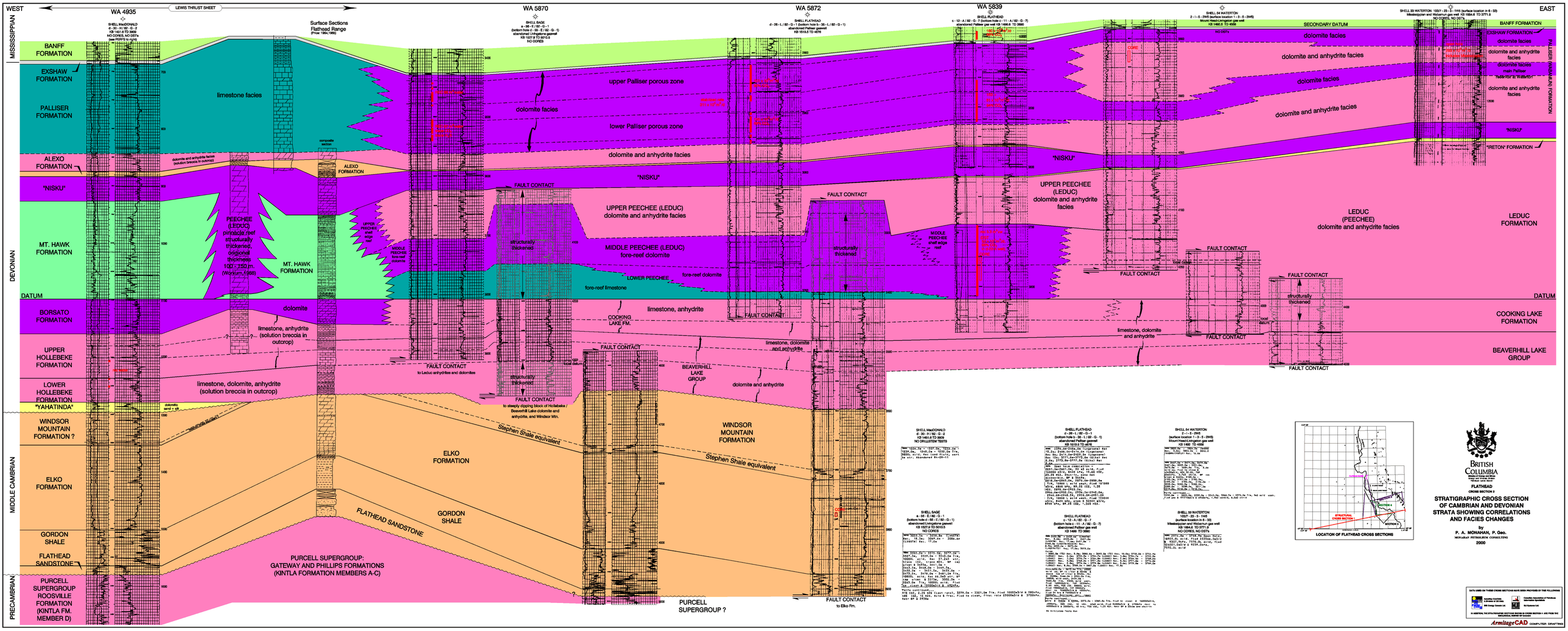
WEST
EAST
WA 4935
LEWIS THRUST SHEET
WA 5870
WA 5872
WA 5839
Surface Sections
Flathead Range
(Price: 1964,1966)
SHELL MacDONALD
d- 30 - H / 82 - G - 2
KB 1461.6 TD 3909
NO CORES, NO DSTs
(see PEEKS to north)
SHELL SAGE
a- 56 - E / 82 - G - 1
(bottom hole b- 56 - E / 82 - G - 1)
abandoned Livingstone gravel
KB 1527.8 TD 9212.5
NO CORES
SHELL FLATHEAD
d - 26 - L / 82 - G - 1 (bottom hole b - 35 - L / 82 - G - 1)
abandoned Palliser gravel
KB 1519.0 TD 4876
SHELL FLATHEAD
c - 12 - A / 82 - G - 7 (bottom hole c - 11 - A / 82 - G - 7)
abandoned Palliser gas well KB 1466.8 TD 3998
SHELL 54 WATERTON
2 - I - E - 29/5 (surface location 1 - 3 - E - 29/5)
Mount Hawk-Livingston gas well
KB 1466.8 TD 4058
NO DSTs
SHELL 33 WATERTON 100/7 - 23 - S - 1W5 (surface location H 6 - 33)
Mesaligaston and Wichamun gas well KB 1464.8 TD 3771.3
NO CORES, NO DSTs
SECONDARY DATUM
MISSISSIPPIAN
DEVONIAN
MIDDLE CAMBRIAN
PRECAMBRIAN
BANFF FORMATION
EXSHAW FORMATION
PALLISER FORMATION
ALEXO FORMATION
"NISKU"
MT. HAWK FORMATION
BORSATO FORMATION
UPPER HOLLEBEKE FORMATION
LOWER HOLLEBEKE FORMATION
"YAHATINDA"
WINDSOR MOUNTAIN FORMATION ?
ELKO FORMATION
GORDON SHALE
FLATHEAD SANDSTONE
PURCELL SUPERGROUP ROOSVILLE FORMATION (KINTLA FM. MEMBER D)
DATUM
limestone facies
dolomite and anhydrite facies (solution breccia in outcrop)
corresponds to
ALEXO FORMATION
PEECHEE (LEDUC) pinnacle reef structurally thickened; original thickness 100 - 750 m. (Workum,1968)
MT. HAWK FORMATION
upper PEECHEE shelf edge reef
MIDDLE PEECHEE fore-reef dolomite
dolomite
limestone, anhydrite (solution breccia in outcrop)
limestone, dolomite, anhydrite (solution breccia in outcrop)
dolomitic shale & silt
Stephen Shale equivalent
ELKO FORMATION
GORDON SHALE
FLATHEAD SANDSTONE
PURCELL SUPERGROUP: GATEWAY AND PHILLIPS FORMATIONS (KINTLA FORMATION MEMBERS A-C)
upper Palliser porous zone
dolomite facies
lower Palliser porous zone
dolomite and anhydrite facies
"NISKU"
FAULT CONTACT
UPPER PEECHEE (LEDUC) dolomite and anhydrite facies
structurally thickened
MIDDLE PEECHEE (LEDUC) fore-reef dolomite
LOWER PEECHEE
fore-reef dolomite
fore-reef limestone
COOKING LAKE FM.
limestone, anhydrite
FAULT CONTACT
to Leduc anhydrites and dolomites
FAULT CONTACT
to steeply dipping block of Hollebeke / Beaverhill Lake dolomite and anhydrite, and Windsor Mtn.
BEAVERHILL LAKE GROUP
limestone, dolomite and anhydrite
dolomite and anhydrite
WINDSOR MOUNTAIN FORMATION
Stephen Shale equivalent
ELKO FORMATION
GORDON SHALE
FLATHEAD SANDSTONE
PURCELL SUPERGROUP ?
FAULT CONTACT
to Elko Fm.
CORE
DST
"NISKU"
UPPER PEECHEE (LEDUC) dolomite and anhydrite facies
MIDDLE PEECHEE shelf edge reef
FAULT CONTACT
structurally thickened
LEDUC (PEECHEE) dolomite and anhydrite facies
limestone, dolomite and anhydrite
local datum
dolomite facies
dolomite and anhydrite facies
dolomite facies
dolomite and anhydrite facies
dolomite facies
main Palliser
"Bellerophon" at Waterton
dolomite and anhydrite facies
"NISKU"
"IRETON" FORMATION
BANFF FORMATION
EXSHAW FORMATION
dolomite facies
dolomite and anhydrite facies
dolomite facies
main Palliser
"Bellerophon" at Waterton
dolomite and anhydrite facies
"NISKU"
"IRETON" FORMATION
PALLISER (WABAMUN FORMATION)
LEDUC FORMATION
COOKING LAKE FORMATION
BEAVERHILL LAKE GROUP
LOCATION OF FLATHEAD CROSS SECTIONS
SECTION 4
SECTION 5
STRUCTURAL CROSS SECTION
BRITISH COLUMBIA
FLATHEAD
CROSS SECTION 6
STRATIGRAPHIC CROSS SECTION OF CAMBRIAN AND DEVONIAN STRATA SHOWING CORRELATIONS AND FACIES CHANGES
by
P. A. MONAHAN, P. Geo.
MONAHAN PETROLEUM CONSULTING
2000
DATA USED ON THESE CROSS SECTIONS HAVE BEEN PROVIDED BY THE FOLLOWING
Canadian Association of Petroleum Landmen of Alberta
IHS Energy Canada Ltd.
Oil Extension Ltd.
IN ADDITION, THE STRATIGRAPHIC SECTIONS SHOWN IN CROSS SECTION 4 ARE FROM THE GEOLOGICAL SURVEY OF CANADA
ArmitageCAD COMPUTER DRAFTING