

# Mean Sea Level Elevation of the Prairie Formation Salt



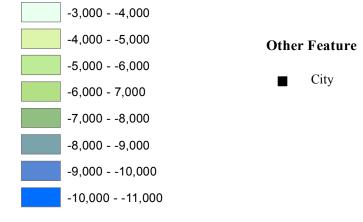
# Ned W. Kruger

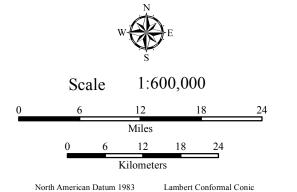
# 2019

### 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 elevations presented on this map are based on tops of the Prairie salt below the Second Red Bed. Tops were picked by interpretation of the logs from 895 wells. Elevations ranged from 4,084 feet below sea level in northern Bottineau County to 10,218 feet below sea level in central McKenzie County.

## **Elevation (mean sea level)**





# **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.

