

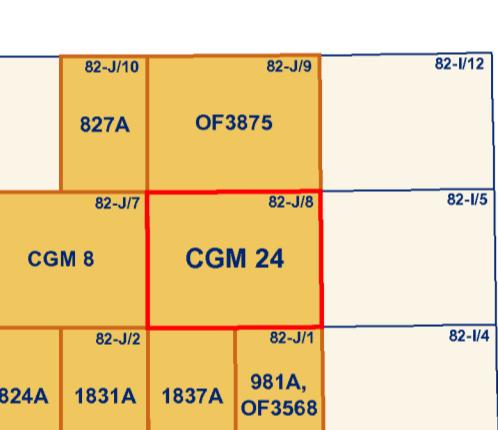
Figure 1. Structural subdivisions.

Abstract

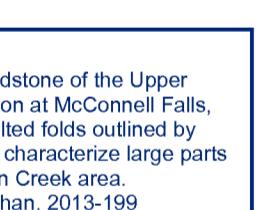
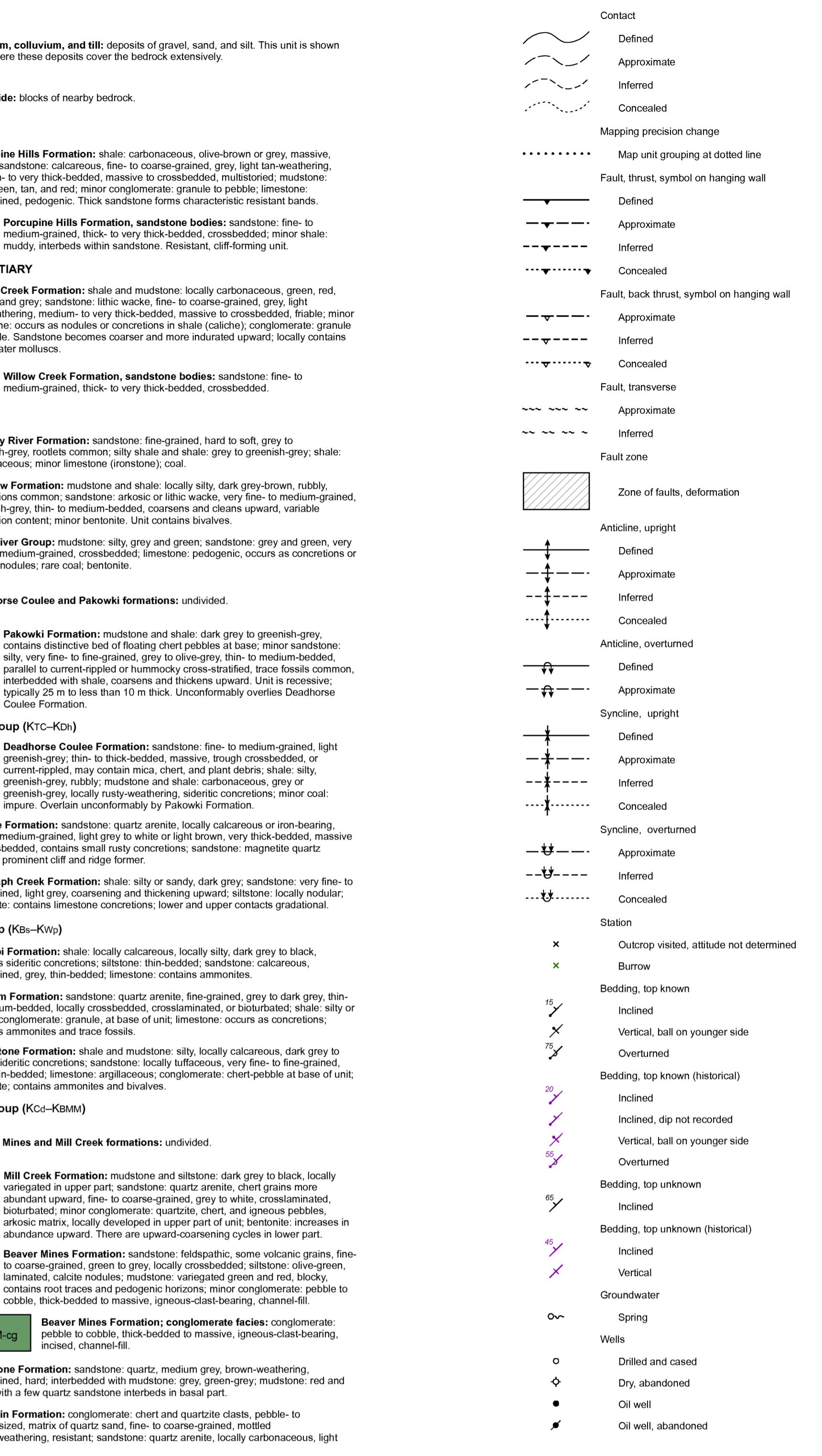
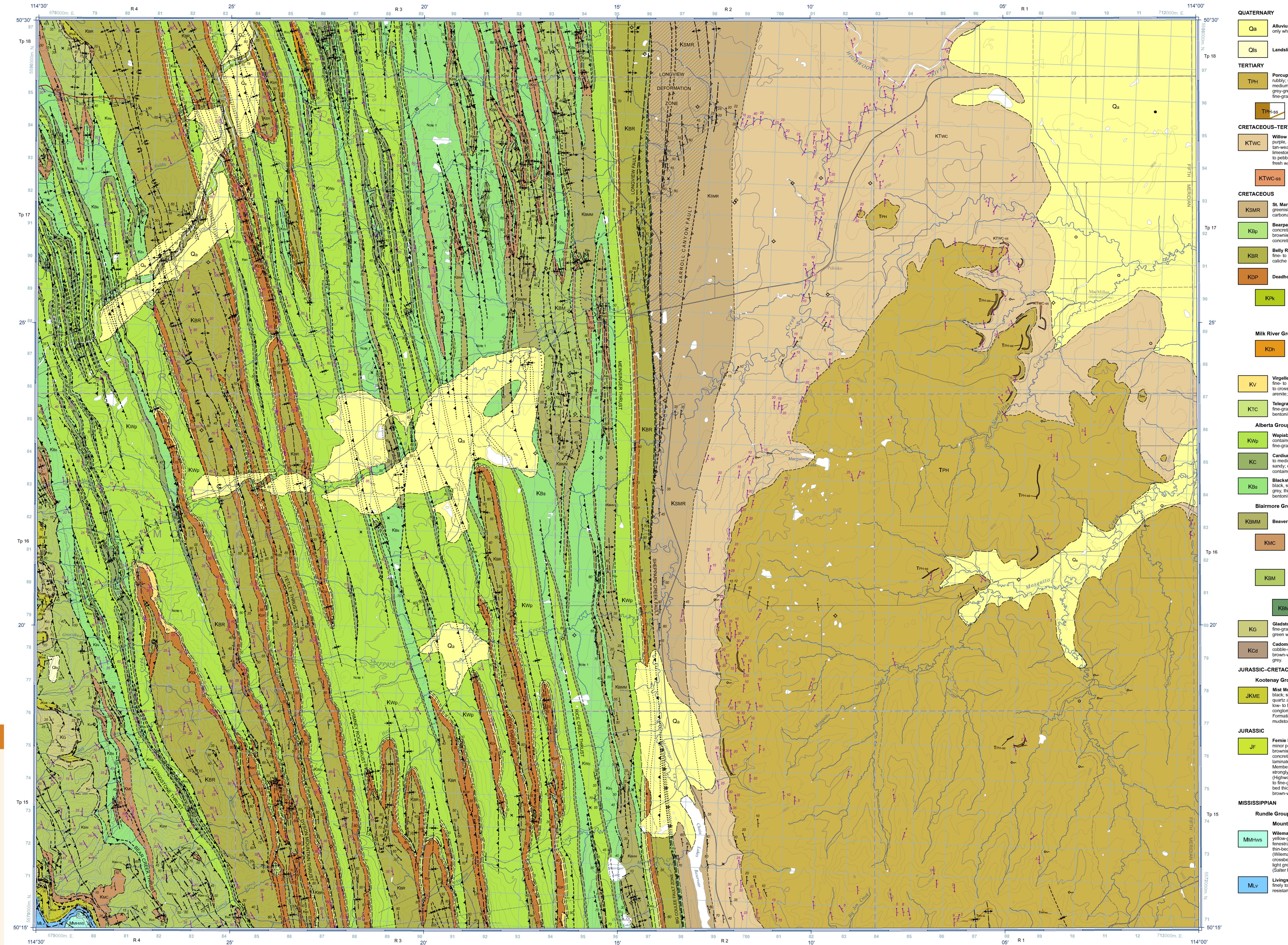
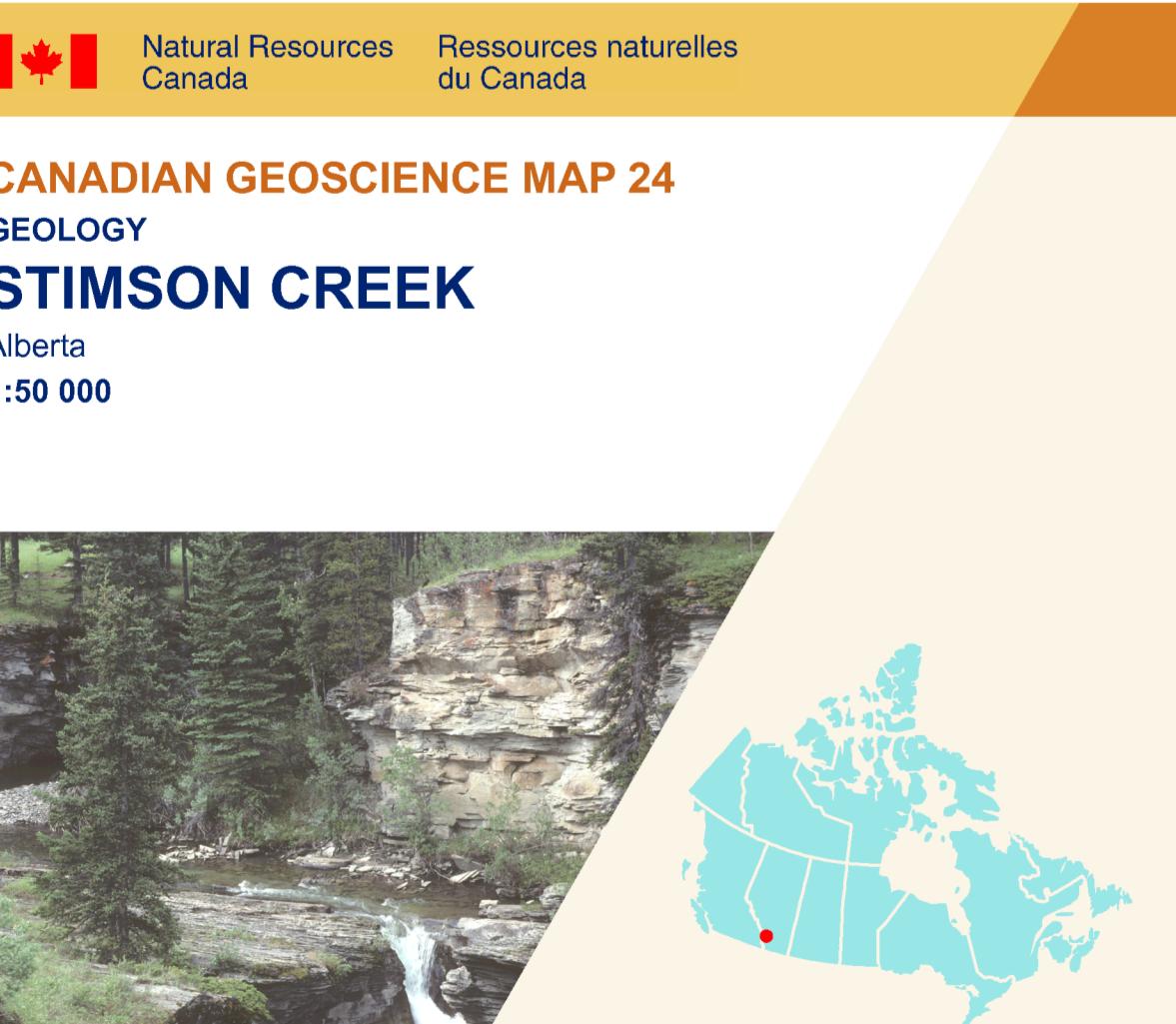
The 1:50 000 scale bedrock geological map of Stimson Creek, Alberta, was developed from fieldwork conducted in 1997 and 1998, combined with reinterpretation of previous maps. The area covered by the map extends from the southern part of the inner part of the southern Rocky Mountain foothills through the Alberta syncline, characterized by gently dipping Upper Cretaceous clastic strata. Exposed in the northern part of the syncline are numerous thrust faults and folds developed in Upper Cretaceous clastic strata that form the uppermost part of the syncline. Thrust faults, folds, and rare back-thrusts developed in Jurassic and Cretaceous clastic strata characterize the Rocky Mountain foothills. Mississippian carbonate outcrops in the structurally highest thrust sheet. Deformation is thin-skinned, and primarily parallel to East-West thrusts. The Lower Cretaceous igneous-clast-bearing, incised, channel-fill conglomerate occurs in the Coral Creek area.

Résumé

La carte géologique à l'échelle de 1:50 000 de la région de Stimson Creek, Alberta, a été élaborée à partir de travaux géologiques menés sur le terrain en 1997 et 1998, combinés à la réinterprétation de cartes antérieures. La zone couverte par la carte s'étend de la partie sud des Rocheuses vers l'est jusqu'à la partie nord de la synclinal d'Alberta, caractérisée par des strates clastiques moyennement inclinées au dessus du Paléocène. La partie nord de la région présente une zone étroite de failles de chevauchement qui forment la partie supérieure de la synclinal. Des failles, des plis et de rares rebondissements à vêlage vers l'avant-pays, sont développés dans les strates clastiques moyenâgeuses des Rocheuses. Des roches carbonatées mississippiennes émergent dans les contrevents des Rocheuses. Des roches déformées sont peu épaisses et sont principalement alignées le long des failles de chevauchement. Les affleurements de la nappe de charge de strates moyennement inclinées sont situés dans la partie supérieure de la synclinal. La déformation est superficielle et date principalement de l'alignement des failles de chevauchement. Des épais conglomerats de remplissage de chenaux, incisés, comportant des clastes de roche ignée et datant du Crétacé inférieur, sont présents dans la région du ruisseau Coral.



National Topographic System reference and index to adjoining published Geological Survey of Canada maps

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Note 1. Structural thickening probably occurs in this area, but cannot be mapped due to poor exposure.

REFERENCES

Hume, G., 1947, Stimson Creek, west of the fifth meridian, Alberta; Geological Survey of Canada, Map 934A, scale 1:63 360.

Hume, G.S. and Hage, C.O., 1942, Peleko Creek, Alberta; Geological Survey of Canada, Map 698A, scale 1:63 360.

Recommended citation:
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CANADIAN GEOSCIENCE MAP 24**GEOLGY**
STIMSON CREEK

Alberta

1:50 000

1 0 1 2 3 4 km

Author: M.E. McMechan
Geological interpretation by M.E. McMechan based on ground observations by M.E. McMechan, 1997–1998, 2002–2003, and 2007–2008, and by J. Hage, (1942), Hume, (1947), and studies of vertical airphotographs and high-resolution outcropped images.

Geomatics and cartography by B. Firmino, F.A. Hardj, and P.R.J. Wozniak

Scientific editing by E. Ingis
Map projection Universal Transverse Mercator, zone 11, North American Datum 1983
Base map at the scale of 1:50 000 from Natural Resources Canada, with modifications.
Elevations in feet above mean sea level

The Townships and Ranges provide spatial reference and is not intended for defining legal land ownership.
See Open File 5575 metadata.
Mean magnetic declination 2013, 14°45'E, decreasing 12° annually.
The Geological Survey of Canada welcomes corrections or additional information from users.

Data may include additional features not portrayed on the map.
See documentation accompanying the data.
Additional descriptive notes and references are included in the map information document.
This publication is available for free download through GEOSCAN (<http://geoscan.earth.ca/>)

CANADIAN GEOSCIECE MAP 24
GEOLGY
STIMSON CREEK

Alberta