

STRUCTURAL CROSS SECTION ACROSS FLATHEAD AREA

based on surface geological mapping by Douglas 1952, Leach 1960, and Price 1962a, and with data derived from published cross sections from Bally *et al.* 1966, Yoos, 1991; Fernor and Moffat, 1992; van der Velden and Cook, 1994, 1996, and Fernor, 1999

WEST

EAST

kilometre 2 1 0 1 2 3 4 5 kilometre
(no vertical exaggeration)

B.C. | ALBERTA

SHELL MACDONALD
b-30-H / 82-G-2

CHEVRON MOBIL
FLATHEAD
d-22-H / 82-G-2

SHELL SAGE
a-56-E / 82-G-1

SHELL GROUSE
d - 66 - G / 82 - G - 1

SHELL 14 WATERTON
10-2-3-1W5
(projected)

MACDONALD RANGE

FLATHEAD VALLEY
Flathead River

SAGE CREEK
ANTICLINE

AKAMINA SYNCLINE

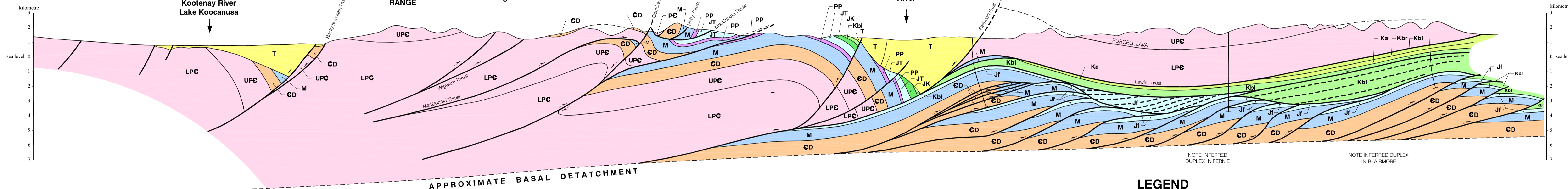
CLARKE RANGE

ROCKY MOUNTAIN
TRENCH

GALTON
RANGE

Wigwam River

Kootenay River
Lake Koocanusa



APPROXIMATE BASAL DETACHMENT

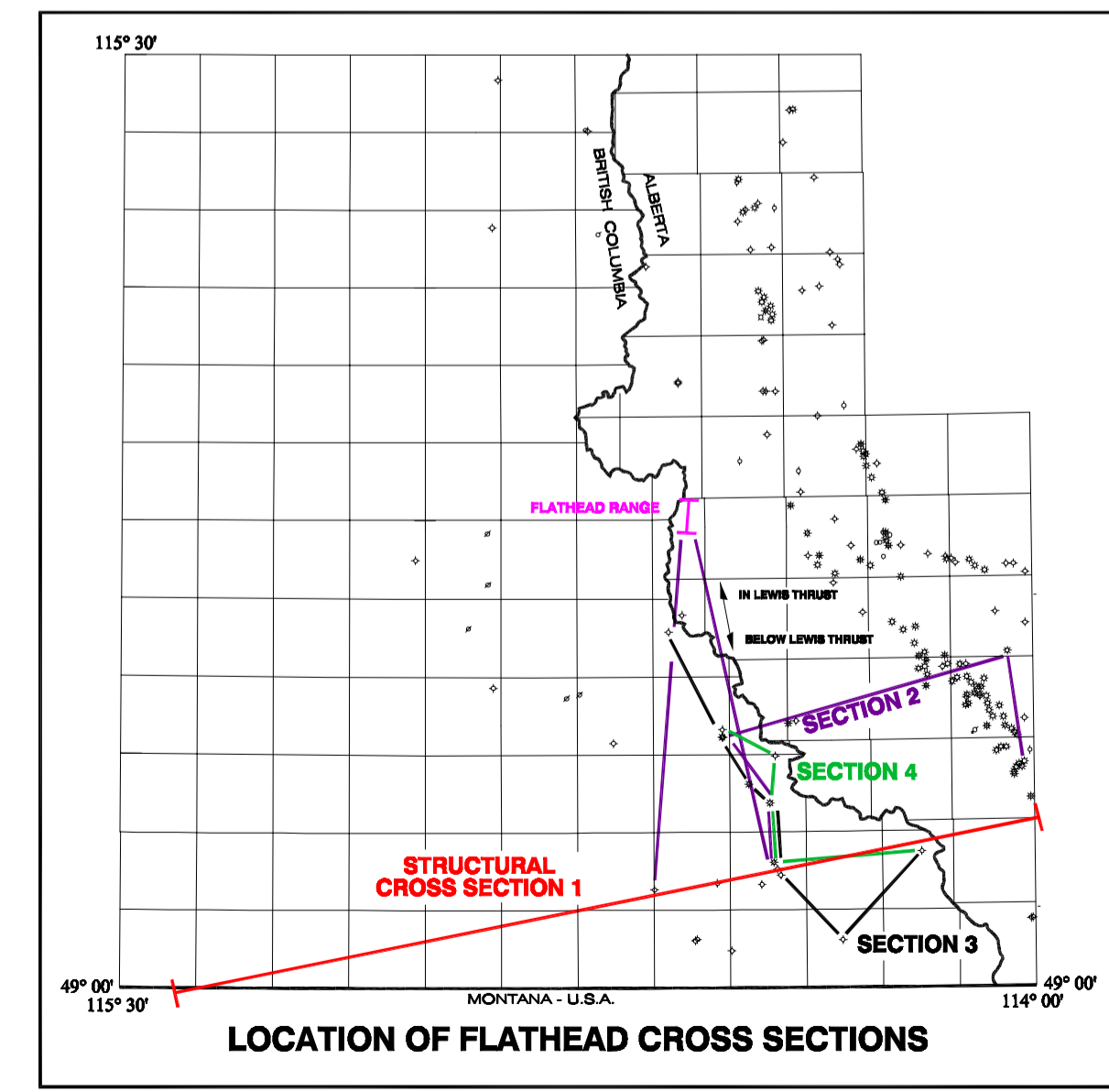
NOTE INFERRED
DUPLEX IN FERNIE

NOTE INFERRED
DUPLEX IN BLAIRMORE

LEGEND

- T** Tertiary: Miocene St. Eugene Fm. in Rocky Mountain Trench (in part), Oligocene Kishenehn Fm. in Flathead Valley. (includes veneer of Quaternary)
- Kbr** Upper Cretaceous Belly River Fm.
- Ka** Upper Cretaceous Alberta Group
- Kbl** Lower Cretaceous Blairmore Group (includes JK below Lewis Thrust)
- JK** Jurassic-Lower Cretaceous Kootenay Group (included in Kbl below Lewis Thrust)
- Jf** Jurassic Fernie Formation (shown below Lewis Thrust)
- JT** Triassic Spray River Group and Jurassic Fernie Formation (shown above Lewis Thrust)
- PP** Pennsylvanian Permian Rocky Mountain Supergroup (included in M below Lewis Thrust)
- M** Mississippian, Banff Fm. and Rundle Group (includes PP below Lewis Thrust)
- CD** Cambrian, Flathead, Gordon, Elko and Windsor Mtn. Fms., and Devonian Fairholme Group, Alexo Fm., and Palliser Fm.
- UPC** Precambrian Purcell Supergroup, upper part, above Purcell Lava
- LPC** Precambrian Purcell Supergroup, lower part below top of Purcell lava

POSSIBLE FOOTWALL
CUTOFF OF
PRECAMBRIAN
STRATA IN LEWIS
THRUST



BRITISH COLUMBIA
Ministry of Energy and Mines
Energy and Minerals Division
Petroleum Lands Branch

FLATHEAD CROSS SECTION 1

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2000