

- LEGEND**
- CRETACEOUS**
- UPPER CRETACEOUS**
- 16 BELLY RIVER FORMATION: grey and green, silty shale, grey and green, crossbedded sandstone
- 15 ALBERTA GROUP (13-15)
15 WAHIAH FORMATION: dark grey, silty shale, thin, grey sandstone
- 14 CARDIUM FORMATION: grey sandstone, grey, silty shale
- 13 BLACKSTONE FORMATION: dark grey, silty shale, thin sandstone
- LOWER CRETACEOUS**
- 12 CROWNEST FORMATION: grey tuff, green agglomerate
- 11 BLAIRMORE GROUP: grey and greenish grey sandstone, green and maroon, silty mudstone, conglomerate
- 10 KOOTENAY FORMATION: dark grey and black shale, carbonaceous shale, dark grey and black sandstone, coal
- JURASSIC**
- 9 FERME GROUP: dark grey and black shale, grey siltstone and sandstone; basal conglomeratic sandstone
- TRIASSIC**
- 8 SPRAY RIVER FORMATION: grey siltstone, grey and brown sandstone, dark grey mudstone
- MISSISSIPPIAN, PENNSYLVANIAN (?) AND PERMIAN (?)**
- 7 ROCKY MOUNTAIN FORMATION: grey sandstone, silty dolomite, chert
- MISSISSIPPIAN**
- 6 RUNDLE GROUP (4-6)
6 ETHERINGTON FORMATION: black and grey limestone, black and grey dolomite, grey sandstone, green shale
- 5 MOUNT HEALD FORMATION: black and grey limestone, grey and black dolomite, chert
- 4 LIVINGSTONE FORMATION: grey limestone, grey dolomite, chert
- 3 BANFF FORMATION: black limestone and dolomite, black siltstone and mudstone, chert
- 2 EXSHAW FORMATION: black, silty shale, grey siltstone
- DEVONIAN**
- 1 PALLISER FORMATION: grey limestone

- Rock outcrop (altitude not attainable)
 Sedimentary contact (approximate)
 Bedding (horizontal, inclined, vertical, overturned)
 Fault, thrust (approximate, assumed)
 Fault, normal (solid circle on down-thrown side)
 Anticline, trace of axial plane (approximate)
 Syncline, trace of axial plane (approximate)
 Syncline, overturned
 Plunge of fold axis
 Fault locality
 Mineral occurrence
 Well (drilling, gas, abandoned)
 Note 1 on structure section C-D: Unit 7 may include Triassic, Spray River formation in part.

- Geology by D. K. Norris, 1955
- Roads (loose surface)
 Cart track
 Trail
 Interprovincial boundary
 Township boundary (surveyed)
 Township boundary (unsurveyed)
 Section line and number
 Stream (position approximate)
 Fall
 Contours (interval 500 feet)
 Height in feet above mean sea-level
 Approximate magnetic declination, 22° 00' East

Cartography by the Geological Cartography Unit, 1958

Air photographs covering this area may be obtained through the National Air Photographic Library, Topographical Survey, Ottawa, Ontario

In response to public demand for earlier publication, Preliminary Series maps are now being issued in this simplified form, thereby affording a substantial saving in time. There is no loss of information, but the maps will be clearer to read if all or some of the map-symbols are hand-coloured.

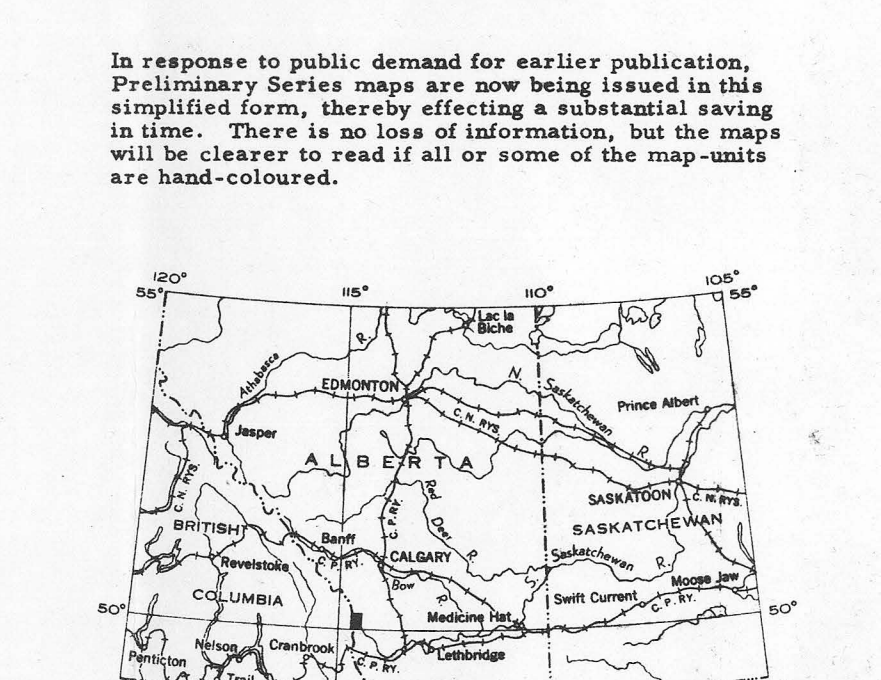


Figure 3
 Surface geological map of structures in immediate footwall of Lewis thrust plate, Beehive Mountain map-area and vicinity

Revisions to Geological Map 14-1958, Beehive Mountain, British Columbia and Alberta
 by D. K. Norris

Additional structural and stratigraphic control immediately east of the surface trace of the Lewis fault in the Beehive Mountain map-area (82/2 east half)¹ has resulted in significant changes in the interpretation of the geology there (Figure 1). Basically the structure is a recumbent syncline² with Upper Cretaceous Belly River Formation and possibly St. Mary River Formation in its core. Rocks at least as old as the Jurassic Ferme Group occur in its overturned limb. If this recumbent fold is interpreted correctly, as a peel² with its base at or near the Paleozoic-Mesozoic contact, there would be an anticlinal structure in Paleozoic rocks at favourable drilling depths (see Fig. 2, structure section) beneath the Lewis thrust plate. Providing there is adequate closure along strike, the structure could have served as an economically important trap for natural hydrocarbons.

The accompanying map and structure section illustrates the additional control acquired in 1960. They are on a scale of two inches equals one mile and the stratigraphic units are identified according to the original published legend. Included also is a synthesis (Fig. 3) illustrating regional relationships among thrust faults and overturned panels and serving to orient the reader with respect to a broader structural framework.

1. Norris, D.K.
 1958: Beehive Mountain, Alberta and British Columbia; Geol. Surv. Can., Paper 58-5, report and map 14-1958.

2. Norris, D.K.
 1961: An interstratal peel on Maverick Hill, Alberta; J. Alberta Soc. Petrol. Geologists, vol. 9, no. 6, pp. 177-191.

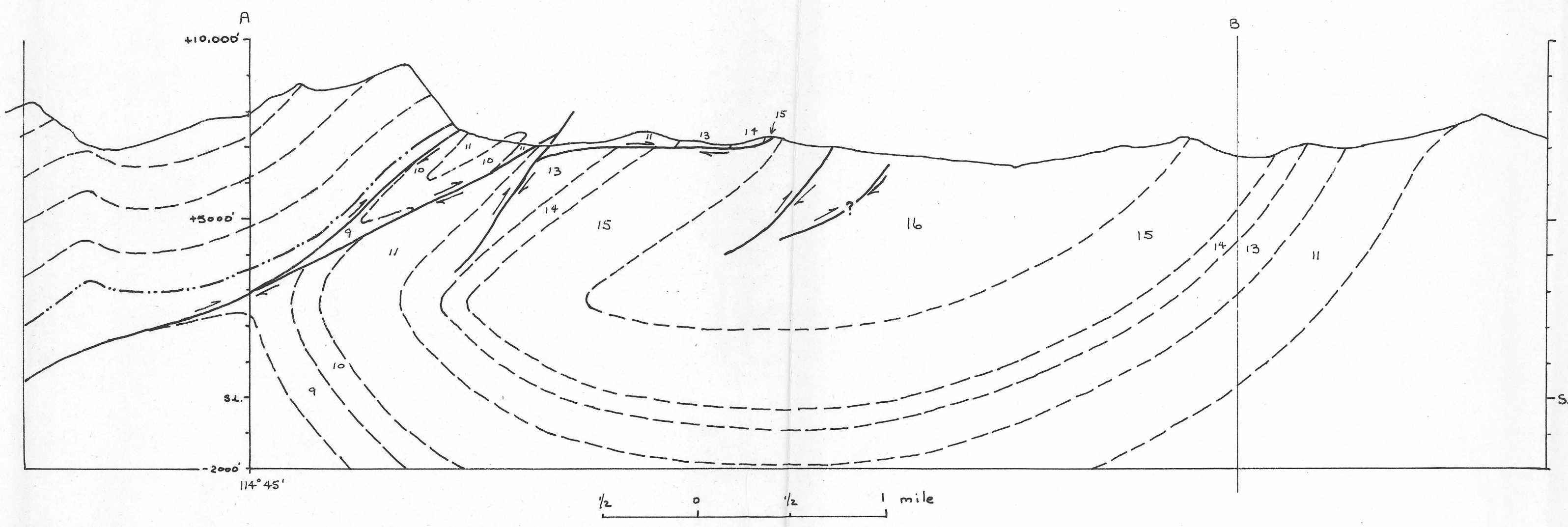


Figure 2
 Structure Section, natural Scale



Figure 1
BEEHIVE MOUNTAIN
 ALBERTA-BRITISH COLUMBIA
 Scale 1 Inch = 1/2 Mile

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Advance Information
 Subject To Revision