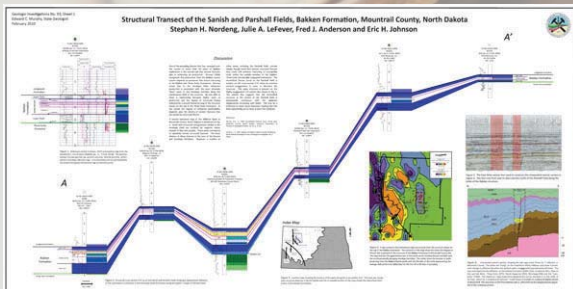


NEW PUBLICATIONS

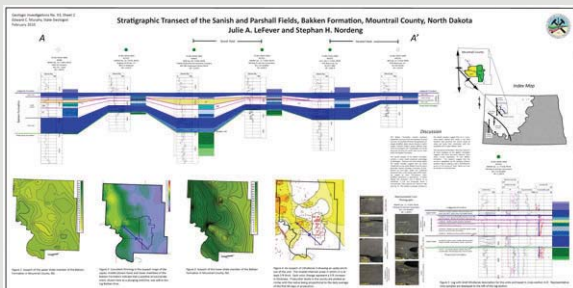
Geologic Investigations

Anderson, F.J., 2010, Field Screening for Shallow Gas in Ransom County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 91. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J., 2010, Shallow Gas Geochemical Exploration Indicators in Ground-Water Wells in North Dakota, North Dakota Geological Survey Geologic Investigations, No. 92. Available in paper map format (\$20.00) and on CD (\$5.00).



Nordeng, S.H., LeFever, J.A., Anderson, F.J., and Johnson, E. H., 2010, Structural Transect of the Sanish and Parshall Fields, Bakken Formation, Mountrail County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 93 Sheet 1. GI-93 contains a structural (sheet 1 by Nordeng and Lefever) and a stratigraphic cross-section (sheet 2 by Lefever and Nordeng) made from cored and logged wells that transect the Sanish and Parshall fields in Mountrail County, North Dakota. Available in paper map format (\$10.00) and on CD (\$5.00).



LeFever, J.A. and Nordeng, S.H., 2010, Stratigraphic Transect of the Sanish and Parshall Fields, Mountrail County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 93 Sheet 2. GI-93 contains a structural (sheet 1 by Nordeng and Lefever) and a stratigraphic cross-section (sheet 2 by Lefever and Nordeng) made from cored and logged wells that transect the Sanish and Parshall fields in Mountrail County, North Dakota. Available in paper map format (\$10.00) and on CD (\$5.00).



Anderson, F.J., 2010, Earthquakes in North Dakota, North Dakota Geological Survey Geologic Investigations, No. 94. GI-94 is a 1:750,000 scale map that depicts the locations of earthquakes that have occurred in North Dakota, as compiled from available earthquake information catalogs and databases. Information on earthquake magnitudes and intensities, along with estimated depths of earthquake occurrence, are included. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Gudmundsen, C.B., 2010, Field Screening for Shallow Gas in Dunn County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 95. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Gudmundsen, C.B., 2010, Field Screening for Shallow Gas in Billings County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 96. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Ries, A.J., 2010, Field Screening for Shallow Gas in Slope County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 97. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Hall, B.N., 2010, Field Screening for Shallow Gas in Richland County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 98. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Gudmundsen, C.B., 2010, Field Screening for Shallow Gas in Golden Valley County, North Dakota, North Dakota Geological Survey Geologic Investigation, No. 99. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Ries, A.J., 2010, Field Screening for Shallow Gas in McLean County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 100. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Ries, A.J., 2010, Field Screening for Shallow Gas in Bowman County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 101. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Ries, A.J., 2010, Field Screening for Shallow Gas in Adams County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 102. Available in paper map format (\$10.00) and on CD (\$5.00).

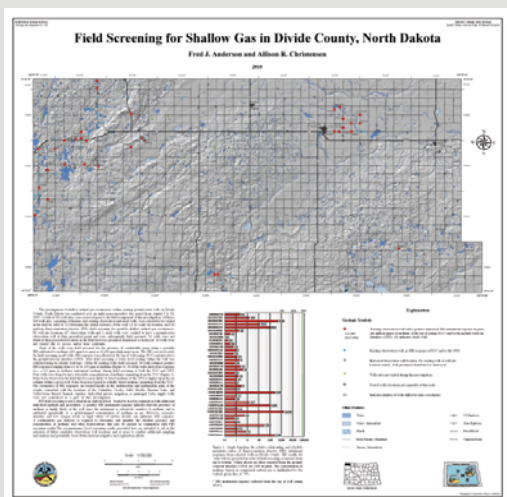
Anderson, F.J. and Christensen, A.R., 2010, Field Screening for Shallow Gas in Mountrail County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 103. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Christensen, A.R., 2010, Field Screening for Shallow Gas in Burke County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 104. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Ries, A.J., 2010, Field Screening for Shallow Gas in Grant County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 105. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Ries, A.J., 2010, Field Screening for Shallow Gas in Hettinger County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 106. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Hall, B.N., 2010, Field Screening for Shallow Gas in Sargent County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 107. Available in paper map format (\$10.00) and on CD (\$5.00).

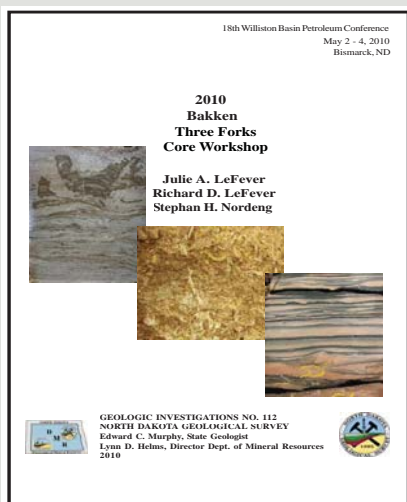


Anderson, F.J. and Christensen, A.R., 2010, Field Screening for Shallow Gas in Divide County, North Dakota, North Dakota Geological Survey Geologic Investigations, No. 108. GI-108 is a 1:150,000 scale map that presents and briefly describes the results of recently completed shallow gas field screening of shallow groundwater wells in Divide County, North Dakota. The results from 88 tested wells are displayed, overlain on a shaded-relief base map. A significant methane detection in an observation well near Crosby is included. A brief discussion, along with a graphical display of the results, is included. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J. and Ries, A.J., 2010, Field Screening for Shallow Gas in McIntosh County, North Dakota, North Dakota Geological Survey Geologic Investigation, No. 109. Available in paper map format (\$10.00) and on CD (\$5.00).

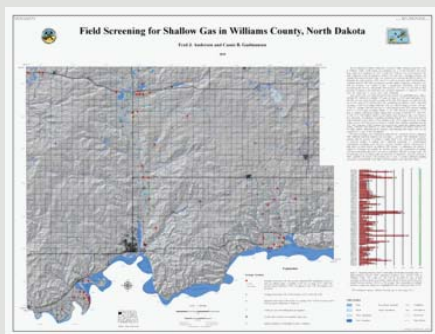
Anderson, F.J. and Hall, B.N., 2010, Field Screening for Shallow Gas in Cass County, North Dakota, North Dakota Geological Survey Geologic Investigation, No. 110. Available in paper map format (\$10.00) and on CD (\$5.00).

Anderson, F.J., Christensen, A.R., and Ries, A.J., 2010, Field Screening for Shallow Gas in Wells County, North Dakota, North Dakota Geological Survey Geologic Investigation, No. 111. Available in paper map format (\$10.00) and on CD (\$5.00).

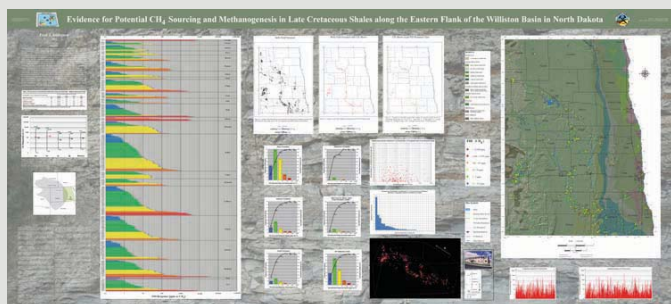


LeFever, J.A., LeFever, R.D., and Nordeng, S.H., 2010, 2010 Bakken-Three Forks Core Workshop, North Dakota Geological Survey Geologic Investigations, No. 112, 74 pp. GI-112 contains isopachs of the lower middle and upper members of the Bakken Formation and an isopach of the underlying Three Forks Formation. The workshop manual contains cores and logs for the three sessions that were presented. The first session includes the logs and cores used to illustrate details of the stratigraphy along a six well transect across the Sanish and Parshall Fields in Mountrail County. These are the same wells used to construct the cross sections contained in GI-92 and GI-93. The second session examines, through seven cores and logs, the stratigraphy of the lower Bakken shale along a northwest-southwest transect from southern Divide County through McKenzie, Billings and southern Dunn County. The third session provides eight sets of cores and logs that illustrate some of the depositional features commonly found in the Three Forks Formation. This workshop was held during the 18th Williston Basin Petroleum Conference held in Bismarck between May 2 and May 4, 2010. Available on CD (\$5.00).

Anderson, F.J. and Gudmunson, C.B., 2010, Field Screening for Shallow Gas in McKenzie County, North Dakota, North Dakota Geological Survey Geologic Investigation, No. 113. Available in paper map format (\$10.00) and on CD (\$5.00).



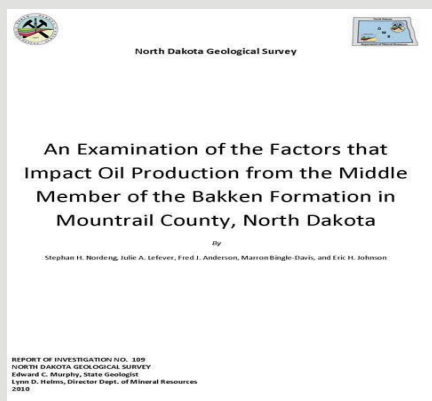
Anderson, F.J. and Gudmunson, C.B., 2010, Field Screening for Shallow Gas in Williams County, North Dakota, North Dakota Geological Survey Geologic Investigation, No. 115. GI-115 is a 1:150,000 scale map that presents and briefly describes the results of recently completed shallow gas field screening of shallow ground-water wells in Williams County, North Dakota. The results from 167 tested wells are displayed, overlain on a shaded-relief base map. A brief discussion, along with a graphical display of the results, is included. Available in paper map format (\$10.00) and on CD (\$5.00).



Anderson, F.J., 2010, Evidence for Potential CH₄ Sourcing and Methanogenesis in Late Cretaceous Shales along the Eastern Flank of the Williston Basin in North Dakota, North Dakota Geological Survey Geologic Investigation, No. 116. GI-116 is a 94" x 42" poster publication that was recently presented at the 2010 Rocky Mountain Section Meeting of the American Association of Petroleum Geologists, held in Durango, CO. This colorful map poster contains the locations and concentrations of detected methane shows in ground-water wells that lay above or within Late Cretaceous shale bedrock on the eastern flank of the Williston Basin in North Dakota. The map included on this

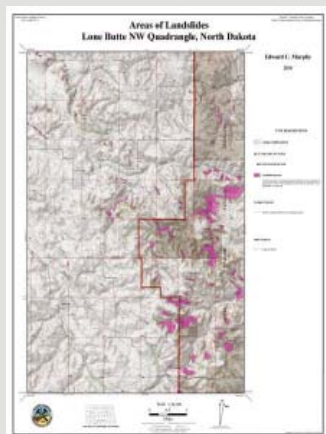
poster is presented at a scale of 1:500,000 and depicts the relationship between the location of ground-water wells with a gas show and the underlying Late Cretaceous rocks in eastern North Dakota. A brief descriptive statistical summary of the data is included. GI-116 is available online, in traditional paper map format (\$25.00) or on CD (\$5.00).

Report of Investigations



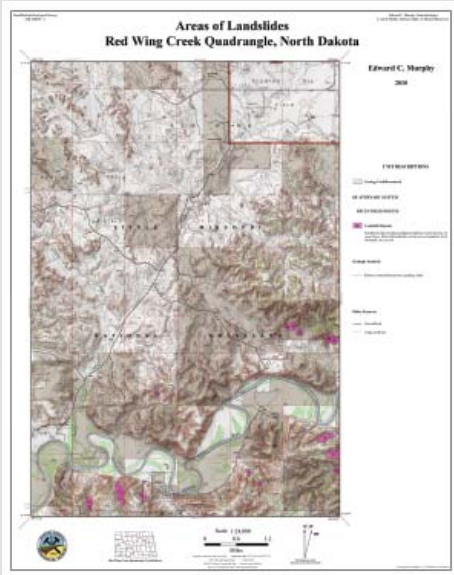
Nordeng, S.H., LeFever, J.A., Anderson, F.J., Bingle-Davis, M., and Johnson, E. H., 2010, An Examination of the Factors that Impact Oil Production from the Middle Member of the Bakken Formation in Mountrail County, North Dakota, North Dakota Geological Survey Report of Investigations, No. 109, 89 pp. RI-109 contains an evaluation of the oil generating potential of the Bakken Formation in North Dakota. The study also includes a state wide examination of the structural and stratigraphic relationships of the Bakken Formation with regard to Bakken oil production prior to the discovery of the Parshall field. The state-wide evaluation of the Bakken provides a working model of oil generation and expulsion that is applied to the Bakken fields in Mountrail County. A set of detailed maps are presented for Mountrail County. These maps include various structural, stratigraphic and organic geochemical maps together with detailed surface lineament maps, interpreted 2-d seismic cross-sections, and an analysis of fractures found in thin-section. Available on CD (\$5.00).

Landslide Maps (\$5.00 paper, \$5.00 pdf on CD, \$25 shape file on CD)



Murphy, E.C., 2010, Areas of landslides Lone Butte NW, ND Quadrangle: North Dakota Geological Survey 24k Map Series No. LonB NW-I. A total of 118 landslides were mapped in this quadrangle covering an area of 836 acres. The landslides ranged from small isolated slides of a few acres to large complex slides that covered up to 100 acres. The majority of landslides in this map occur in the badlands topography within the drainages of Rough and Elkhorn creeks. This map is on the edge of a landslide prone area. The south edge of this map is two to three miles north of the Little Missouri River and the east edge is four or more miles west or northwest of the river. The three adjacent quadrangles to the east and south contain 483 landslides that occupy about 16,000 acres. These landslides include large complexes that cover as much as 1,700 acres.

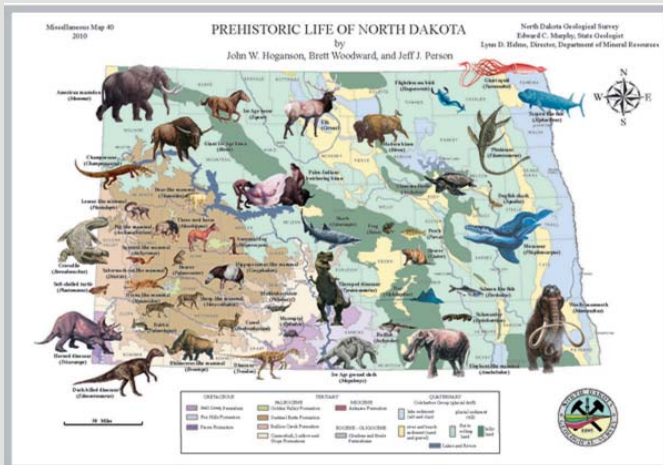
Murphy, E.C., 2010, Areas of landslides Moline School, ND Quadrangle: North Dakota Geological Survey 24k Map Series No. MlnS-I.
 Murphy, E.C., 2010, Areas of landslides Phillip Spring, ND Quadrangle: North Dakota Geological Survey 24k Map Series No. PhIS-I.
 Murphy, E.C., 2010, Areas of landslides Rawson, ND Quadrangle: North Dakota Geological Survey 24k Map Series No. Rwsn-I.



Murphy, E.C., 2010, Areas of landslides Red Wing Creek, ND Quadrangle: North Dakota Geological Survey 24k Map Series No. RdWC-I. A total of 19 landslides were mapped in this quadrangle covering an area of 161 acres. The slides ranged from small isolated slides of less than one acre to larger complexes that extend over an area of up to 30 acres. The majority of landslides in this map occur in the badlands topography adjacent to the Little Missouri River. From this point east, landslides along the Little Missouri River Valley significantly increase in size and number due to the redirection of the Little Missouri River by glaciers approximately 600,000 years ago. The north-flowing ancestral Little Missouri River was forced to the east, out of a valley that is now occupied by Bowline, Red Wing, Cherry, and Tobacco Garden creeks, and quickly eroded a new channel creating over-steepened slopes that were very susceptible to slope failure.

Murphy, E.C., 2010, Areas of landslides Sather Lake, ND Quadrangle: North Dakota Geological Survey 24k Map Series No. SthL-I.

Miscellaneous Maps



Hoganson, J.W., Woodward, B., and Person, J. J., 2010, Prehistoric Life of North Dakota, Miscellaneous Map 40, No. 1. This is an update of Miscellaneous Map 37. A total of 25,000 copies of that map were published in 2004 and are now exhausted. Both MM40 and the preceding MM37 have been used by educators and others interested in knowing more about the prehistoric animals that lived in North Dakota at different times in the geologic past. Images of animals are positioned on the geologic map of North Dakota where fossils of the animals have been found. This map is also the basis for our interactive website about the prehistoric life of North Dakota where visitors to that site can learn more about the animals illustrated on the map and where and when these animals lived. \$0.25 per sheet.

Outside Publications

Anderson, F.J., 2010, Landslides in North Dakota: An Overview of the Landslide Inventory Mapping Program at the North Dakota Geological Survey, Geological Society of America, Rocky Mountain Section, Abstracts with Programs, Vol. 42, No. 3, p. 5.
 Russell, P., Hoganson, J.W., Karrow, P., and Motz, J., 2010, A Mastodon in a Biscuit Box, University of Waterloo, Canada, 19 pp.
 Murphy, E.C., 2010, Coal geology of North Dakota in Keystone Coal Industry Manual, Coal Age Primedia Business Magazines & Media, Jacksonville, Florida, p. 511-515.
 Nordeng, S.H., LeFever, J.A., Anderson, F.J., and Johnson, E.H., 2010, Oil generation rates and subtle structural flexure: keys to forming the Bakken sweetspot in the Parshall Field of Mountrail County, North Dakota: Association of American Petroleum Geologists, Rocky Mountain Sectional Meeting, Durango, CO, Abstract.