

- CENOZOIC**
- PALEOCENE**
- Tph** PORCUPINE HILLS FORMATION - medium to very thickly bedded, multistoried, fine to coarse grained, massive to crossbedded sandstone; massive, rubby shale; carbonaceous shale; granule to pebble conglomerate
- MESOZOIC AND CENOZOIC**
- CRETACEOUS AND PALEOGENE**
- UPPER CRETACEOUS AND PALEOGENE**
- TKwc** WILLOW CREEK FORMATION - green, red, pink, and grey mudstone, caliche nodules common; soft, massive to crossbedded grey sandstone; granule to pebble conglomerate
- MESOZOIC**
- CRETACEOUS**
- MAASTRICHTIAN**
- Ksmr** ST. MARY RIVER FORMATION - fine grained, hard to soft, grey to greenish grey sandstone, rootlets common; grey to greenish grey silty shale and shale; carbonaceous shale; limestone ("ironstone"); coal
 - Kbp** BEARPAW FORMATION - rubby, dark grey shale; thin, fine to very fine grained sandstone; medium to coarse-grained sandstone
- CAMPANIAN**
- BELLY RIVER GROUP (Kcc - Kdwc)**
- Kdwc** DRYWOOD CREEK FORMATION - fine grained flaser to wavy rubby grey shale; bedded sandstone; carbonaceous shale; coal
 - Klb** LUNDBRECK FORMATION - multistoried, medium to very thickly bedded, medium to coarse grained, light to very light grey sandstone; grey to light green shale, caliche nodules common; granule to pebble conglomerate; caliche hardpan; dark grey carbonaceous shale
 - Kcc** CONNELLY CREEK FORMATION - medium bedded, multistoried current rippled, fine grained, dark grey sandstone; grey to olive green shale; limestone nodules; basal sandstone is medium to fine grained, massive to very thickly crossbedded quartz arenite, often with "Scolithes" trace fossils
 - Kdhc** MILK RIVER GROUP (Ktc - Kdhc)
 - Kdhc** PAKOWKI FORMATION - coarsening and thickening upward, dark grey shale with black chert pebbles to shale interbedded with thinly to medium bedded, fine to very fine grained, parallel to current rippled to hummocky cross-stratified sandstone, trace fossils common
 - Ktc** DEADHORSE COULEE FORMATION - thinly to thickly interbedded, medium grained, massive and crossbedded greenish-grey sandstone, fine grained current rippled sandstone, rubby, greenish, silty shale; plant debris
 - Kvr** VIRGELLE FORMATION - massive to very thickly crossbedded, fine to medium grained, light grey sandstone, prominent cliff and ridge former
 - Ktc** TELEGRAPH CREEK FORMATION - coarsening and thickening upward, fine to very fine grained sandstone; siltstone, occasionally nodular; dark grey shale
- TURONIAN TO CAMPANIAN**
- Kwp** WAPIABI FORMATION - dark grey shale; silty shale; calcareous shale; concretions
 - Kca** CARDIUM FORMATION - granule conglomerate; fine to coarse grained sandstone; sandy to silty shale
 - Kbk** BLACKSTONE FORMATION - dark grey shale; silty shale; very fine grained sandstone
 - Kbl** BLAIRMORE GROUP - undivided: grey and greenish grey sandstone; green, silty mudstone (Beaver Mines Formation); grey sandstone and shale in the lower part (Gladstone Formation); basal chert- and quartzite-pebble conglomerate (Cadomin Formation)
- PHANEROZOIC**
- Kbr** BELLY RIVER GROUP (undivided)
 - Kmr** MILK RIVER GROUP (undivided) and PAKOWKI FM (on cross sections only)

Note A: Bearpaw Formation interval may include deformed portions of the uppermost Belly River Group (Drywood Creek Formation) and the lowermost St. Mary River Formation.

MAP SYMBOLS

- Outcrop (small, large, scattered)**
- Geological boundary (defined, approximate, assumed)**
- LOCAL STRUCTURES**
- PLANAR STRUCTURES**
- Bedding, tops known (horizontal, inclined, overturned, vertical)
 - Bedding, tops unknown (inclined, vertical)
 - Spaced, disjunctive cleavage (inclined)
 - Tectonic banding
 - Minor fault (reverse and inclined, sinistral, dextral)
 - Joint (inclined)
 - Vein (inclined)
- LINEAR STRUCTURES**
- Fold axis (anticline, syncline, Z-fold, S-fold, fault striation)
- REGIONAL STRUCTURES**
- Regional backthrust shear zone (triangle zone upper detachment)
 - Thrust fault (teeth indicate dip direction; defined, approximate, assumed)
 - Backthrust fault (teeth indicate dip direction; approximate, assumed)
 - Fault, sense unknown (defined, approximate)
 - Anticline (upright, overturned; defined, approximate position)
 - Syncline (upright, overturned; defined, approximate position)
- SELECTED OBSERVATIONS COMPILED FROM DOUGLAS (1950)**
- Outcrop
 - Bedding, tops unknown (inclined)
 - Anticline (upright)
 - Syncline (upright)
- OTHERS**
- Well (gas [abandoned]; dry and abandoned; water disposal [abandoned])

SCHEDULE OF WELLS (Wells listed by release date):

UWID	FULL NAME	RIG RELEASE	SURFACE LOCATION (Easting, Northing)
1 - 100016291402W5 0	WILLOW CREEK WELL	20/10/02	697418, 5565041
2 - 100013041402W5 0	RICE CREEK WELL	24/08/12	698165, 5560407
3 - 1000120501502W5 0	STIMSON NO. 1	48/04/02	698124, 5568015
4 - 100022901302W5 0	BA-TRIAD-SUN-ROYALITE ROCKING P 2-29	57/04/03	697539, 5554347
5 - 100015101202W5 0	DECALTA KR ET AL CALLUM 15-15-12-2	70/02/16	701190, 5542687
6 - 1000101001401W5 0	JOFFRE ET AL TROUT CREEK 10-10-14-1	80/07/10	710454, 5560579
7 - 100072101401W5 0	CDNOXY ET AL STIMSON 7-21-14-1	80/12/11	708717, 5563108
8 - 100043501401W5 0	JOFFRE ET AL STIMSON 4-35-14-1	81/01/13	711106, 5566347
9 - 1000122601201W5 0	JOFFRE ET AL TROUT CREEK 12-26-12-1	81/08/06	711898, 5546106
10 - 100162501302W5 0	CHEVRON LANGFORD 16-25-13-2	83/07/13	704325, 5555873

Geology by G. S. Stockmal.
 Geology based on fieldwork and interpretation of vertical air photographs by G. S. Stockmal (1996) with compilation from Douglas (1950).

REFERENCES

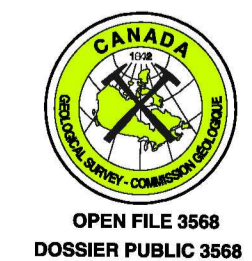
Douglas, R.J.W.
 1950: Callum Creek, Langford Creek and Gap map-areas, Alberta. Geological Survey of Canada Memoir 255, 124p.

SOUTHEASTERN CORDILLERA NATMAP PROJECT

Geological cartography by G. S. Stockmal and S. J. Hinds
 Any revisions or additional geological information from users would be welcomed by the Geological Survey of Canada
 Base map at the same scale published Surveys and Mapping Branch in 1971
 Copies of the topographical edition of this map area may be obtained from the Canada Map Office, Department of Natural Resources, Ottawa, Ontario

NOTE:
 Base map and geology have been transformed from NAD27 (North American Datum 1927) to NAD83.
 Recommended citation:
 Stockmal G.S.
 1998: Geology, Langford Creek (East Half), Alberta (preliminary); Geological Survey of Canada, Open File # 3568, scale 1:50 000.

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 Le Programme national de cartographie géoscientifique du Canada

GEOLOGY
LANGFORD CREEK
ALBERTA

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 Kilometres 1 0 1 2 3 Kilomètres
 Universal Transverse Mercator Projection
 Projection transverse universelle de Mercator
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UNIVERSAL TRANSVERSE MERCATOR GRID, ZONE 11

82J/W	82J/E	82J/W	82J/E	82/5
Mount Head	Stimson Creek			Nanton
1052A	698A	934A		
82J/W	82J/E	82J/W	82J/E	82/4
Fording River	Langford Creek			Claresholm
1824A	1831A	1837A	OF 3568	
82G/15	82G/16W	82G/16E		82H/13
Tornado Mountain	Maycroft			Granum
1823A	978A	OF 3275	OF 3445	

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