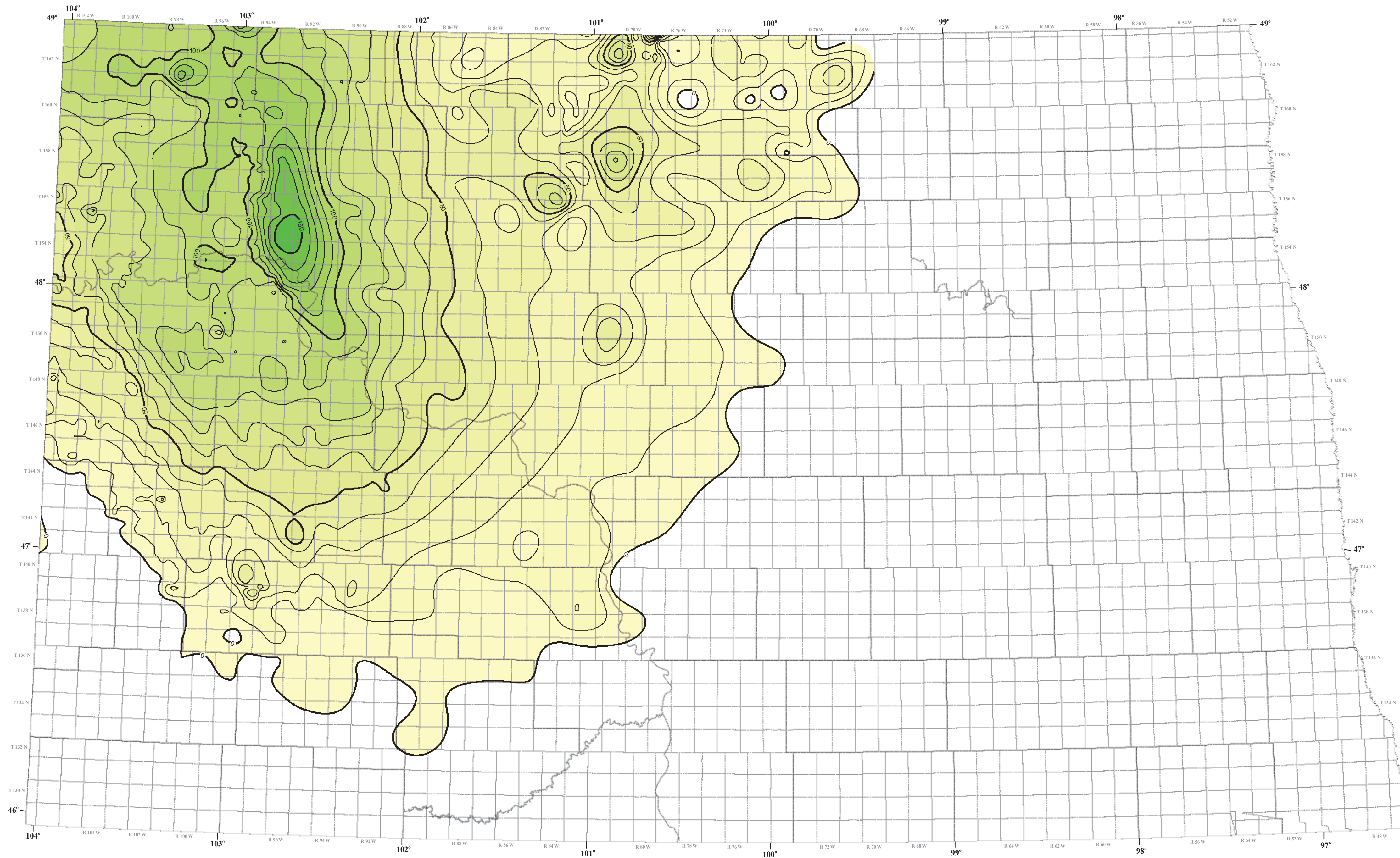


Isopach of the Bakken Formation

Julie A. LeFever



INTRODUCTION

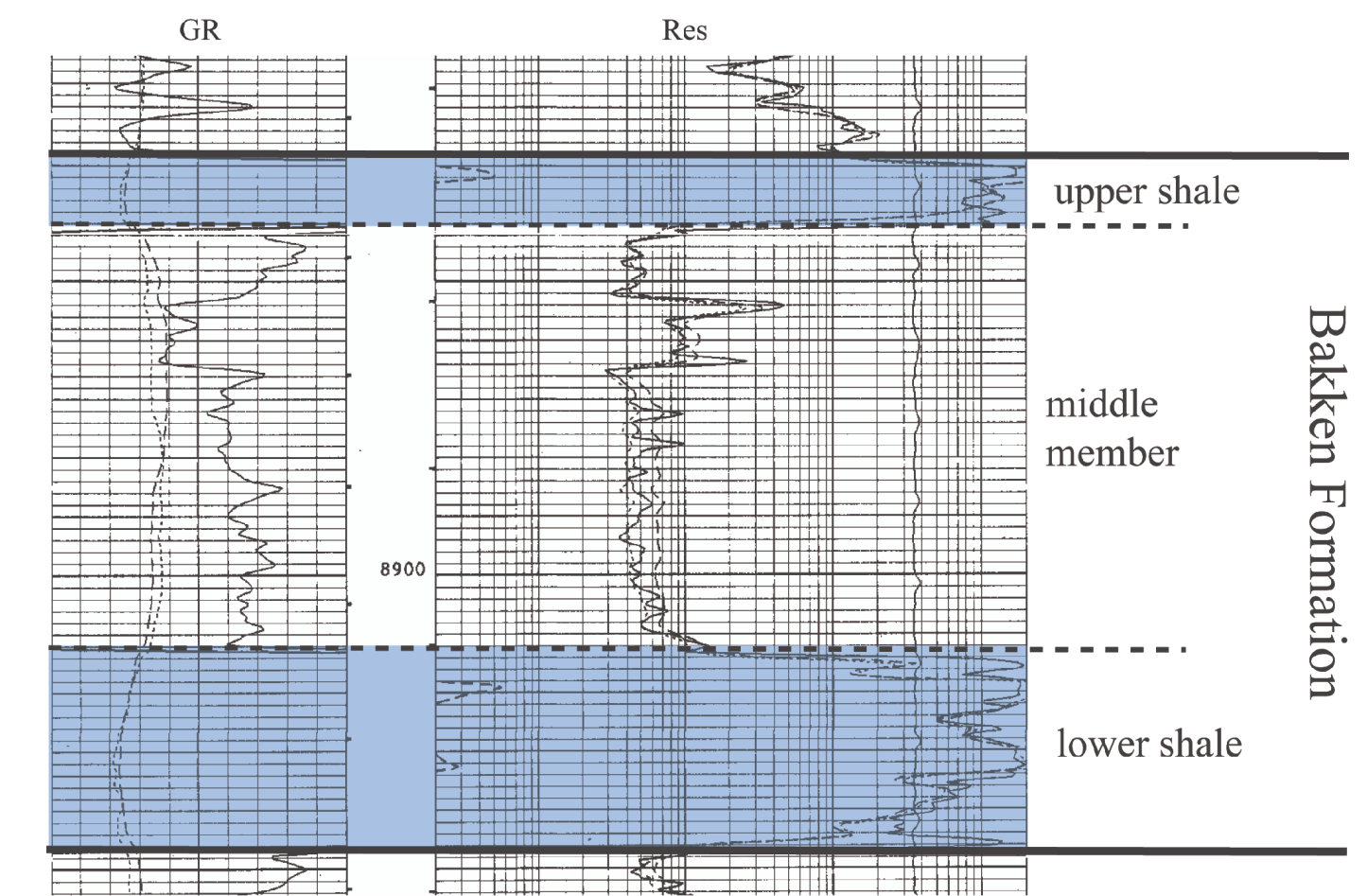
A series of five regional maps have been constructed for the Bakken Formation including an overall isopach of the Bakken Formation, individual isopachs for each of the three members, and a structure map on the top of the formation. These maps are based on 4,260 data points scattered throughout the North Dakota side of the Williston basin.

ISOPACH OF THE BAKKEN FORMATION

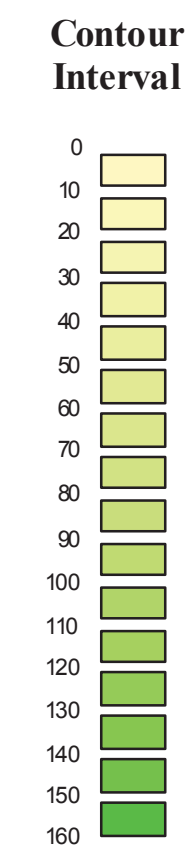
The Bakken Formation is present only in the subsurface of the Williston basin and extends over approximately two-thirds of the State of North Dakota (see Map). The formation consists of three members, two black, fissile shales separated by a mixed sequence of siliciclastics and carbonates (see Typical Log). The formation overlies the Three Forks Formation (Devonian) and is overlain by the Lodgepole Formation (Mississippian).

The formation attains a maximum thickness of 160 ft (49 m) and has a well-defined depocenter just east of the Nesson Anticline (western Mountrail County). A smaller north-south trending sub-basin occurs on the eastern edge of the Bakken in Bottineau and McHenry counties. Anomalous formation thicknesses also occur in the area of the Lodgepole Dickinson mounds in Stark County. The southeastern extension of the formation is probably due in part to a shift in the depositional shoreline related to movement along the Heart River and Antelope fault zones.

SENW Sec. 11, T.160N., R.95W
 Conoco, Inc.
 #17 Watterud "A"

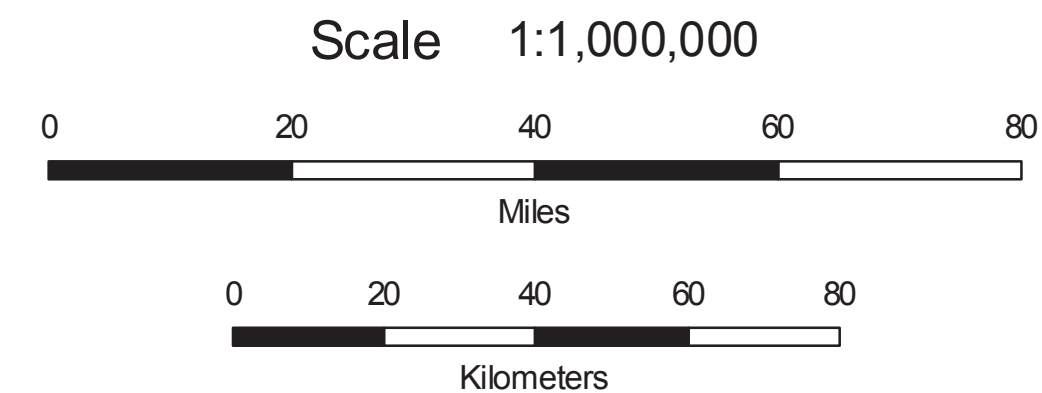


Typical Log



Explanation

- Thickness of the Bakken Formation (in feet)
- Township Boundaries
- County Boundaries



North American Datum 1927 Lambert Conformal Conic

