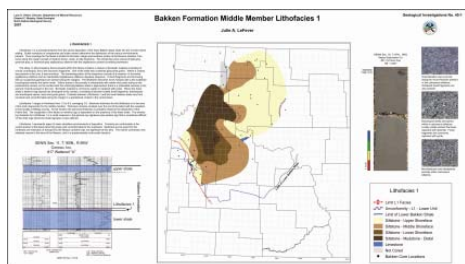


NEW PUBLICATIONS



Geologic Investigations



LeFever, Julie, A., 2007, Lithofacies of the Middle Bakken Member, North Dakota: North Dakota Geological Survey Geologic Investigations no. 45. CD – Price \$5.00.

The Middle Member of the Bakken Formation has been split into six major lithofacies (1-5 and a Central Basin Facies) starting at the base of that interval. Information on these lithofacies is presented in a series of six posters, which contain isopach maps or fence diagrams, core photographs, photomicrographs, and a representative log section. We initially intended to label the Lithofacies 3 poster as G.I. 45, as reported in the July, 2007 newsletter, and label the remaining lithofacies with subsequent numbers. However, for the sake of expedience we decided to retain the G.I. 45 series number and place all of the lithofacies onto one CD.



Nordeng, Stephan, H., 2007, Stratigraphic cross-section of Ratcliffe Interval through the Foreman Butte Field using neutron-density logs with the distribution of moveable hydrocarbons and water saturation: North Dakota Geological Survey Geologic Investigations no. 48.

Two cross-sections are presented in GI 48. The first focuses on the lateral and vertical distribution of in-place and movable hydrocarbons within the productive Ratcliffe Interval in the Foreman Butte Field in McKenzie County, North Dakota. The second cross-section illustrates the regional stratigraphic correlation between productive intervals in the Foreman Butte Field and the West Tioga field. Similarities in log characteristics and water saturations suggest that additional production may be expected beyond the current limits of these two fields.

LeFever, Julie, A., 2007, Exploration frontiers in the Bakken Formation, Montana and North Dakota: North Dakota Geological Survey Geologic Investigations no. 49. *From a powerpoint presented at the 2007 Rocky Mountain Sectional Meeting of the American Association of Petroleum Geologists in Snowbird, Utah.* CD – Price \$5.00.



Anderson, Fred, J., 2007, Field screening for shallow gas in Burleigh County, North Dakota: North Dakota Geological Survey Geologic Investigations no. 50. 1:150,000 scale map. \$10.00.

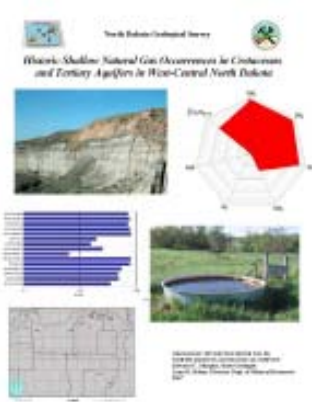
The map depicts results of recent shallow gas field screening conducted in Burleigh County. This 1:150,000 scale map presents the results of flame-ionization detector field screening analysis on existing ground-water observation wells throughout the county overlain onto a shaded relief base map. A brief discussion, along with a graphical display of the results, are included.

Anderson, Fred, J., 2007, Field screening for shallow gas in Ward County, North Dakota: North Dakota Geological Survey Geologic Investigations no. 51, 1:150,000 scale map. \$10.00.

Anderson, Fred, J., 2007, Field screening for shallow gas in McHenry County, North Dakota: North Dakota Geological Survey Geologic Investigations no. 52, 1:150,000 scale map. \$10.00.

Anderson, Fred, J., 2007, Field screening for shallow gas in Kidder County, North Dakota: North Dakota Geological Survey Geologic Investigations no. 53, 1:150,000 scale map. \$10.00.

- Anderson, Fred, J., 2007, Field screening for shallow gas in Barnes County, North Dakota: North Dakota Geological Survey Geologic Investigations no. 54, 1:150,000 scale map. \$10.00.
- Anderson, Fred, J., 2007, Field screening for shallow gas in Morton County, North Dakota: North Dakota Geological Survey Geologic Investigations no. 55, 1:150,000 scale map. \$10.00.
- Anderson, Fred, J., 2007, Field screening for shallow gas in LaMoure County, North Dakota: North Dakota Geological Survey Geologic Investigations no. 56, 1:150,000 scale map. \$10.00.
- Anderson, Fred, J., 2007, Field screening for shallow gas in Pierce County, North Dakota: North Dakota Geological Survey Geologic Investigations no. 57, 1:150,000 scale map. \$10.00.



Anderson, Fred, J., 2007, Shallow gas occurrences in Cretaceous and Tertiary Aquifers in western North Dakota: North Dakota Geological Survey Geologic Investigations no. 58, Online.

GI-58 is a summary of the results of gas sampling and analyses collected from flowing-head wells in Cretaceous and Tertiary Aquifers in west central North Dakota. Description of the individual constituents detected is featured along with a discussion regarding potential shallow gas sourcing.

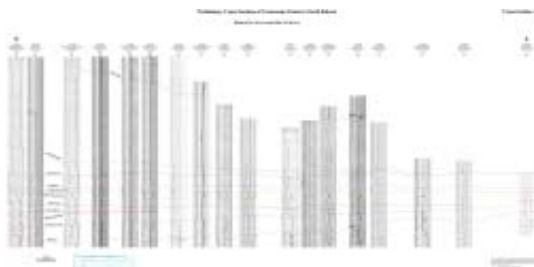
Reports of Investigations



LeFever, Richard, D., 2007, Reference logs for Cretaceous Formations in North Dakota: North Dakota Geological Survey Report of Investigations no. 106. CD – Price \$5.00.

A series of reference logs were chosen from throughout North Dakota to assist companies and individuals in selecting the tops of formations, members, or beds in Cretaceous rocks. Eleven different stratigraphic units, from the top of the Inyan Kara Formation to the top of the Pierre Formation, are illustrated on CD. The Cretaceous shales in North Dakota are potential gas reservoirs.

LeFever, Richard, D. and LeFever Julie A., 2007, Preliminary cross-sections of Cretaceous strata in North Dakota: North Dakota Geological Survey Report of Investigations no. 107. CD – Price \$5.00.

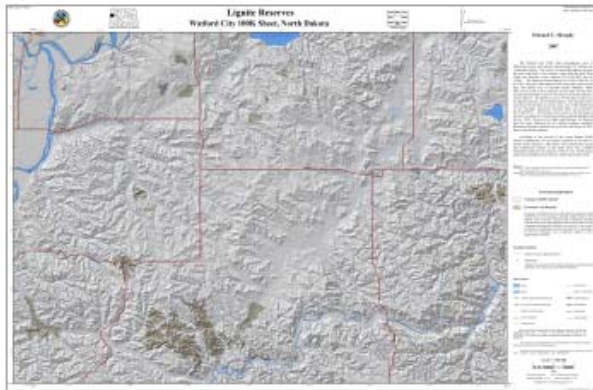


sections are useful references for those working in these potential gas reservoirs and are part of an ongoing project to define the stratigraphic framework of the Cretaceous for the entire state. CD – Price \$5.00.

100 K Mineral Maps

- Murphy, Edward, C., 2007, Lignite Reserves – Elgin 100k Sheet: North Dakota Geological Survey 100k Elgn - c, 1:100,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves – Minot 100k Sheet: North Dakota Geological Survey 100k Mnot - c, 1:100,000 scale. Price \$5.00.

Murphy, Edward, C., 2007, Lignite Reserves – Watford City 100k Sheet: North Dakota Geological Survey 100k WfdC - c, 1:100,000 scale. Price \$5.00.

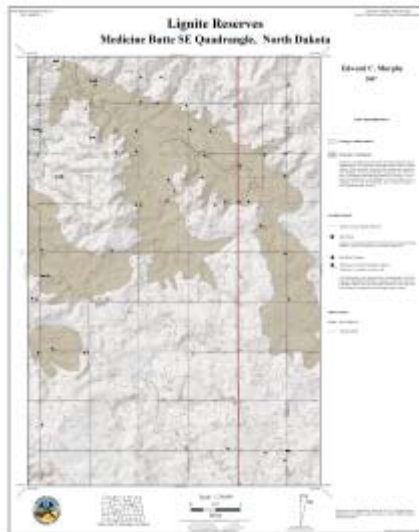


The Watford City 100K sheet contains approximately 618 million tons of economically mineable lignite. Most of the coal reserves in this sheet are located west of the North Unit of the Theodore Roosevelt National Park.

24K Mineral Maps

- Murphy, Edward, C., 2007, Lignite Reserves Beulah NW, North Dakota: North Dakota Geological Survey 24k Series Bulh NW - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Riverdale South, North Dakota: North Dakota Geological Survey 24k Series Rvdl S - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Hazen NE, North Dakota: North Dakota Geological Survey 24k Series Hzen NE - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Hazen NW, North Dakota: North Dakota Geological Survey 24k Series Hzen NW - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Beulah NE, North Dakota: North Dakota Geological Survey 24k Series Bulh NE - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Stanton SE, North Dakota: North Dakota Geological Survey 24k Series Stnt SE - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Stanton, North Dakota: North Dakota Geological Survey 24k Series Stnt - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Hazen East, North Dakota: North Dakota Geological Survey 24k Series Hzen E - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Hazen West, North Dakota: North Dakota Geological Survey 24k Series Hzen W - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Beulah, North Dakota: North Dakota Geological Survey 24k Series Bulh - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Zap, North Dakota: North Dakota Geological Survey 24k Series Zap - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Fort Clark NE, North Dakota: North Dakota Geological Survey 24k Series FtCl NE - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Fort Clark, North Dakota: North Dakota Geological Survey 24k Series FtCl - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Hannover NE, North Dakota: North Dakota Geological Survey 24k Series Hnvr NE - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Hannover NW, North Dakota: North Dakota Geological Survey 24k Series Hnvr NW - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Red Butte, North Dakota: North Dakota Geological Survey 24k Series RedB - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Red Butte NW, North Dakota: North Dakota Geological Survey 24k Series RedB NW - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Medicine Butte NE, North Dakota: North Dakota Geological Survey 24k Series MdcB NE - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Medicine Butte, North Dakota: North Dakota Geological Survey 24k Series MdcB - c, 1:24,000 scale. Price \$5.00.

- Murphy, Edward, C., 2007, Lignite Reserves Nelson Lake, North Dakota: North Dakota Geological Survey 24k Series NlSL - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Center, North Dakota: North Dakota Geological Survey 24k Series Cntr - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Hannover, North Dakota: North Dakota Geological Survey 24k Series Hnvr - c, 1:24,000 scale. Price \$5.00.
- Murphy, Edward, C., 2007, Lignite Reserves Red Butte SW, North Dakota: North Dakota Geological Survey 24k Series RedB SW - c, 1:24,000 scale. Price \$5.00.



Murphy, Edward, C., 2007, Lignite Reserves Medicine Butte SE, North Dakota: North Dakota Geological Survey 24k Series MdcB SE- c, 1:24,000 scale. Price \$5.00.

The Medicine Butte SE quadrangle contains approximately 200 million tons of coal reserves. Mineable coal thickness ranges from 12 to 17 feet, generally within two beds, in this map. Hole numbers and mineable coal thicknesses are plotted on the map.

- Murphy, Edward, C., 2007, Lignite Reserves Medicine Butte SW, North Dakota: North Dakota Geological Survey 24k Series MdcB SW - c, 1:24,000 scale. Price \$5.00.

Outside Publications

- Harris, K.L., Thorleifson, H.L., Anderson, F.J., Manz, L.A., and Matile, G., 2007, Quaternary Lithostratigraphic Mapping in the Northern Red River Valley - Minnesota, North Dakota, and Manitoba: Geological Society of America, Abstracts with Programs, Vol 39, No. 6, p. 503.
- Hopkins, D., Manz, L., Ulmer, M., Benedict, P., Norvell, W., Grosz, A., and Jensen, E., 2007, Geochemical Distribution of Selected Elements in North-Central North Dakota Generalized Using Soil Survey SSURGO Data: International Annual Meetings of the American Society of Agronomy, Crop Science Society of America, and Soil Science Society of America, New Orleans, LA, November 4-8, 2007, Poster.
- Fischer, D.W., LeFever, J.A., LeFever, R.D., Helms, L.D., Sorenson, J.A., Smith, S.A., Steadman, E.N., Harju, J.A., 2007, Broom Creek Formation Outline, Second Phase Final, Plains CO₂ Reduction Partnership: Energy and Environmental Research Center Report to the U.S. Department of Energy, 20 p.
- Fischer, D.W., LeFever, J.A., LeFever, R.D., Helms, L.D., Sorenson, J.A., Smith, S.A., Steadman, E.N., Harju, J.A., 2007, Duperow Formation Outline, Second Phase Final, Plains CO₂ Reduction Partnership: Energy and Environmental Research Center Report to the U.S. Department of Energy, 20 p.
- Fischer, D.W., LeFever, J.A., LeFever, R.D., Helms, L.D., Sorenson, J.A., Smith, S.A., Steadman, E.N., Harju, J.A., 2007, Winnipegosis Formation Outline, Second Phase Final, Plains CO₂ Reduction Partnership: Energy and Environmental Research Center Report to the U.S. Department of Energy, 20 p.
- Fischer, D.W., LeFever, J.A., LeFever, R.D., Helms, L.D., Sorenson, J.A., Smith, S.A., Steadman, E.N., Harju, J.A., 2007, Red River Formation Outline, Second Phase Final, Plains CO₂ Reduction Partnership: Energy and Environmental Research Center Report to the U.S. Department of Energy, 20 p.
- Hanks, H., Hoganson, J.W., Woodward, B., 2007, Mega movers:enormous field jackets: Journal of Vetebrate Paleontology, vol. 27, no. 3 (supplement), pp. 86A-87A.
- Hoganson, J.W., Erickson, J.M., and Holland, F.D., Jr, 2007, Amphibian, reptilian, and avian remains from the Fox Hills Formation (Maastrichtian) – shoreline and estuarine deposits of the Pierre Sea in south-central North Dakota: *in* The geology and paleontology of the Late Cretaceous marine deposits of the Dakota, eds., Martin, J. and Parris, D., Geological Society of America Special Paper 427, pp. 239-256.
- LeFever, J.A., 2007, Exploration Frontiers in the Bakken Formation, Montana and North Dakota: Rocky Mountain Sectional Meeting of the American Association of Petroleum Geologists Abstracts with Programs, p. 45.