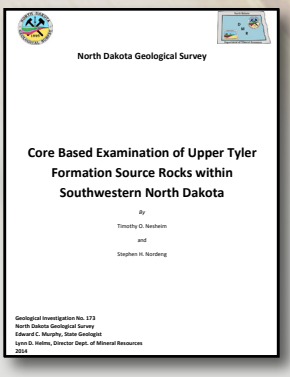
NEW PUBLICATIONS

Geologic Investigations


North Dakota Geological Survey

Core Based Examination of Upper Tyler Formation Source Rocks within Southwestern North Dakota

By

Timothy O. Nesheim

and

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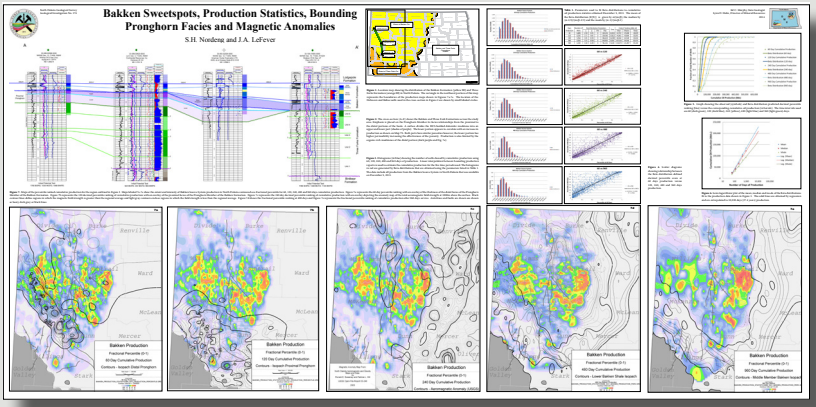
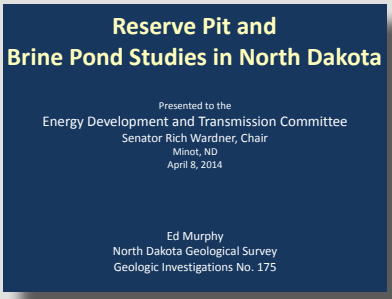
Geological Investigation No. 173
North Dakota Geological Survey
Edward C. Murphy, State Geologist
Lynn D. Helms, Director Dept. of Mineral Resources
2014

Nesheim, T.O., and Nordeng, S. H., 2014, Core Based Examination of Upper Tyler Formation Source Rocks within Southwestern North Dakota: North Dakota Geological Survey, Geologic Investigations No. 173. Detailed core examination and high density geochemical data from two Tyler cores indicates the upper Tyler Formation contains laterally continuous organic-rich limestone beds. Based on the geochemical data, these organic-rich limestone beds average as excellent quality (5-6% TOC, >20 mg/g), oil-prone (HI>>>OI) source rock with corresponding Tmax values (>440°) indicating they are thermally mature, within the oil generation window. On CD with pdf $5, CD with pdf and geochemical data spreadsheets including pyrograms $25.



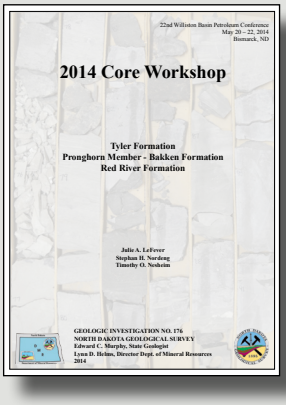
Nordeng, S. H., 2014, Bakken Sweetspots, Production Statistics, Bounding Pronghorn Facies and Magnetic Anomalies: North Dakota Geological Survey, Geologic Investigations No. 174. GI-174 is a poster that looks at Bakken Source System cumulative production statistics after 60, 120, 240, 480 and 960 days of production. Beta distributions are fit to the cumulative frequency distributions and the best fit parameters are used to classify and map production "sweet spots" using a range of 0 to 1. The maps consist of the beta classed production at 60 days overlain by the isopach of the distal Pronghorn member, production at 120 days overlain by the isopach of the proximal Pronghorn member, 240 days production overlain by the USGS's aeromagnetic anomaly map, 480 days production overlain by the isopach of the lower Bakken shale and 960 day production overlain by the isopach of the middle member of the Bakken Formation. Poster $15, CD $5.


Reserve Pit and Brine Pond Studies in North Dakota

Presented to the
Energy Development and Transmission Committee
Senator Rich Wardner, Chair
Minot, ND
April 8, 2014

Ed Murphy
North Dakota Geological Survey
Geologic Investigations No. 175

Murphy, E.C., 2014, Reserve Pit and Brine Pond Studies: North Dakota Geological Survey Geologic Investigations No. 175. A 109 slide powerpoint presentation given to the Energy Development and Transmission Interim Committee of the ND State Legislature. The presentation focuses on the impacts to soil and groundwater at six reserve pits and a brine pond site in western and north-central North Dakota. These sites were studied in the early 1980s. Remediation work to lessen the impact of saltwater in the Wylie Field is also documented in this talk. CD $5.


22nd Williston Basin Petroleum Conference
May 20 – 22, 2014
Bismarck, ND

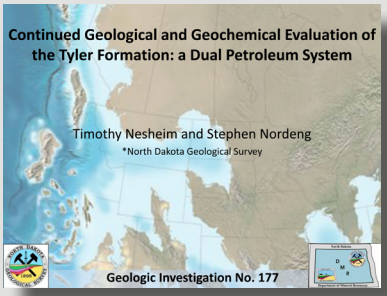
2014 Core Workshop

Tyler Formation
Pronghorn Member - Bakken Formation
Red River Formation

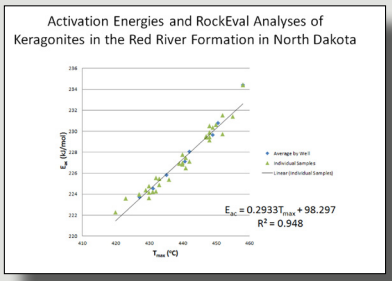
Julie A. LeFever
Stephan H. Nordeng
Timothy O. Nesheim

GEOLOGIC INVESTIGATION NO. 176
NORTH DAKOTA GEOLOGICAL SURVEY
Edward C. Murphy, State Geologist
Lynn D. Helms, Director Dept. of Mineral Resources
2014

LeFever, J.A., Nordeng, S.H., and Nesheim, T.O., 2014, 2014 Williston Basin Petroleum Conference Core Workshop; Tyler Formation, Pronghorn Member – Bakken Formation, Red River Formation: North Dakota Geological Survey Geologic Investigations No. 176, 76 p. The core workshop volume contains photographs of core typically in 30 foot sections, associated well cores, and short articles regarding 11 well cores from the North Dakota portion of the Williston Basin. Paper copy $10, $5 for the CD.



Nesheim, T.O., and Nordeng, S. H., 2014, Continued Geological and Geochemical Evaluation of The Tyler Formation: A Dual Petroleum System: North Dakota Geological Survey, Geologic Investigations No. 177. Geological and geochemical analysis of Tyler Formation cores and logs indicates there are two separate sets of Tyler source beds that can be differentiated spatially, stratigraphically, geochemically, and lithologically. These two sets of Tyler source beds each form a unique petroleum system. GI-177 examines and compares the geology of petroleum systems within the Tyler Formation.



Nordeng, S. H. (2014) Activation Energies and RockEval Analyses of Keragonites in the Red River Formation in North Dakota: North Dakota Geological Survey, Geological Investigations No. 178. GI-178 is a power point presentation from the 2014 Williston Basin Petroleum Conference. The slides include a discussion of the use of activation energy analysis and Rock Eval analysis in the evaluation of the oil generating potential of the Red River Formation in the Williston Basin of North Dakota.

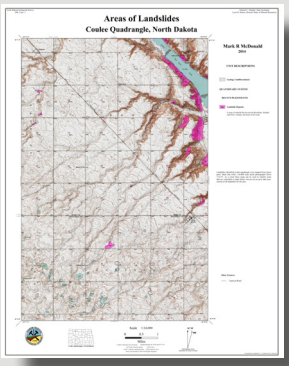
Landslide Maps

McDonald, M.R., 2014, Areas of landslides Bowbells, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Bbls – l.

McDonald, M.R., 2014, Areas of landslides Bowbells NE, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Bbls NE – l.

McDonald, M.R., 2014, Areas of landslides Bowbells NW, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Bbls NW – l.

McDonald, M.R., 2014, Areas of landslides Bowbells SE, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Bbls SE – l.

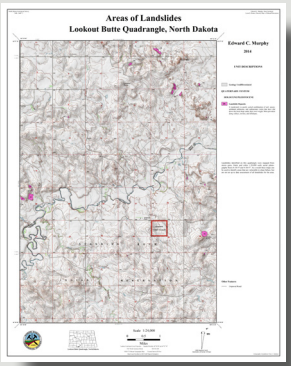


McDonald, M.R., 2014, Areas of landslides Coulee, ND Quadrangle: North Dakota Geological Survey, 24K Map Series No. Cule – l. Twenty-one landslides were mapped with in the Coulee Quad. The landslides primarily occur along the sides of the valley occupied by the Lower Des Lacs Lake and coulees and ravines leading into that valley. These landslides occupy a total area of 455 acres with the largest landslide complex covering 119 acres. Paper copy $5.00, $25.00 for 100k shape files on CD.

Murphy, E.C., 2014, Areas of landslides Bell Coulee East, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. BlCE – l.

Murphy, E.C., 2014, Areas of landslides Bell Coulee West, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. BlCW – l.

Murphy, E.C., 2014, Areas of landslides Flasher, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. Flsr – l.



Murphy, E.C., 2014, Areas of landslides Lookout Butte, ND Quadrangle: North Dakota Geological Survey 24K Map Series No. LktB – l. Twenty landslides were mapped within the Lookout Butte Quad. The slides occur within badlands topography adjacent to Cedar Creek and within the Cedar Creek River Valley. These landslides occupy a total area of 76 acres with the largest slide covering 16 acres. Paper copy $5.00, $25.00 for 100k shape files on CD.