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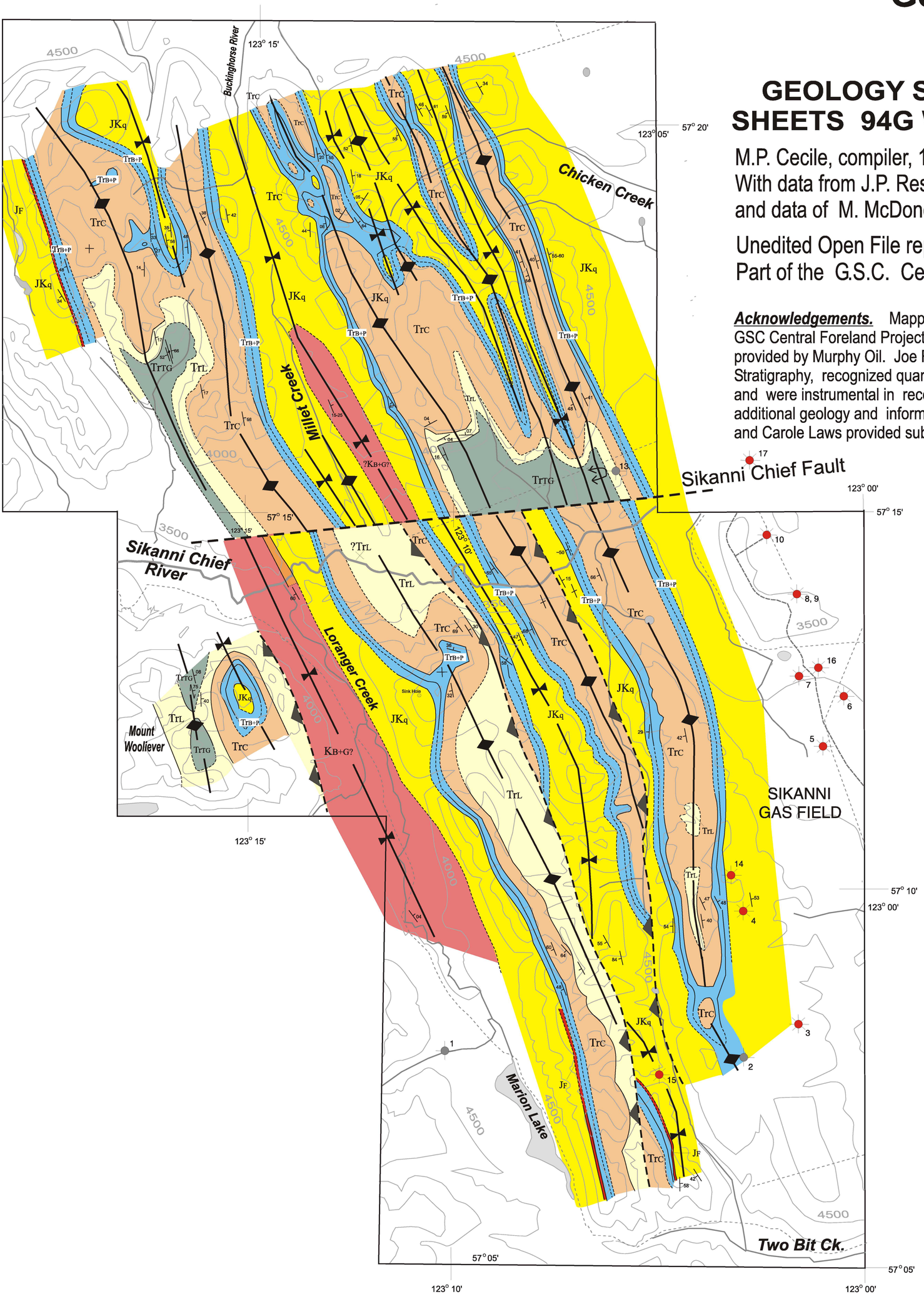
# Geological Survey of Canada
# Open File Report 3471

## GEOLOGY SIKANNI CHIEF RIVER AREA PARTS OF NTS SHEETS 94G \3 (MARION LAKE), 94G \6 (MOUNT WITHROW)

M.P. Cecile, compiler, 1997. Geology from field work by M.P. Cecile 1996.
With data from J.P. Restoule, T.C. Ziebell, C. Booth and J.G. Pozzobon of Murphy Oil;
and data of M. McDonough, V . Allan and C. Laws of Husky Oil, 1996-7.

Unedited Open File report. Map contours scanned in.
Part of the G.S.C. Central Foreland Project.

***Acknowledgements.*** Mapping was carried out as part of reconnaissance mapping to plan field work for the GSC Central Foreland Project, which begins in 1998. Most of the helicopter support for the mapping was provided by Murphy Oil. Joe Restoule, Trevour Ziebell, and Curtis Booth provided an introduction to Triassic Stratigraphy, recognized quartizites in the areas as likely Monteith Formation, provided map information, and were instrumental in recognizing the Sikanni Chief Fault Mike McDonough with Husky Oil provided additional geology and information on several critical outcrops of the thin Fernie Formation Vaugh Allen and Carole Laws provided subsurface data to support the fault interpretation along the Sikanni River Valley.




# LEGEND

**KB+G? — BUCKINGHORSE FM. + GETHING FM?**
Shale, black with minor sandstone,
(Gething - with abundant rusty sandstone).

**KG? — GETHING? FM.**
Quartz sandstone (rusty) and shale, black.

**JKq — MONTEITH? FM.**
Quartzite, massive, white, grey fine grained, minor black shale and shaly quartzite; rare chert pebble conglomerate.

**JF — FERNIE FM.**
Shale, black rusty and shale, calcareous, grey.
(Some thin Fernie likely present across area)

**TrB+P — BALDONNEL-PARDONET FMS.**
Baldonnel - limestone, massive grey cliff forming fossiliferous;
Pardonet - limestone, recessive flaggy fossiliferous, shaly and silty.

**Trc — CHARLIE LAKE FM.**
Siltstone, calcareous, orange weathering, minor limestone, shale, sandstone and breccia.

**TrL — LIARD FM. (HALFWAY FM. - SUBSURFACE)**
Quartz sandstone, massive thick bedded, minor calcareous quartz sandstone and limestone.

**TrTG — TOAD-GRAYLING FM. (DOIG FM. SUBSURFACE)**
Shale, calcareous, grey weathering, laminated.

Geological boundary (defined, approximate/assumed)

Bedding (horizontal, inclined, vertical overturned, top not known)

Cleavage (inclined, vertical)

Thrust Fault - known, assumed/approximate

Anticline, syncline; arrow in direction of plunge

Anticline, syncline; overturned

**Sikanni Chief Fault -** Assumed to be a tear fault because of differences in structures either side. Extends northeast into the subsurface.

9 Gas Well - See numbers below.

2 Abandoned Well - See numbers below

1 - 200/C-054-G/094-G-03/00 Remington Marion C-054
2 - 200/D-055-H/094-G-03/00 Husky Sikanni D-055
3 - 200/A-063-H/094-G-03/00 Husky Sikanni A-063
4 - 200/A-095-H/094-G-03/00 Ranger Sikanni A-094
5 - 200/A-032-I/094-G-03/00 Ranger Sikanni A-032
6 - 200/C-041-I/094-G-03/00 Ranger Sikanni C-041
7 - 200/D-053-I/094-G-03/00 Ranger Sikanni D-053
8 - 200/D-073-I/094-G-03/00 Ranger Sikanni D-073
10 - 200/C-093-I/094-G-03/00 Ranger Sikanni D-093
13 - 200/B-019-A/094-G-06/00 Remington W. Sikanni B-019
14 - Well sited in, Ranger D5I, D6I
15 - Well sited in, Ranger D57H
16 - Well sited in, Ranger I62I
17 - Well sited in, Ranger B19A

Contour Intervals 500'

5 km

Scale

Although every effort has been made to ensure accuracy, this Open File Report has not been edited for conformity with Geological Survey of Canada standards.