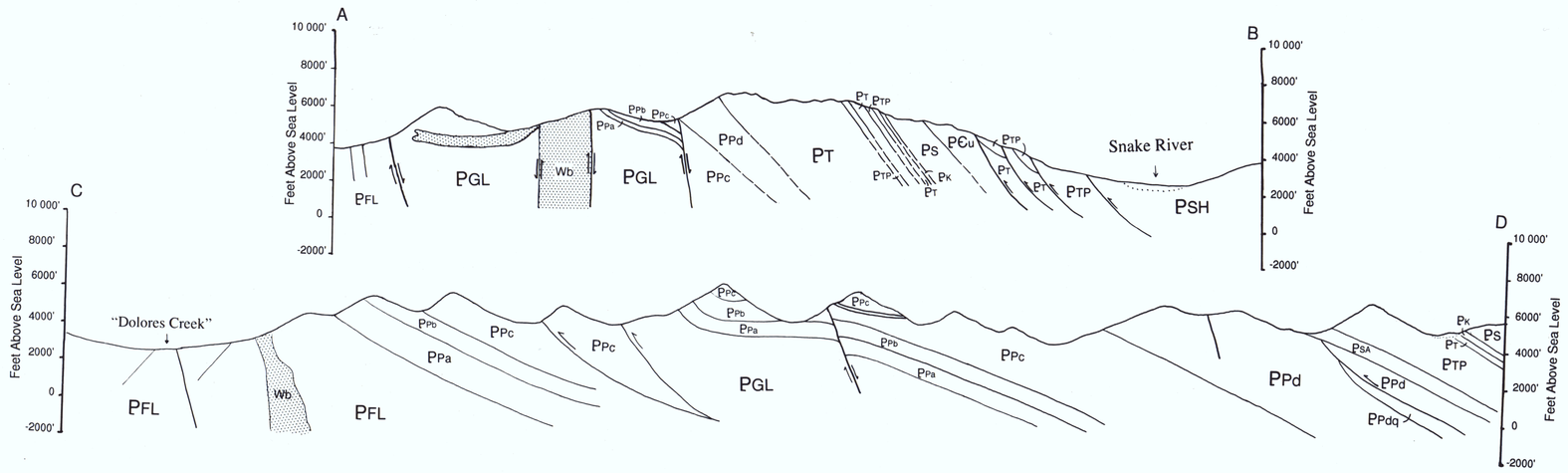
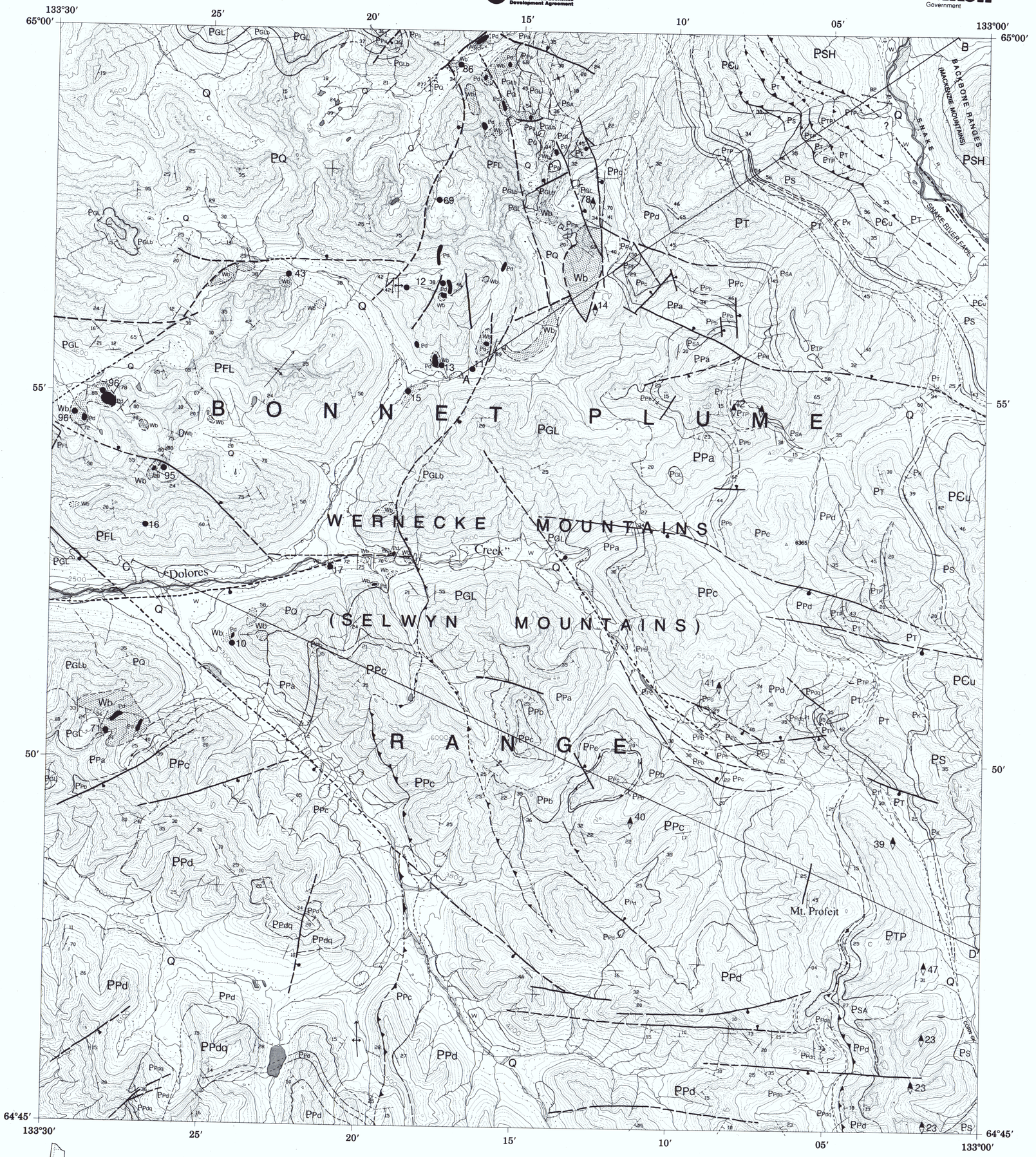



Canada

Canada/Yukon Economic Development Agreement

Yukon Government




CONTOUR INTERVAL 100 FEET

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YUKON TERRITORY

Scale 1:50,000 Échelle

Miles 1 0 1 2 3 Miles

Metres 1000 0 1000 2000 3000 4000 Mètres

Yards 1000 0 1000 2000 3000 4000 Yards

CONVERSION SCALE FOR ELEVATIONS
ÉCHELLE DE CONVERSION DES ÉLÉVATIONS

Metres 30 20 10 0 50 100 150 200 250 300 Mètres

Feet 100 50 0 100 200 300 400 500 600 700 800 900 1000 Pieds

NORTH AMERICAN DATUM 1927
TRANSVERSE MERCATOR PROJECTION

TOPOGRAPHIC MAP PRODUCED BY SURVEYS AND MAPPING BRANCH, DEPARTMENT OF ENERGY, MINES AND RESOURCES, OTTAWA, 1970.

| | | |
|---|---|---|
| 106 F/4 | 106 F/3 | 106 F/2 |
| 106 C/13 | 106 C/14 | 106 C/15 |
| 106 C/12 | 106 C/11 | 106 C/10 |

## LEGEND

### STRATIFIED ROCKS

**Quaternary**

Q — *Alluvium, colluvium, and glacial deposits*

**Upper Proterozoic to Lower Paleozoic**

PЄu — *Rusty to grey weathering quartz arenite; pinkish orange and grey weathering white carbonate; pebble conglomerate; siltstone and shale*

**Upper Proterozoic**
***Windermere Supergroup***

PS — ***Sheepbed Formation:*** *recessive, black weathering shale and siltstone; minor grey weathering limestone near top of unit*

PK — ***Keele Formation:*** *thin bedded to massive, light orange to brown weathering micritic dolostone. Minor brown weathering diamictite locally forming base of unit may belong to* ***Ice Brook Formation***

PT — ***Twitya Formation:*** *thin bedded, brown weathering siltstone interbedded with sandstone, granule to pebble conglomerate ("grit"), and light grey weathering dolostone*

PTP — ***Profeit dolostone*** *(facies of Twitya Formation): massive to thick bedded, light grey weathering dolostone commonly containing vugs, stromatolites, oncolites, oolites and micritic intraclasts; commonly fetid; minor siltstone, sandstone and grit*

PSH — ***Shezal Formation:*** *massive, green weathering diamictite containing rounded to subrounded pebbles and cobbles of carbonate, sandstone and (?)greenstone*

PSA — ***Sayunei Formation:*** *thick bedded to massive, orange to brown weathering sandstone, and conglomerate containing rounded to subrounded pebble to boulder sized clasts of carbonate, siltstone and quartz arenite*

**Middle to Upper Proterozoic**
***Pinguicula Group***

PPd — ***Unit D:*** *medium to very thick bedded buff, orange, brown and grey weathering dolostone, interbedded with black, grey and maroon weathering shale, micaceous siltstone, nodular limestone, and light grey weathering quartz arenite. Stromatolites are locally abundant in basal and upper parts of succession*

PPdq — ***Corn Creek quartz arenite*** *(facies of Unit D): thick to very thick bedded, light grey weathering quartz arenite, minor siltstone and carbonate; abundant in upper parts of Unit D; formerly termed "Corn Creek quartzite"*

PPc — ***Unit C:*** *thin to very thick bedded and massive, grey weathering dolostone and limestone; abundant "zebra" texture and pods of coarse grained sparry dolomite; minor intraclast conglomerate and interbeds of black shale*

PPb — ***Unit B:*** *medium bedded, orange weathering dolostone; minor grey weathering limestone and maroon weathering siltstone. Local crossbedding and intraclast conglomerate*

PPa — ***Unit A:*** *thin bedded, laminated, maroon, green and black weathering siltstone and shale; minor basal sandstone and conglomerate*

**Middle Proterozoic**
***Wernecke Supergroup***

PGL — ***Gillespie Lake Group:*** *orange, brown and grey weathering dolostone and silty dolostone, locally stromatolitic, locally hosting chert nodules and sparry karst infillings; minor siltstone and shale, and light grey weathering quartzose sandstone*

PGLb — ***Basal Gillespie Lake Group:*** *cross laminated, orange weathering silty to sandy dolostone interbedded with black weathering shale and grey to white weathering, quartzose, fine grained sandstone*

PQ — ***Quartet Group:*** *black weathering shale, finely laminated dark grey weathering siltstone, and planar to cross laminated light grey weathering siltstone and very fine grained sandstone. In upper part of succession, siltstone and fine grained sandstone interbedded with subordinate orange weathering dolostone grades upward into basal Gillespie Lake Group*

PFL — ***Fairchild Lake Group:*** *thinly bedded, laminated to cross-laminated, black to greenish-grey weathering siltstone and limy siltstone; minor black to grey weathering slate and kinked slate; minor brown weathering dolostone*

### INTRUSIVE ROCKS

**Middle Proterozoic**
***Wernecke breccia***

Wb — *Mottled red, green and grey weathering hematitic and dolomitic breccia, and related metasomatized and veined country rock. Breccia contains variably metasomatized clasts of Wernecke Supergroup, and minor diorite. Breccia and metasomatites are locally enriched in copper, cobalt, uranium, gold and silver*

***Igneous dykes and stocks***

Pd — *Fine to medium grained, greenish grey weathering diorite with local pegmatitic segregations; pinkish grey weathering, fine to medium grained quartz albite syenite*

### SYMBOLS

- stratigraphic or intrusive contact — known, approximate, assumed
- normal fault (pegs on hanging wall) — known, approximate, assumed
- thrust fault (teeth on hanging wall) — known, approximate, assumed
- strike-slip fault
- bedding — inclined, overturned, vertical, horizontal, facing unknown; estimate from airphoto or distant sighting
- cleavage — inclined
- fold — syncline, anticline
- line of cross section — A B

**Mineral Occurrences, listed in Yukon Minfile**

● Wernecke breccia
Cu and/or U (+/- Co, Au, Mo, Ba, Ag)
- 10 KEY MOUNTAIN
- 11 MAMMOTH
- 12 CIRQUE
- 13 PORPHYRY
- 15 AIRSTRIP
- 16 MUELLER
- 17 DOBBY
- 43 DOWSER
- 69 PTERD
- 71 PIKA
- 86 ANOKI
- 95 JULIE
- 96 BELL

Vein
Zn-Pb (+/- Ag, Cu, Au)
- 14 TETRAHEDRITE CREEK
- 23 COB
- 39 PROFEIT
- 40 POO
- 41 CARNE
- 42 DAN
- 47 COAST
- 78 BLUSSON

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**Recommended citation:**

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Indian and Northern Affairs Canada
Exploration and Geological Services Division
Yukon Region

**Open File 1995-6(G)**


**GEOLOGICAL MAP OF "DOLORES CREEK" MAP AREA (106C/14), WERNECKE MOUNTAINS, NORTHEASTERN YUKON**
**1:50 000 scale**


Derek J. Thorkelson and Carol A. Wallace
Canada/Yukon Geoscience Office



Copies of this map may be purchased from: Exploration and Geological Services Division, Indian and Northern Affairs Canada, 300-345 Main St., Whitehorse, Yukon Y1A 2B5