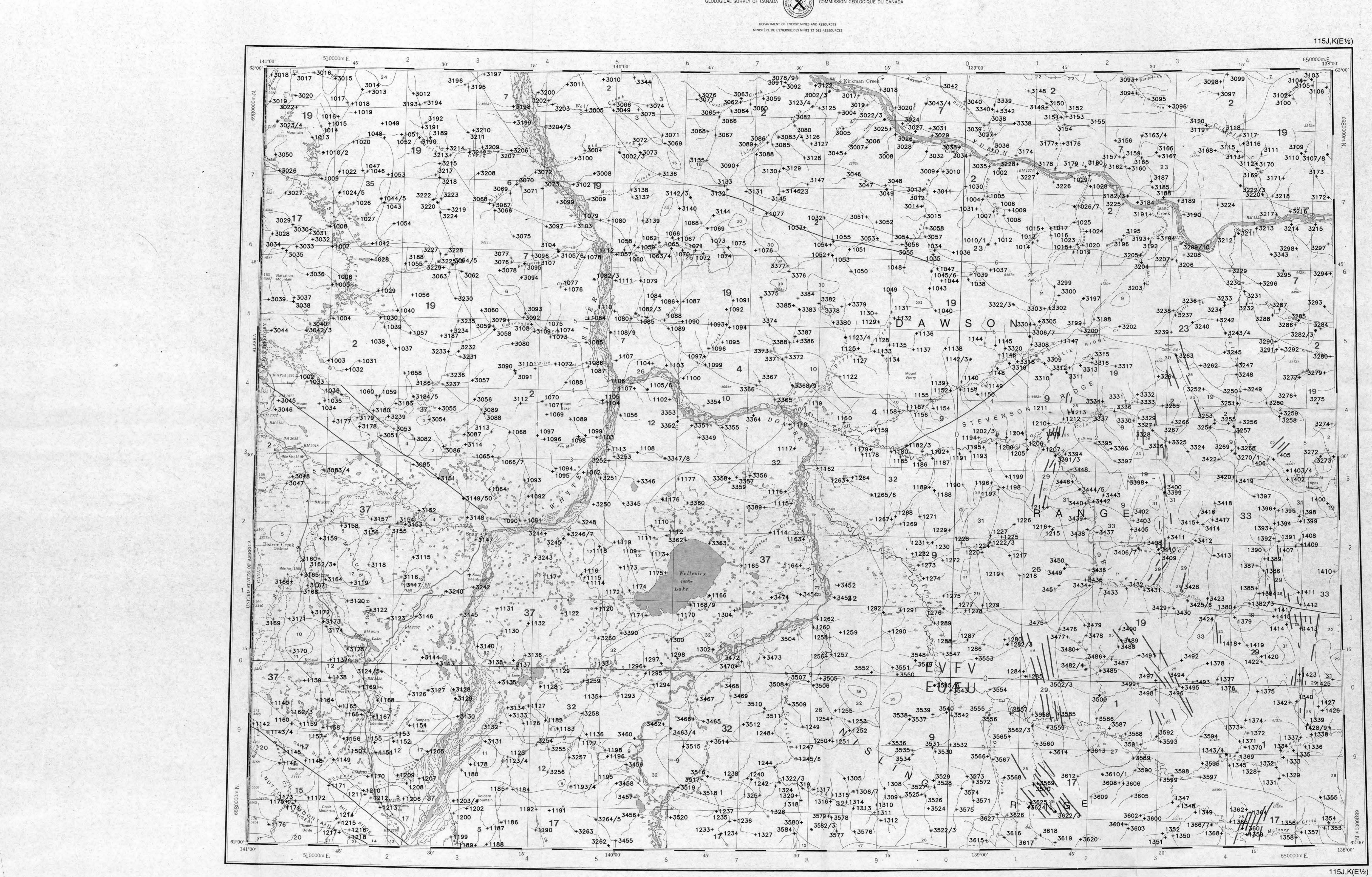
Copies of map material and listings of field observations, analytical data and methods, from which the open file was prepared, are available from:

K.G. Campbell Corporation  
 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  
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Contribution to the Canada/Yukon Subsidiary Agreement on Mineral Resources 1985-1989 under the Canada/Yukon Economic Development Agreement.



**SAMPLE LOCATION**  
 GSC OPEN FILE 1363  
 REGIONAL GEOCHEMICAL RECONNAISSANCE MAP 99-1986  
 CANADA - YUKON  
 SUBSIDIARY AGREEMENT ON MINERAL RESOURCES (1985-1989)  
 STREAM SEDIMENT AND WATER GEOCHEMICAL SURVEY  
 SOUTH-WEST YUKON, 1986

Elevation in feet above mean sea level

Mean magnetic declination 1987, 29°37' East, decreasing 13.4' annually. Readings vary from 29°37'E in the SE corner to 29°32'E in the NW corner of the map area

Scale 1:250 000 - Echelle 1/250 000

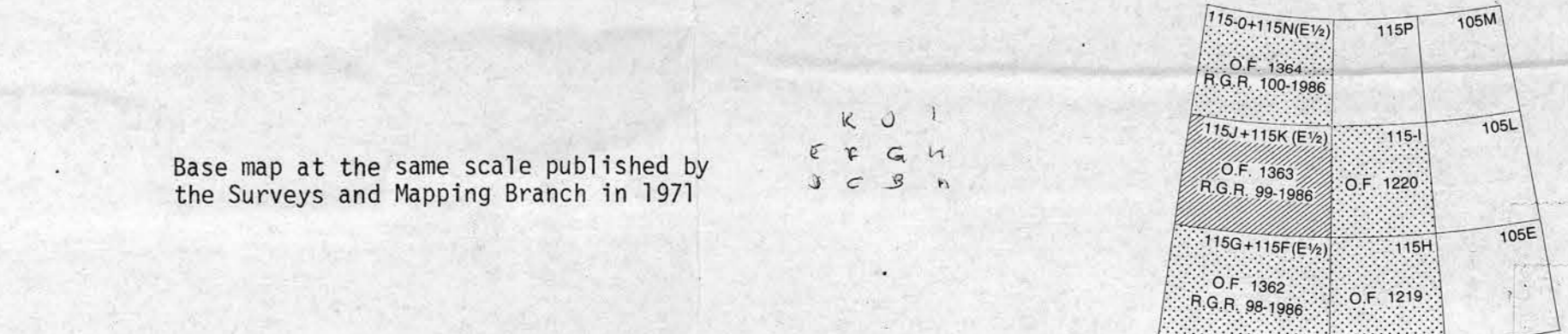
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Base map at the same scale published by the Surveys and Mapping Branch in 1971

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**LEGEND**

QUATERNARY	PLEISTOCENE AND RECENT
37	Q5 64* Glacial and surficial deposits
TERTIARY AND QUATERNARY	
PLIOGENE AND PLEISTOCENE	
36	PPV 63 Olivine basalt
TERTIARY	
LATE TERTIARY	
35	LTG 62 Rhyolite porphyry, granite, granodiorite
OLIGOCENE AND MIOCENE	
34	OM 61 AMPHITHEATRE: Sandstone, conglomerate, shale, coal
CARBONIFEROUS	
33	OMV 61 Andesite, basalt, breccia
32	OMD 61 DONJEC: Tuff, breccia
Eocene	
MOUNT NANKSEN GROUP	
31	DM 59 Acid to intermediate tuff, breccia
LOWER (?) TERTIARY	
30	TC 58 CASINO: Tuff, ignimbrite, breccia
29	TFP 58 Feldspar porphyry dykes, flow
28	TD 58 Andesite, porphyritic basalt flows and dykes
EARLY TERTIARY	
27	ETG 57 Granodiorite, granite
26	ETA 57 Alaskite, granite, quartz monzonite
25	FPF 57 Feldspar porphyry dykes
CRETACEOUS	
24	KY 52 Syenite, monzonite
23	KG 52 Granite
22	KOM 52 Quartz monzonite, granodiorite; CASSIAR quartz monzonite, alaskite
21	KGM 52 Granodiorite, quartz diorite, diorite, agmatite complex
JURASSIC AND CRETACEOUS	
BEAUBEAUX GROUP	
20	JKD 51 Argillite, greywacke, conglomerate, volcanics
TRIASSIC	
19	TGM 42 Foliated hornblende granodiorite, quartz monzonite
MESOZOIC UNDIVIDED	
18	MM 41 Porphyritic quartz monzonite
17	MG 41 Granodiorite, quartz monzonite
16	MD 41 Diorite
PERMIAN AND TRIASSIC	
15	PTSV 40 Greenstone, greywacke, shale, limestone
14	PTV 40 Greenstone, diorite
13	PTB 40 Pyroxenite, serpentinite
PALEOZOIC AND MESOZOIC UNDIVIDED	
12	PW 40 Basic to intermediate volcanic rocks
11	PH 40 Hornblende gabbro
10	PHB 40 Ultrabasic rocks
PALEOZOIC UNDIVIDED	
9	PK 09 MASINA: Graphitic quartzite, schist
8	PC 09 Limestone
7	PGM 09 PELLY GNEISS: Foliated to gneissic granodiorite
6	PM 09 Amphibolite, schist, gneiss
5	PTP 09 Chert, argillite, quartzite
4	PK 09 Greenstone, amphibolite
CARBONIFEROUS AND PERMIAN	
3	CPS 35 Quartz-muscovite schist
2	CPS 35 Schist, gneiss, includes BIG SALMON METAMORPHIC COMPLEX
HARDYRIAN AND CARBONIFEROUS	
1	HCSM 08 Schist, gneiss, quartzite

\*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:  
 Gorbis, H., Templeman-Kluit, D.J., Busson, S.L., and Campbell, R.B. (1980) Map 139A, MacMillan River, Yukon - District of Mackenzie - Alaska, NT Sheet 105, 115, Geological Survey of Canada, Energy, Mines and Resources Canada, 1:1,000,000 Scale.

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