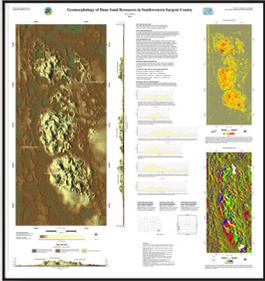
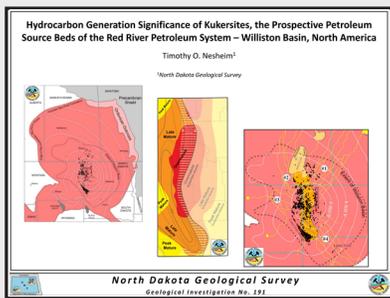


# NEW PUBLICATIONS

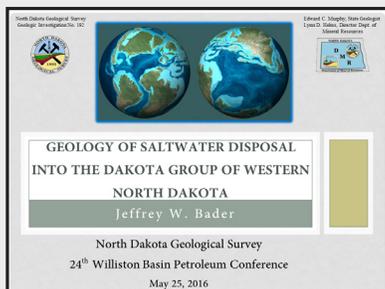
## Geological Investigations



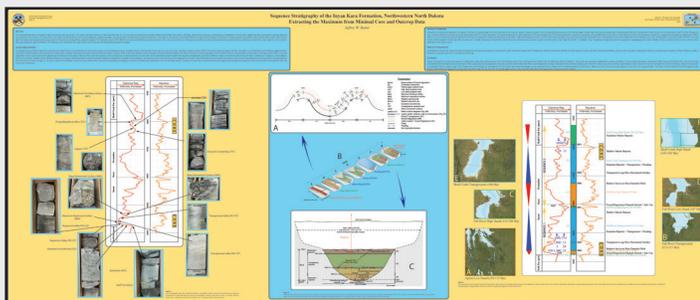
Anderson, F.J., 2016, Geomorphology of Dune Sand Resources in Southwestern Sargent County: North Dakota Geological Survey, Geologic Investigations No. 190. GI-190 is a geomorphological and potential resource evaluation of dune sands found along the western border of Sargent County in southeastern North Dakota. Volumetric determinations of in-place sand resources are included. Price: \$10 per map poster, \$5 on CD as PDF with shape files.



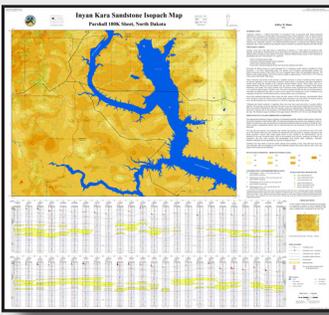
Nesheim, T.O., 2016, Hydrocarbon Generation Significance of Kukersites, the Prospective Petroleum Source Beds of the Red River Petroleum System – Williston Basin, North America: North Dakota Geological Survey, Geologic Investigations No. 191. The Red River Formation has cumulatively produced over 300 million barrels of oil out of western North Dakota, making it the third most productive interval behind the Bakken-Three Forks Formations and the Madison Group. GI-191 examines the oil generation significance of kukersites, which are thin beds of organic-rich mudstone that have likely sourced the Red River's hydrocarbons. Price: \$5 on CD.



Bader, J.W., 2016, Geology of Saltwater Disposal into the Dakota Group of Western North Dakota: North Dakota Geological Survey, Geologic Investigations No. 192. GI-192 is a PowerPoint presentation from the 24th Williston Basin Petroleum Conference highlighting the geology of the Dakota Group of western North Dakota. Specifically, GI-192 reviews the Amerada Petroleum Corporation, Math Iverson #1 (API 33-105-00097-00-00) Inyan Kara cores and logs from a sequence stratigraphic perspective. Price: \$5 on CD.

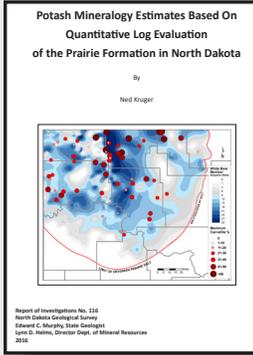


Bader, J.W., 2016, Sequence Stratigraphy of the Inyan Kara Formation, Northwestern North Dakota: Extracting the Maximum from Minimal Core and Outcrop Data: North Dakota Geological Survey, Geologic Investigations No. 193. GI-193 is a three plate poster presentation from the AAPG 2016 Annual Convention highlighting the depositional setting for the Inyan Kara Formation (Dakota Group) of northwestern North Dakota. Specifically, GI-193 reviews the Amerada Petroleum Corporation, Math Iverson #1 (API 33-105-00097-00-00) Inyan Kara cores and logs from a sequence stratigraphic perspective, and provides depositional/sequence stratigraphic models for the Inyan Kara across North Dakota and into Canada. Price: \$15 per poster, \$5 on CD as PDF files.



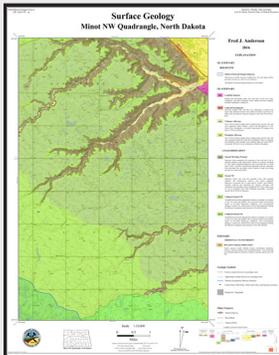
Bader, J.W., and Nesheim, T.O., 2016, Inyan Kara Sandstone Isopach Map, Parshall 100K Sheet, North Dakota: North Dakota Geological Survey, Geologic Investigations No. 194. GI-194 is a 1:100,000 scale isopach map of Inyan Kara sandstones that may potentially be used for produced water injection/disposal. Estimates of reservoir quality are presented for each well along with well status. Roads, cities, and other geographical features are also shown on the map. GI-194 also includes two detailed cross-sections that trend across the entire 100K sheet. The cross-sections show sandstone thicknesses as well as lateral continuity of potentially injectable sandstones. Price: \$20 for traditional paper format , \$5 on CD with shape files, cross-sections, and supporting metadata.

## Reports of Investigation



Kruger, N.W., 2016, Potash Mineralogy Estimates Based On Quantitative Log Evaluation of the Prairie Formation in North Dakota: North Dakota Geological Survey, Report of Investigation No. 116. Quantitative log evaluation can provide mineralogical estimates of potash ore when core data is unavailable. RI-116 reviews the quantitative log evaluation process and presents findings from analyses of North Dakota wells. Geophysical log analysis was performed on 117 wells throughout the potash-containing-area of northwestern North Dakota. Maps were created depicting the estimated maximum concentrations of sylvite and carnallite over isopachs of each of the six potash-containing members of the Prairie Formation. These maps and additional log analysis may be useful in the planning of a potash exploration program. Price: \$5 on CD.

## Surface Maps

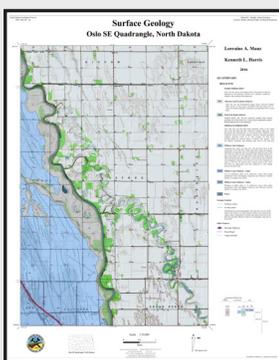


Anderson, F.J., 2016, Surface geology of the Minot NW Quadrangle: North Dakota Geological Survey 24k Map Series no. Mnot NW-sg. The Minot NW quadrangle is the fifth in a series of six maps that cover the detailed geologic mapping for the Minot area. This map covers a 50 square mile area directly southwest of the City of Minot starting in the vicinity of Trestle Valley (Gassman Coulee). Data sources used in the preparation of this map included ultra high-resolution LiDAR elevation data combined with original field investigation. Paper \$15, CD \$5.

Manz, L.A., and Harris, K.L., 2016, Surface geology of the Gilby Quadrangle, North Dakota: North Dakota Geological Survey 24k Map Series no. Glby-sg. Paper \$15, CD \$5.

Manz, L.A., and Harris, K.L., 2016, Surface geology of the Oslo Quadrangle, Minnesota – North Dakota: North Dakota Geological Survey 24k Map Series no. Oslo-sg. Paper \$15, CD \$5.

Manz, L.A., and Harris, K.L., 2016, Surface geology of the Oslo NE Quadrangle, Minnesota – North Dakota: North Dakota Geological Survey 24k Map Series no. Oslo NE-sg. Paper \$15, CD \$5.



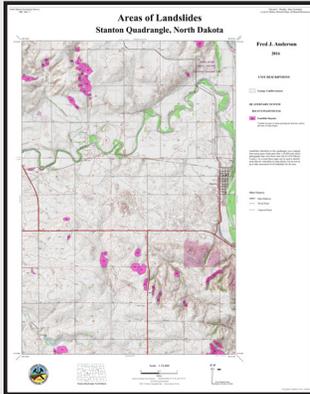
Manz, L.A., and Harris, K.L., 2016, Surface geology of the Oslo SE Quadrangle, Minnesota – North Dakota: North Dakota Geological Survey 24k Map Series no. Oslo SE-sg. This map shows the surface geology of the Oslo SE 7.5-minute quadrangle superimposed on a topographic background. It is one of a set of thirty-two 24k maps that cover the 30 x 60-minute area depicted on the USGS' Grafton 100k topographic sheet. Lacustrine sediments of the Sherack Formation, deposited between about 9,900 and 9,500 B.P. during the Emerson Phase of Glacial Lake Agassiz, dominate the surface geology of the Red River Valley in eastern North Dakota and northwestern Minnesota. Offshore sediments (blue) consist of thinly laminated clay, clayey silt, silty clay, and silt. Saline areas are depicted in slightly darker shades of blue. Ice drag marks are shown as blue lines. Paper \$15, CD \$5.

## Landslide Maps

Anderson, F.J., 2016, Areas of Landslides Dazey NE, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Dzey NE – I., Paper \$5, CD with shape files \$5.

Anderson, F.J., 2016, Areas of Landslides Hannover NE, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnvr NE – I., Paper \$5, CD with shape files \$5.

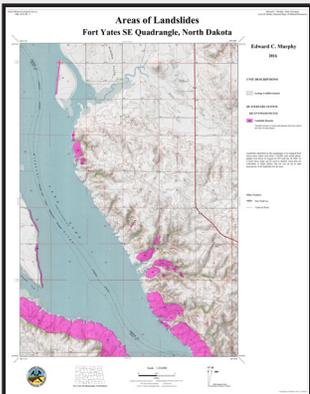
Anderson, F.J., 2016, Areas of Landslides Hannover NW, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Hnvr NW – I., Paper \$5, CD with shape files \$5.



Anderson, F.J., Areas of Landslides Stanton, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Stnt – I. Forty-six landslides were mapped within the Stanton Quad. Areas of landslides were mapped from aerial imagery sources covering areas just west and south of Stanton in eastern Mercer and north-central Oliver Counties. Landslides are located exclusively along major drainages and occur as individual slide areas or larger landslide complexes. These landslides occupy a total area of 582 acres with the largest landslide complex covering 41 acres. Paper \$5, CD with shape files \$5.

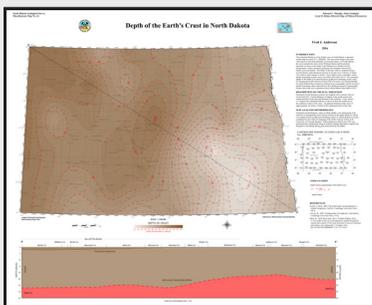
Murphy, E.C., 2016, Area of Landslides Cedar Hills, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. CdrH – I. Paper \$5, CD with shape files \$5.

Murphy, E.C., 2016, Area of Landslides Fort Yates, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. FtYt – I. Paper \$5, CD with shape files \$5.



Murphy, E.C., 2016, Area of Landslides Fort Yates SE, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. FtYt SE – I. A total of 25 landslides were mapped in this quadrangle. These landslides occupy an area of 1,966 acres. The largest landslide or landslide complex mapped in this quadrangle covered 979 acres and the smallest was 2.4 acres. Landslides were mapped off of 1:20,000 scale aerial photographs. Paper \$5, CD with shape files \$5.

## Miscellaneous Maps



Anderson, F.J., 2016, Depth of the Earth's Crust in North Dakota: North Dakota Geological Survey, Miscellaneous Map No. 42. MM-42 is a 1:1,000,000 scale map that shows the thickness of the Earth's Crust across the state of North Dakota. This map was created from crustal thickness data obtained from the Center for Imaging the Earth's Interior at the University of Colorado Boulder. The map also includes a cross-section drawn from the northwest corner of the state to the southeast corner that shows the depth of the boundary between the Earth's crust and mantle as determined from geophysical methods at EarthScope Transportable Array seismic stations that operated in the state from 2008 to 2012. Price: \$10.per map poster, \$5 on CD as PDF with shape files.