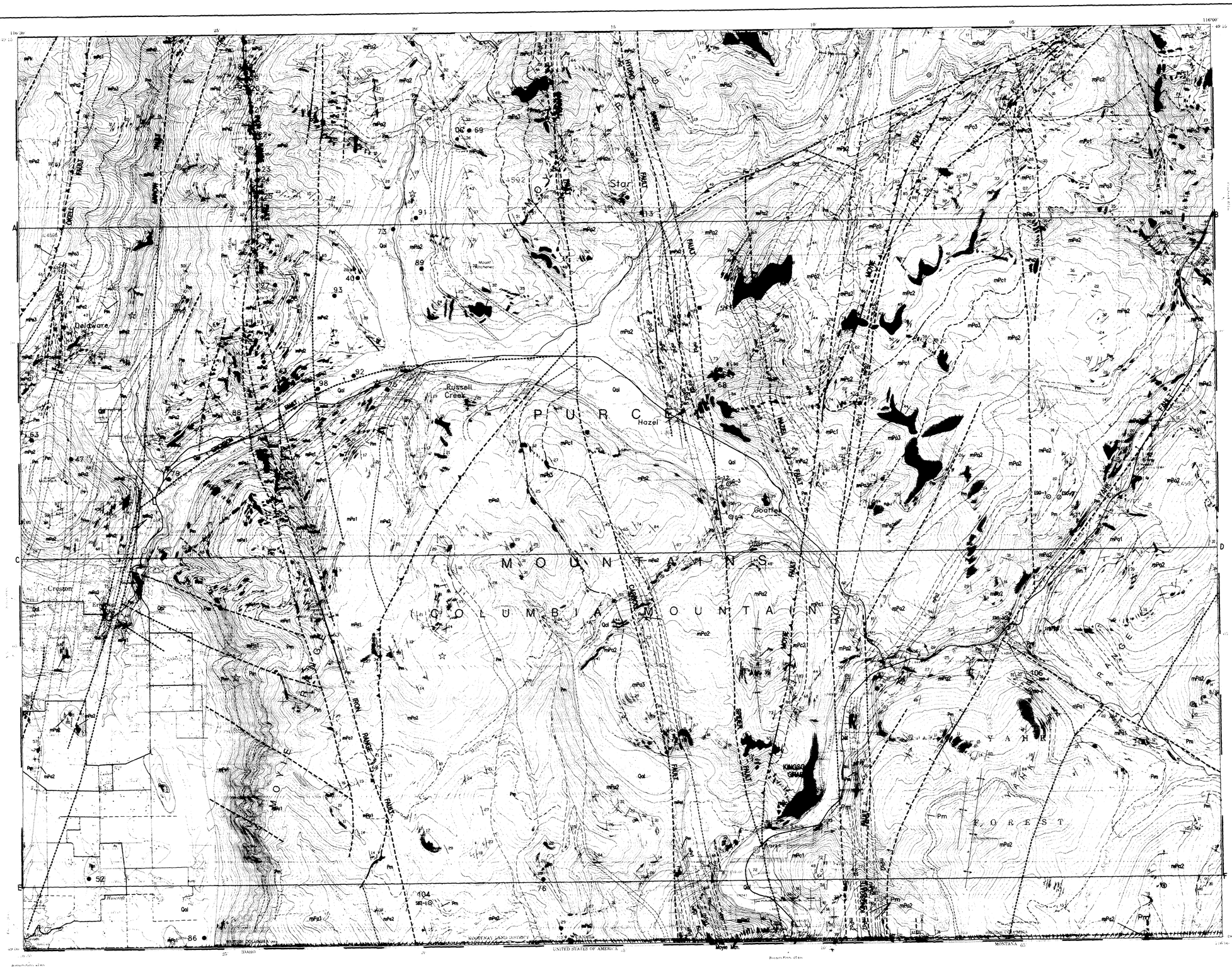


Topographic base map (Yahk, 82F/1) published by the Surveys and Mapping Branch, Department of Energy, Mines and Resources, Ottawa, Ontario, 1981.
North American Datum 1927; Transverse Mercator Projection

BC Ministry of Energy, Mines and Petroleum Resources

1895 - 1995 100 YEARS OF GEOLOGICAL SURVEYING

Geological Survey Branch

OPEN FILE 1995-14

GEOLOGY OF THE YAHK MAP AREA, SOUTHEASTERN BRITISH COLUMBIA

NTS 82F/1

By D.A. Brown, J.A. Bradford, D.M. Melville, and P. Stinson

Additional geology by D.A. Barron, G.K. Manson and J.M. Britton

Kilometres 0 — 4 Kilometres

SCALE 1 : 50 000

LAYERED ROCKS

QUATERNARY

Qal Unconsolidated outwash, alluvium, glacial deposits.

MIDDLE PROTEROZOIC

PURCELL SUPERGROUP

KITCHENER FORMATION

mPk Thin bedded, brown weathering dolomitic siltstone and green argillite.

CRESTON FORMATION

mPc3 **UPPER**: green siltstone; black or purple argillite and siltstone.

mPc2 **MIDDLE**: thin to medium bedded, white to maroon quartz arenite and quartz wacke; black to purple argillite and siltstone. Abundant ripples, desiccation cracks, load casts, cross bedding.

mPc1 **LOWER**: thin bedded to laminated dark argillite and siltstone; green siltstone; lesser fine grained quartz wacke. Waxy green to olive with tan weathering surfaces. Wavy to lenticular bedding with sub-phyllitic to phyllitic foliation. Abundant shrinkage cracks and asymmetric and symmetric ripples.

ALDRIDGE FORMATION

mPa3 **UPPER**: rusty brown weathering, grey to dark grey, fissile to platy, laminated siltstone and mudstone couplets. Informally called "lined rock" due to light grey siltstone laminae within dark grey argillite.

mPa2 **MIDDLE**: grey to rusty weathering, planar bedded, fine-grained quartz and quartzofeldspathic wacke, commonly medium to thick bedded; interbeds of argillite and siltstone. Contains over 20 unique marker units comprised of distinct sequences of alternating light and dark grey, parallel siltite laminae that can be correlated over 100s of kilometres. Isolated "fragmentals", commonly dewatering features, are indicated as open stars. **mPa2a** -- black argillite facies.

mPa1 **LOWER (Ramparts Facies)**: light grey weathering, medium to thick bedded, medium to fine-grained, quartzite, quartz arenite and quartz wacke. Lenticular bedding and local crossbedding. Rare rusty brown wacke horizons towards base of the exposed section.

INTRUSIVE ROCKS

PROTEROZOIC

Pma Mafic sills and/or dikes, similar composition to Moyie sills but hosted in strata younger than the middle Aldridge Formation.

Pm "Moyie Sills": Mafic sills and/or dikes; fine to medium grained, hornblende (± pyroxene) gabbro to hornblende quartz diorite and hornblendite. Local irregular patches of coarse pegmatitic hornblende and feldspar.

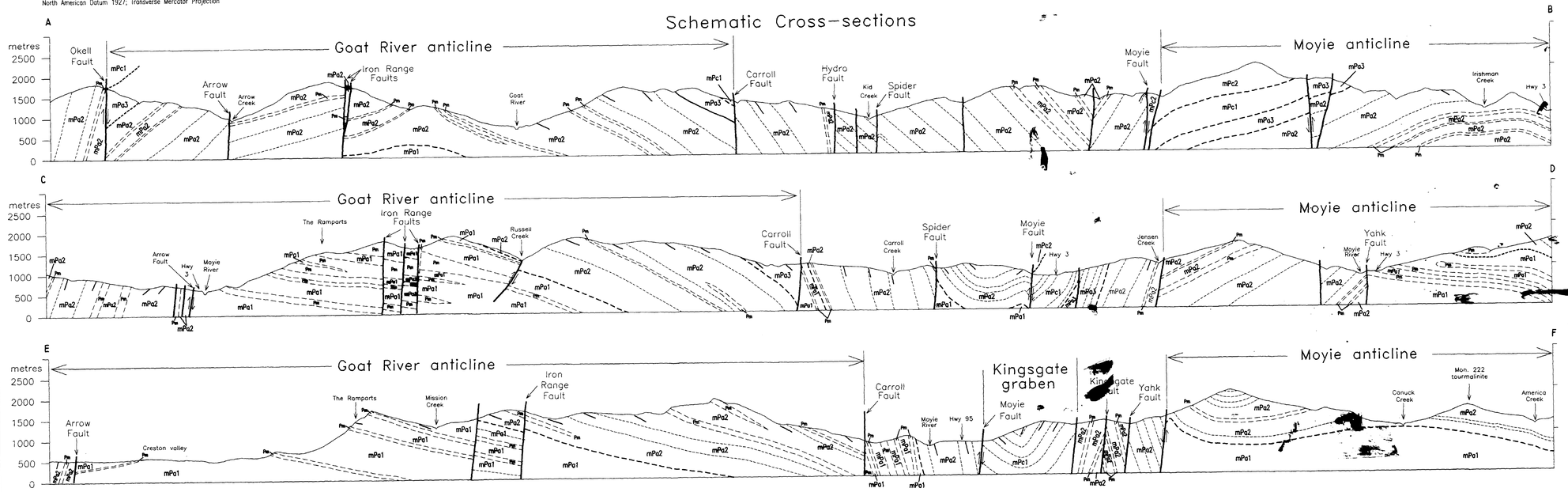
SYMBOLS

- Geological boundaries (defined, approximate, assumed)
- High angle fault (defined, approximate, assumed)
- Thrust fault (defined, approximate, assumed; teeth in overlying plate)
- Measure fault plane (inclined, vertical)
- Limit of Quaternary cover
- Bedding with tops observed (inclined, overturned)
- Bedding (horizontal, inclined, vertical)
- Foliation: schistosity or fracture cleavage (inclined, vertical)
- Axial plane of minor fold
- Anticline, syncline
- Fold axis of minor fold
- Fold axis based on bedding – cleavage intersection
- Paleocurrent direction
- Glacial striae
- Adit, trench
- Drill hole
- MINFILE mineral occurrence — 92
- Outcrop
- Ultrabasic breccia dike
- Sedimentary fragmental
- Tourmalinite
- Tourmalinite float
- Albitite alteration
- Garnetiferous beds

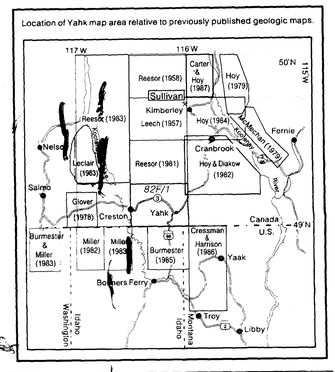
Cross-sections:

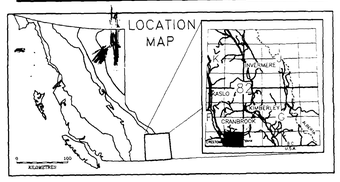
- Projected bedding dip
- Formlines

Schematic Cross-sections



Location of Yahk map area relative to previously published geologic maps.





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