

Supplementary File S1

Geographic and geological-stratigraphic background for the North American localities.

CONTENT

This supplement file provides figures illustrating the place and geological framework of the Cenomanian Wyoming locality and early Eocene (late Ypresian) Princeton Chert beds.

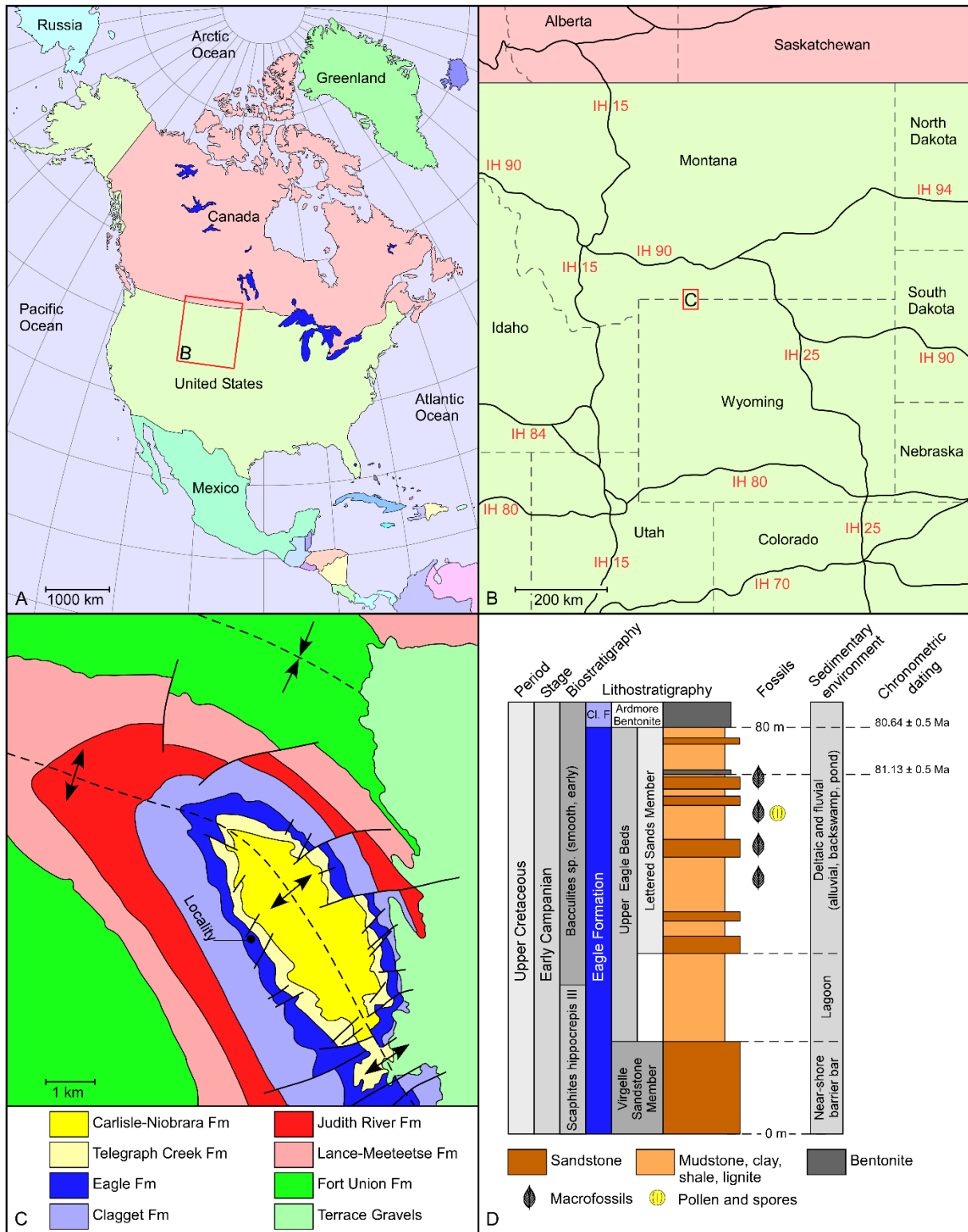


Figure S1. Geographic and geological-stratigraphic background of the Eagle Fm samples. A, B. Geographical maps indicating the position of the Elk Basin, on the boundary between Wyoming and Montana, north-western United States. C. Geological map showing the formations of the Elk Basin and its surroundings. D. Schematic geological section indicating major sedimentary units of the Elk Basin and their stratigraphy, chronometrically dated bentonites are indicated as well as the plant fossil bearing units. Panel C and lithology of panel D modified after Van Boskirk (1998), biostratigraphy and chronometric dates of panel D from Hicks (1993). Abbreviations: IH = Interstate Highway.

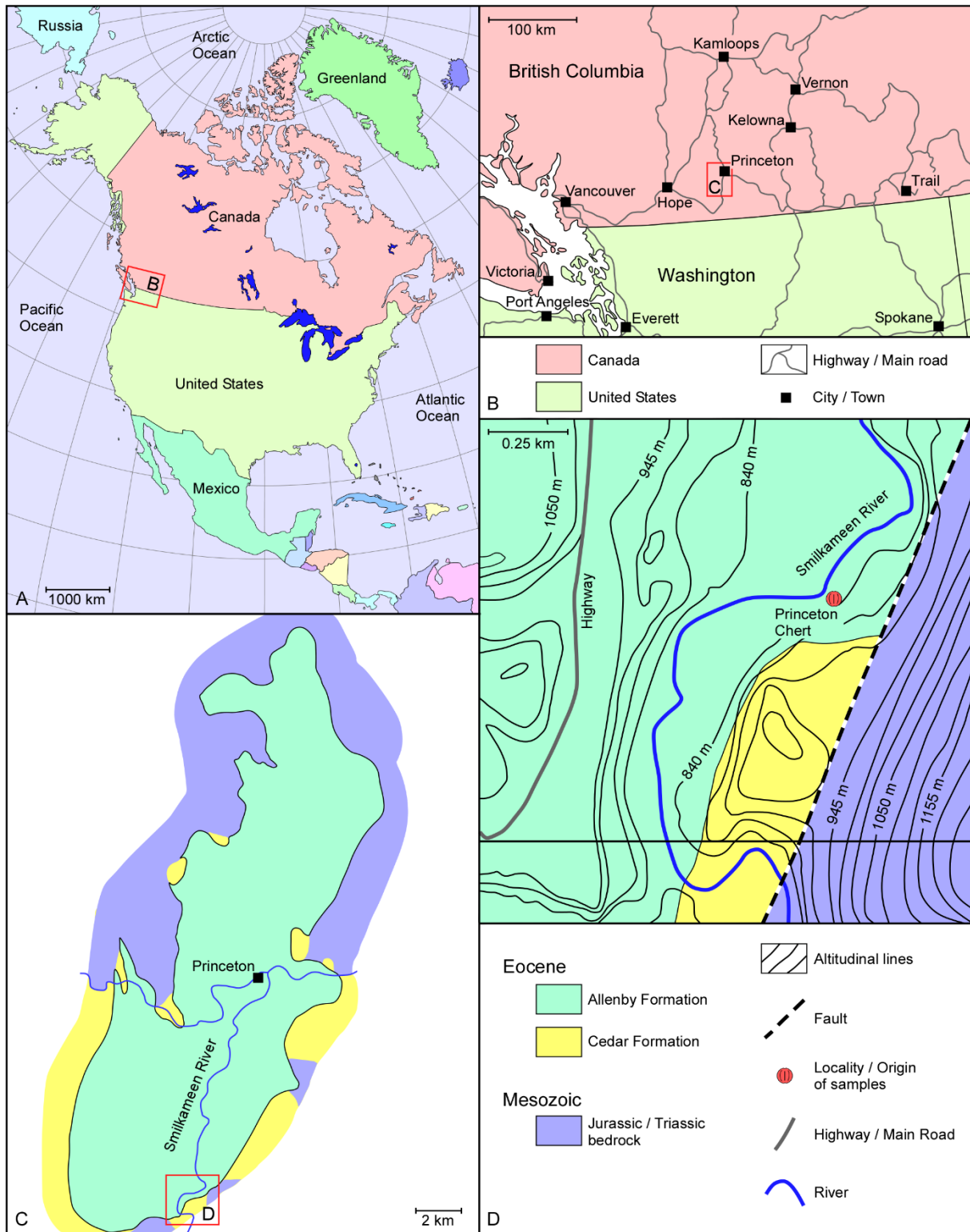


Figure S2. Geographic and geological background of the Princeton Chert beds. A, B. Geographical maps indicating the position of the Princeton Basin, southernmost British Columbia. C. Simplified geological map showing the Princeton Basin and its formations (modified after McMechan 1983; Read 1987, 2000). D. Detailed map showing the geology surrounding the fossil locality (modified after Mustoe 2011).

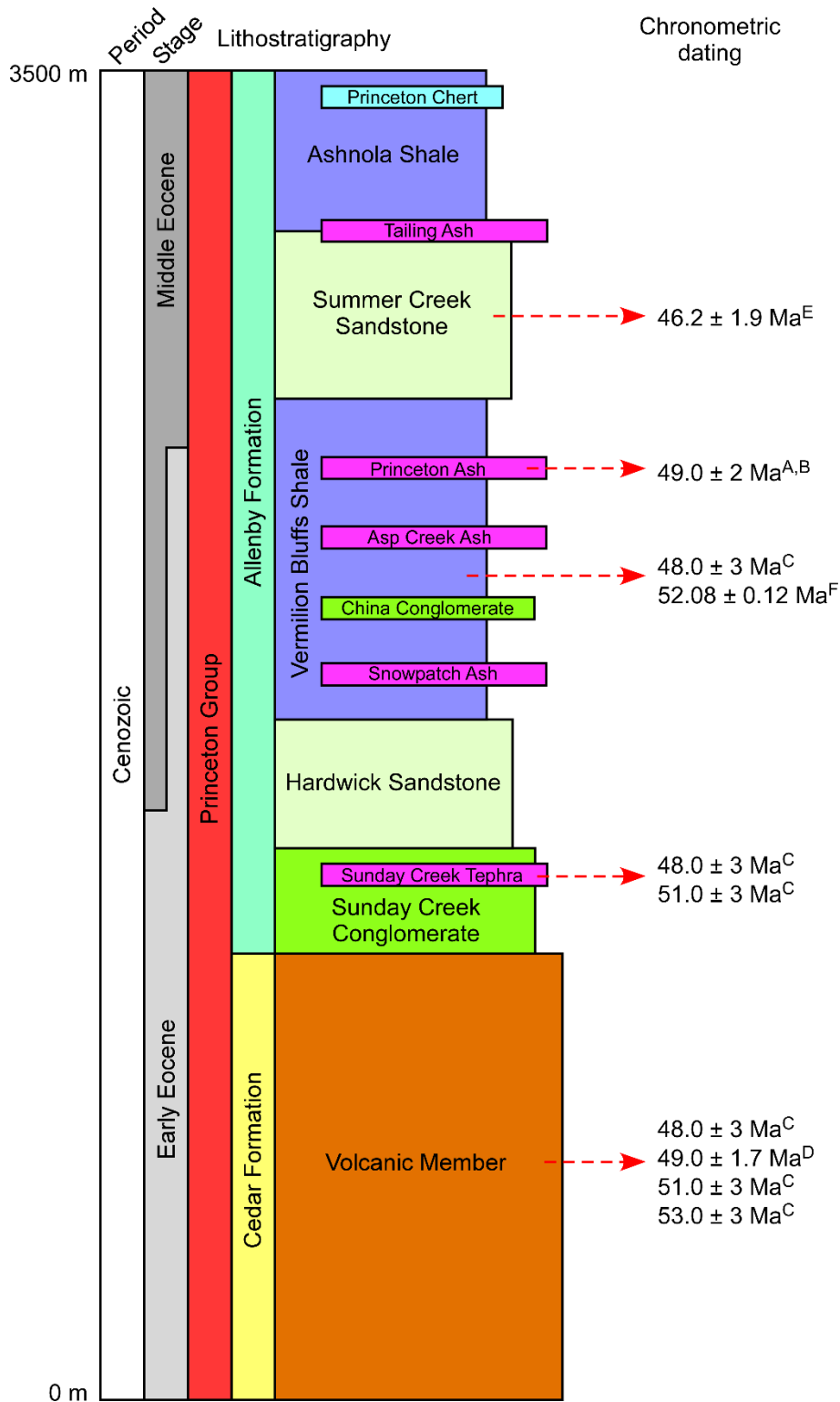


Figure S3. Schematic stratigraphic section indicating major volcanic and sedimentary rock units of the Princeton Group. The thickness of rock units can vary greatly within the basin and were therefore scaled to 3500 m that is the approximated combined thickness of both constituent formations. Thickness of subunits (major tephra and ash layers, Princeton Chert) are not in scale for visibility. Names of units, their thickness, construction, and interrelation are based on McMechan (1983) and Read (1987, 2000). Chronological dates: ^A— Mathews (1963); ^B— Mathews (1964); ^C— Hills & Baadsgaard (1967); ^D— Church & Brasnet (1983); ^E— Read (2000); ^F— Moss et al. (2005).

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