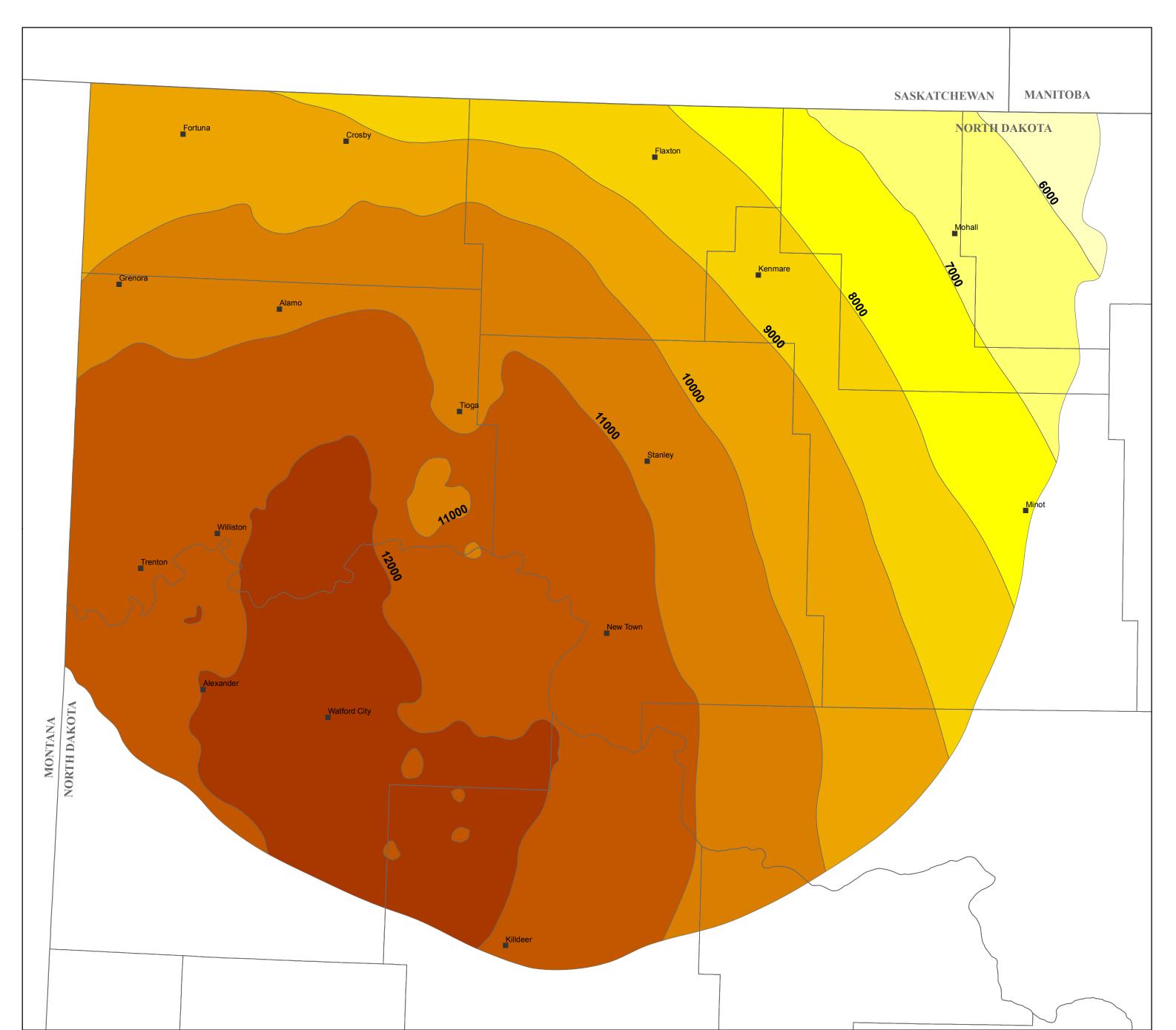


Measured Depths to the Prairie Formation Salt





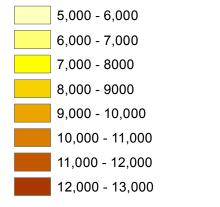
Ned W. Kruger

2019

General Information on the Prairie Formation

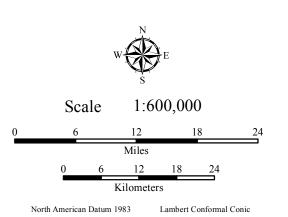
The Prairie Formation is the thickest salt layer in North Dakota. It is subdivided into seven members including a basal anhydrite (the Ratner) and six potash-containing salts (Esterhazy, White Bear, Belle Plaine, Patience Lake, Mountrail, and White Lake) separated by halite beds (Anderson and Swineheart, 1979; LeFever and LeFever, 2005; Kruger, 2014). The Prairie Formation is capped by the "Second Red Bed", a red to green dolomite or calcareous shale. The depths presented on this map are to the top of the Prairie salt below the Second Red Bed. Tops were picked by the interpretation of the logs from 895 wells. Measured depths ranged from 5,602 feet below kelly bushing in northern Bottineau County to 12,563 feet below kelly bushing in northwestern Dunn County.

Depths (in feet)



Other Feature

City



References:

Anderson, S.B. and Swinehart, R.P., 1979, Potash Salts in the Williston Basin: Economic Geology, v. 74, no. 2, p. 358-376.

LeFever, J.A., and LeFever, R.D., 2005, Salts in the Williston Basin, North Dakota: North Dakota Geological Survey, Report of Investigation no. 103, 41p.

Kruger, N.W., 2014, The Potash Members of the Prairie Formation in North Dakota: North Dakota Geological Survey, Report of Investigation no. 113, 39p.