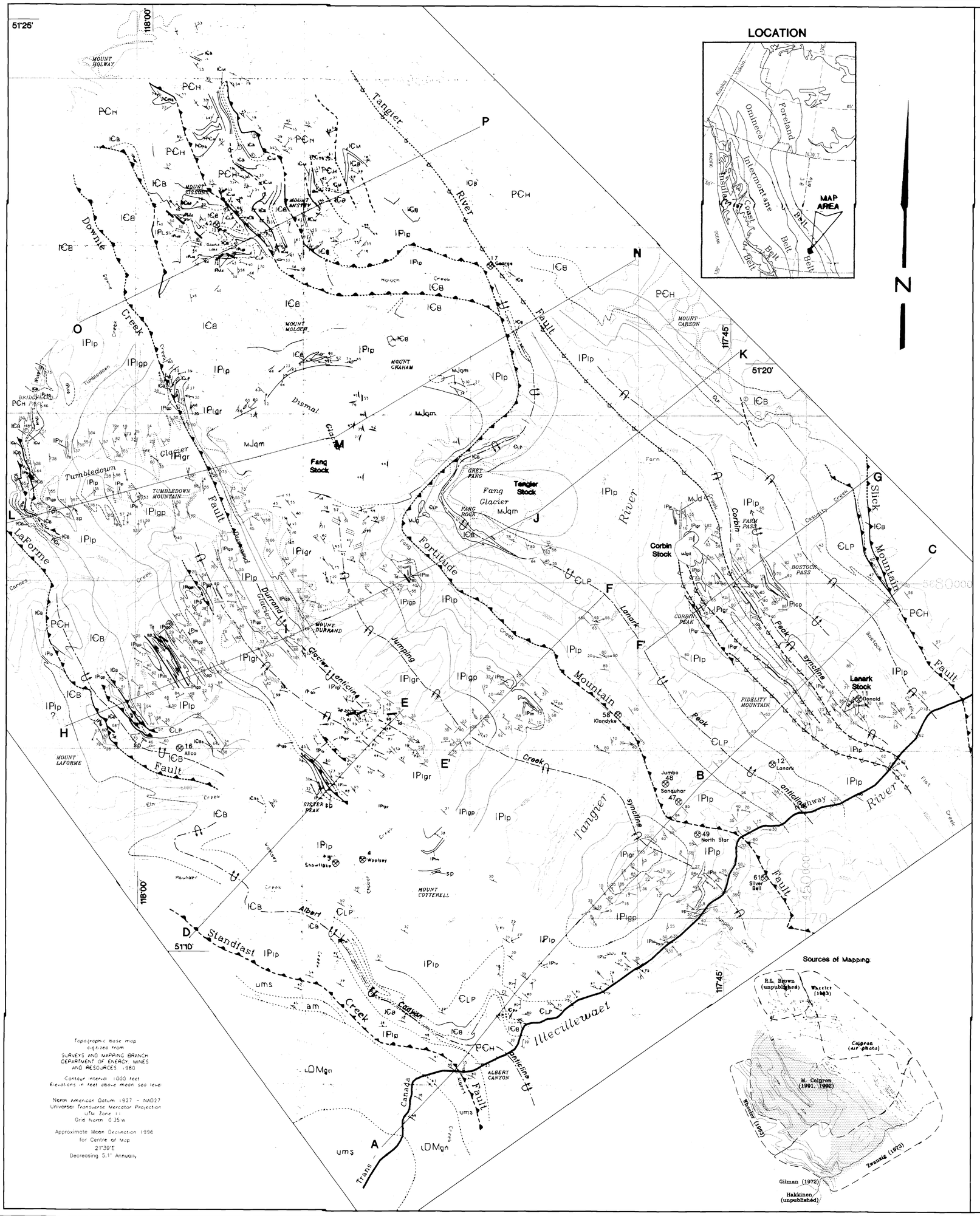

Topographic base map digitized from SURVEYS AND MAPPING BRANCH DEPARTMENT OF ENERGY, MINES AND RESOURCES 1980

Contour interval 1000 feet
Elevations in feet above mean sea level

North American Datum 1927 – NAD27
Universal Transverse Mercator Projection
UTM Zone 11
Grid North 0.35°W

Approximate Mean Declination 1996
for Centre of Map
21°39'E
Decreasing 5.1' Annually

LOCATION

Sources of Mapping

BRITISH COLUMBIA
Ministry of Employment and Investment
Energy and Minerals Division
Geological Survey Branch

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(Sheet 1 of 2)

GEOLOGY OF THE TANGIER RIVER AREA SELKIRK MOUNTAINS, B. C.

PARTS OF NTS 82N/4, 82N/5, 82M/1 & 82M/8

Geology by
Maurice Colpron

Scale 1:50 000

Metres 1000 0 1000 2000 3000 4000 Metres

LEGEND

INTRUSIVE ROCKS

CENOZOIC
TERTIARY (?)

- **Td** — Dacite dikes (porphyry dikes)

MESOZOIC
MIDDLE JURASSIC

- **MJd** — Light grey biotite ± hornblende quartz diorite
- **MJg** — Unfoliated granitoids

FANG AND TANGIER STOCKS

- **MJqm** — Hornblende ± biotite megacrystic quartz monzonite 168 ± 2 Ma (U/Pb zircon Brown et al. 1992)

CORBIN AND LANARK STOCKS

- **MJgd** — Medium-grained hornblende ± biotite granodiorite 168–175 Ma (major hornblende, this study)

PALEOZOIC - MESOZOIC (?)

- **PMd** — Foliated, light green felsic (rhyolitic) porphyry dikes

PALEOZOIC
LATE DEVONIAN – MISSISSIPPIAN

CLACHNACUDAINN GNEISS

- **lDMgn** — Hornblende – biotite granodiorite gneiss 358 ± 6 Ma (U/Pb zircon; Parrish 1991)

LAYERED ROCKS

LOWER PALEOZOIC
CAMBRIAN (?) TO ORDOVICIAN (?)

LARDEAU GROUP

- **lPLsl** — Medium grey calcareous slate and phyllite
- **lPLgp** — Light green siliceous phyllite with dolomitic sandstone beds; thin, light grey dolostone near base
- **lPLcg** — DOWNIE LAKE: dolostone–cobble conglomerate, diagenetic sandstone, medium to dark green chloritic and talcose schist; BRIDGELAND PASS: quartzite breccia

Upper Index Formation

- **lPlgr** — Interlayered grit and black lustrous phyllite; minor dark grey limestone

Middle Index Formation

- **lPlgp** — Light green to light grey lustrous phyllite, phyllite grit and quartzite; minor greenstone
- **lPlv** — Greenstone
- **lPlm** — Light grey marble

Lower Index Formation

- **lPlp** — Black graphitic phyllite, black calcareous phyllite, black siliceous argillite and lustrous medium and dark grey quartzite; minor dark grey limestone
- **lPlc** — Dark grey argillaceous limestone
- **lPlcp** — Tan weathering, medium grey calcareous phyllite, dolomitic sandstone

CAMBRIAN (?)

Lade Peak Formation

- **ЄLP** — Dark grey to black argillaceous limestone, black siliceous argillite; dark grey quartzite, dark grey, calcareous weathering limestone

LOWER CAMBRIAN

BADSHOT FORMATION

- **lЄBs** — Medium to dark grey, recrystallized limestone
- **lЄB** — Light grey to white dolomitic marble; white and buff dolomitic limestone

MONICAN FORMATION

- **lЄM** — Medium to dark green phyllite; minor quartzite

NEOPROTEROZOIC - LOWER CAMBRIAN

HAMILL GROUP

- **PЄH** — Medium grey argillaceous quartzite, light grey quartzite, psammitic schist; minor greenstone
- **PЄHq** — Clean white cross-bedded quartzite

AGE UNCERTAIN

- **am** — Amphibolite
- **ums** — Undifferentiated metasedimentary rocks
- **sp** — Serpentinite and talc schist

MAP SYMBOLS

- Geological contact (defined, approximate, assumed)
- Bedding plane (facing direction unknown): inclined, vertical
- Bedding plane (facing direction indicated by arrow): upright, overturned
- Early schistosity: inclined, vertical
- Dominant foliation: inclined, vertical
- Late cleavage: inclined, vertical
- Shear zone (postdate dominant foliation): sense unknown, dextral, sinistral
- Joint set (in granitic rocks)
- Brittle fault
- Dike
- Intersection lineation between bedding and early schistosity
- Intersection lineation between bedding and dominant foliation
- Intersection lineation between early schistosity and dominant foliation
- Crenulation lineation on dominant foliation
- Axis of dominant fold of bedding; Sense of rotation: counterclockwise, clockwise, symmetrical, unknown
- Axis of late open fold of bedding and dominant foliation
- Stretching and/or mineral lineation
- Slickenline
- Thrust fault (defined, approximate, assumed)
- Overturned contraction fault (upthrown side indicated by teeth; defined, approximate, assumed)
- Steep fault with normal sense of displacement (defined, approximate, assumed)
- Axial trace of overturned antiform
- Axial trace of overturned synform
- Line of structural cross-section — A B
- Archeocyathid locality (after Wheeler [1963] and Brown [1991])
- Mineral occurrence (MINFILE 82N)

CROSS-SECTION SYMBOLS

- Apparent dip of bedding (facing direction unknown)
- Apparent dip of bedding (facing direction indicated by arrow)
- Apparent dip of dominant foliation

ACKNOWLEDGMENTS:

This mapping project was benefited from funding by National Science and Engineering Research Council Grants (to R.A. Price and D.W. Carmichael) Energy, Mines and Resources Research Agreements (to R.A. Price) and Geological Society of America and Queen's University Doctoral Research Grants (to M. Colpron). Rob Whelan and Jason Smamanian provided assistance in the field. Thanks to R.L. Brown for making available his unpublished map of the Downie Lake area. The northern contact of Long Stick north of Mount Graham was mapped by D.M. Carmichael during a short visit to the area in 1993. The area west of Tumbledown Mountain was remapped by J.M. Logan, B.J. Johnson and M. Colpron in 1995 as part of a regional mapping project of the Downie Creek area funded by the B.C. Geological Survey Branch (Logan et al., 1996). This map constitutes the basis of the author's Ph.D. research conducted at Queen's University under the supervision of R.A. Price and D.W. Carmichael.

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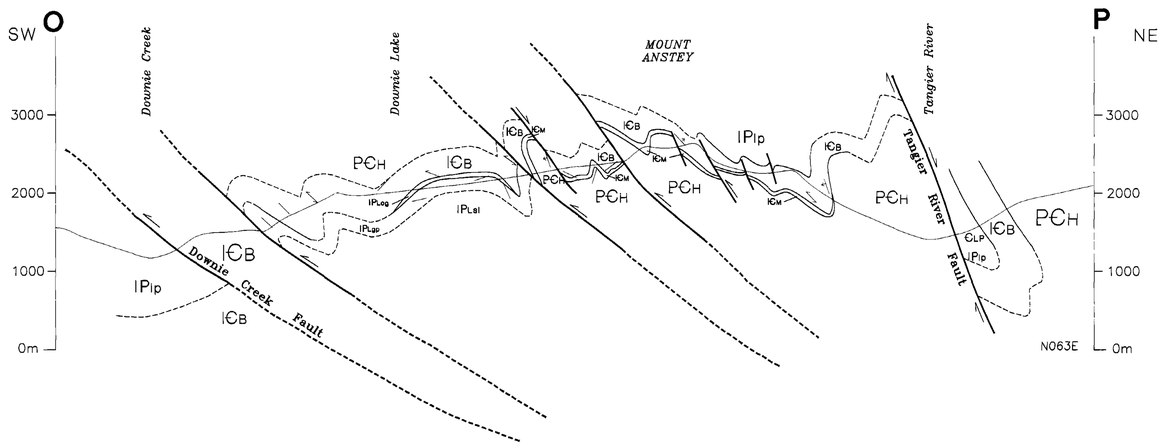
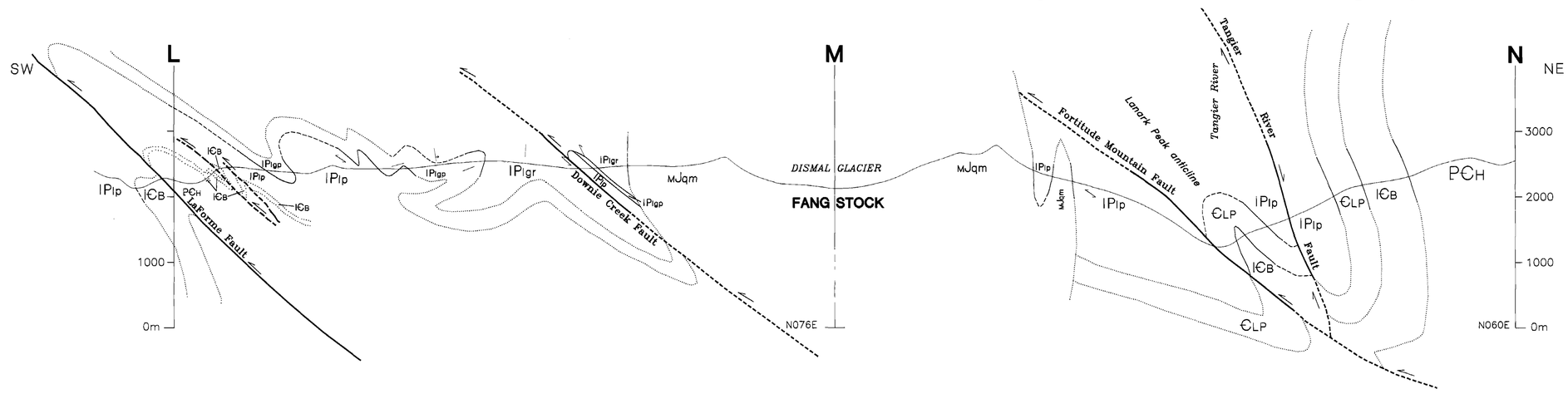
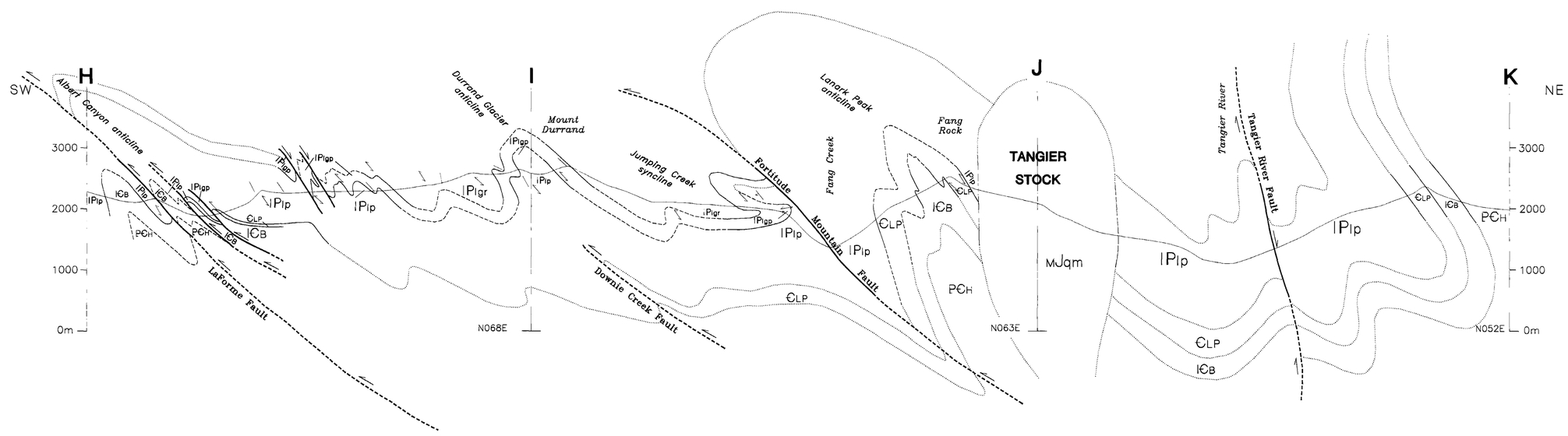
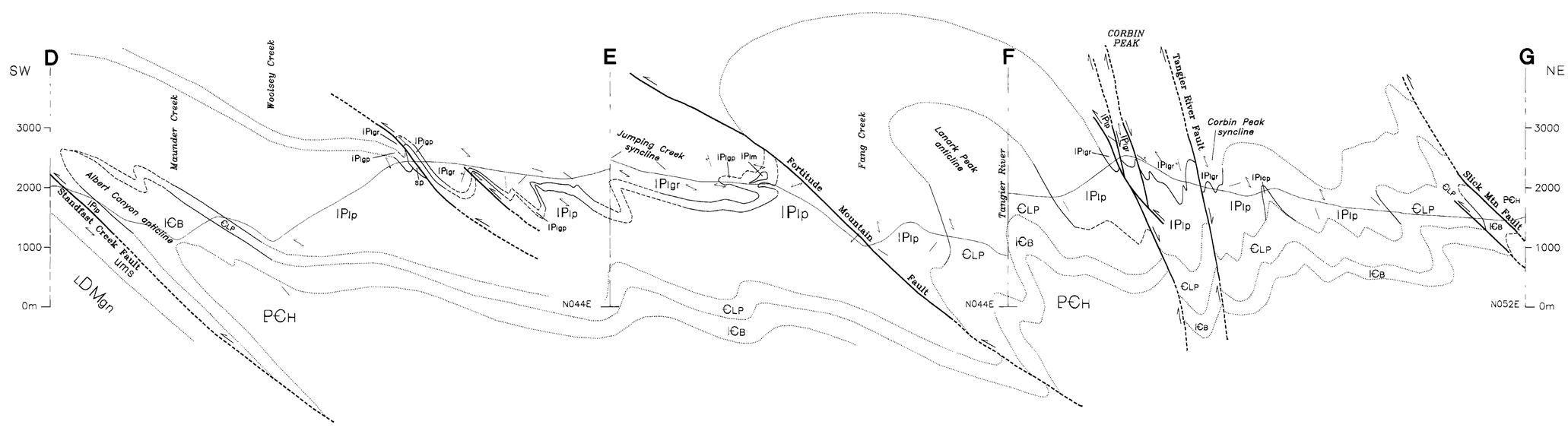
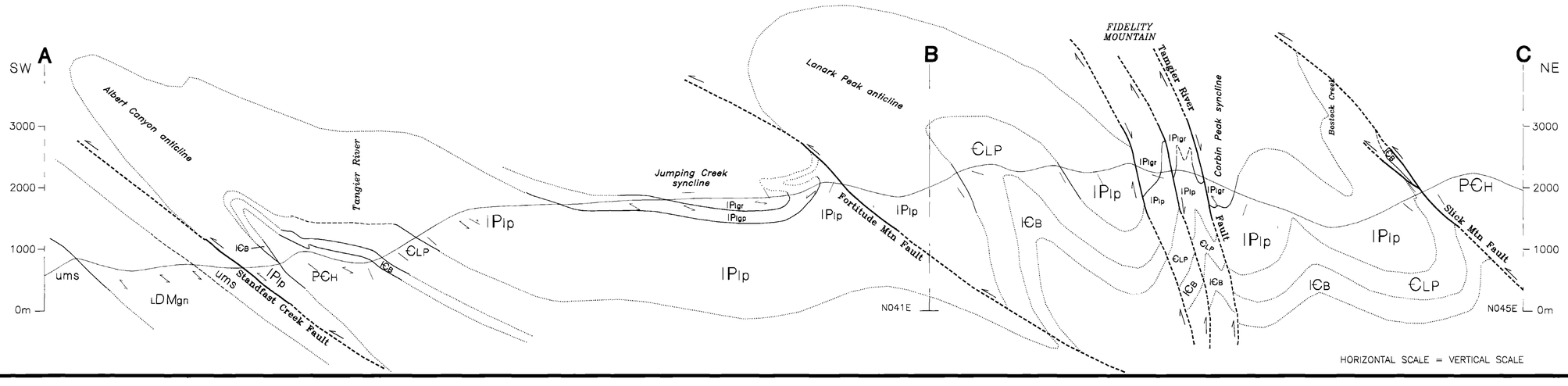
VERTICAL STRUCTURE SECTIONS











HORIZONTAL SCALE = VERTICAL SCALE

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