



Regional Update

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On December 1, the Oklahoma Geological Survey, the South Midcontinent Region of PTTC, and the Oklahoma Independent Petroleum Association/Gas Research Institute (OIPA/GRI) will join forces to present a workshop on coalbed methane in Oklahoma. In recent years, this has been a topic of considerable interest in the region, according to Brian J. Cardott, OGS geologist and program chair of this workshop.

Topics covered in the workshop will include an overview of coal as a source rock and a unique resource for methane, estimating coalbed-methane resources, geologic constraints on production, completion practices, and economics, applied to the Oklahoma coalfield.

Seven papers are scheduled for the meeting, which will be held at the Moore-Norman Technology Center in Norman. Registration cost will be \$35, which includes coffee breaks, lunch, and a publication issued in conjunction with the meeting.

For more information, contact Cardott or Michelle Summers at the OGS.

Speakers and Papers for Coalbed-Methane Workshop

- David Hill, Gas Research Institute, Chicago, IL—
Changing Perceptions of Coalbed Methane
- Andrew R. Scott, Bureau of Economic Geology, Austin TX—
Coalbed Methane Producibility Model
- Charles R. Nelson, Gas Research Institute, Chicago, IL—
Effects of Coalbed-Reservoir Property Analysis Methods on Gas-In-Place Estimates
- Brian J. Cardott, Oklahoma Geological Survey, Norman, OK—
Coalbed Methane Activity in Oklahoma
- Samuel A. Friedman, Oklahoma Geological Survey, Norman, OK—
Oklahoma Coal Cleat
- Brad Wilkins, Wilkins Engineering, McAlester, OK—
Coalbed Methane Completion Practices in Oklahoma
- Matthew A. Biddick, Fractal Oil Company, Norman, OK—
Economic Analysis of Coalbed Methane from the Hartshorne Coal, Arkoma Basin, Oklahoma

Spotlight On: The "Other" NRIS Databases

The Natural Resources Information System (NRIS) is a group of databases that together provide a wide range of detailed information on Oklahoma's natural resources. Best known, perhaps, are the NRIS oil and gas databases, which contain a well history file, production data, and some plugging report data. But the other databases are also valuable sources of information.

Brine

The file of Oklahoma brines consists of 9,497 records. This data set was retrieved from the Oil Field Water Analysis database of 77,650 records, built between 1976 and 1982 under the auspices of the U.S. Bureau of Mines' Bartlesville office. The data, compiled from water analysis reports collected by companies in the petroleum industry, were "recorded as received." No editing or evaluation of the data was done; information varies in its completeness. Reported information includes: well data (name, operator, API number, total depth, elevation); location (TRS, county, geologic basin, latitude/longitude); formation (age, depth interval); lithology; analytical chemistry results; and company supplying information.

All the brine data mentioned can be viewed in the NRIS Facility. There is no search functionality available but the usual sort capability of Access can be used. Oklahoma data can be sent to you in Excel or Access format on a floppy diskette. Data sets for Arkansas (1,162 records), Kansas (5,537 records), and Texas (21,701 records) also have been retrieved and are available. Data sets for other states can be obtained by special arrangement.

Coal

The Oklahoma coal database was developed by the Oklahoma Geological Survey (OGS) as part of the National Coal Resources Data System (NCRDS). The

NCRDS is a cooperative program begun in 1975 by the U. S. Geological Survey and state geological surveys in coal-producing states. Information in the database is presented in a series of Access tables. Analytical and stratigraphic data are available for 12 counties in the northeast Oklahoma shelf area. Production by county is listed for the 16 major coal-producing counties; production from other counties is reported as a combined total.

The analytical-data tables contain information from 580 samples. Information presented includes: coal bed, rank, location (province, coal region, quadrangle, TRS with quarter sections, latitude/longitude), results from chemical and petrographic analyses, mine, owner, operator, type of sample location, and bed measurements.

In the stratigraphic tables, 20,586 records offer details on lithology and bed measurements for 4,456 sample locations.

Annual production figures are given for 1873 through 1998. These figures include not only produced tonnage but also surface-mined tonnage and price per ton.

All the coal data can be viewed in the NRIS Facility. The coal production figures are also available on the Internet as a link from the OGS web: <http://www.ou.edu/special/ogs-pttc/>.

Coalbed Methane

The Oklahoma coalbed methane (CBM) completions table currently contains >800 records from 1988 to present. It is updated on a biweekly basis. Details given include: well name/number, API number, location (TRS with quarter sections, county, latitude/longitude), completion date, operator, coal bed, production depth interval, initial gas potential and produced water, pressure information, and a comments section.

This listing can be viewed at the NRIS Facility in Norman or it can be shipped to you in Excel or Access format on a floppy diskette. You can also search the database online (see OGS's web address above), using several methods. **(See NRIS, page 3)**



Jane Weber

Upcoming Events

November

- 11/10 **Morrow Gas Play in the Anadarko Basin and Shelf of Oklahoma, Workshop, Norman, *OGS, PTTC**
- 11/10 *Beam Pump Optimization, Enid, *MWC*
- 11/12 *Oil and Gas Management - The Beginning Course, Tulsa, *MWC*
- 11/19 *Oil and Gas Management - The Beginning Course, Wilburton, *MWC*

December

- 12/1 **Coalbed Methane Workshop, Norman, *OGS, PTTC**
- 12/6 **Prue and Skinner Plays Workshop, Oklahoma City, *OCGS, OGS, PTTC**
- 12/8 **Prue and Skinner Plays Workshop, Tulsa, Tulsa Geological Society, OGS, PTTC**
- 12/12-14 *Interstate Oil and Gas Compact Commission, New Orleans, Louisiana*

*OGS=Oklahoma Geological Survey, 405/325-3031 or 800/330-3996

*MWC=Marginal Wells Commission, 405/366-8688; 800/390-0460

*OIPA=Oklahoma Independent Petroleum Association 405/942-2334 or 800/838-6472

*OCGS=Oklahoma City Geological Society, 405/236-8086

NRIS—continued

Petroleum Cores

The petroleum core database describes core material collected and maintained by OGS since 1936. The actual cores, currently representing more than 4,405 Oklahoma wells, are kept at the OGS Core & Sample Library. The database includes information on: well name/number; operator; location (TRS with quarter sections, county); stratigraphic name; and core details such as depth interval, total footage, diameter, and condition.

This information has been published, most recently as SP 99-2. In the publication, the cores are grouped into 5 geographic regions of the state: northeast, southeast, southwest, northwest, and ECM (panhandle). As with all the databases, this one can be viewed at the NRIS Facility.

Samples/Cuttings

Where petroleum cores are not available, samples and/or cuttings frequently are. The Survey is computerizing its collection of samples and cuttings. Currently, this

database contains close to 19,000 records, with records being added on a continuing basis as staff time permits.

Input includes: well name/number, API number, operator, TRS with quarter sections, county, and depth range of sampling. These data can be viewed in the NRIS Facility at the Rock Creek location, or the actual samples can be examined at the Core and Sample Library.

Well Logs

The OGS Well-log Library houses over 400,000 well logs. The Survey is the official repository for full-scale logs for the State of Oklahoma. These logs are organized and accessible, but not on computer, although the Survey plans to do so as soon as funding becomes available.

For further details on using any of the data sources described above, contact Jane Weber at the Oklahoma Geological Survey. Phone: 405/325-3031, 405/360-2886, or call toll free at 800/330-3996. Fax: 405/325-7069. Email: jlweber@ou.edu.

Jane Weber

March 28-29 Workshop on Southern Midcontinent Focuses on Petroleum Systems of Sedimentary Basins

This spring, the thirteenth annual workshop designed to transfer information that will aid in the search for, and production of, our oil and gas resources will be presented by the Oklahoma Geological Survey. The topic for this year's meeting will be sedimentary basins, which are the hosts for most major petroleum reservoirs. The basins already have yielded large volumes of oil and gas, and they have great potential for giving up additional hydrocarbons through the use of improved exploration and development techniques. Although all papers are not in at this time, workshop topics, as related to sedimentary basins, could include: geologic evolution and/or petroleum occurrences; thermal history; petroleum generation, migration, and/or entrapment; depositional and/or diagenetic history; and petroleum-reservoir characterization. Papers will be based on general basin analysis or upon studies of specific basins or portions of a basin. Most papers will focus on the southern Midcontinent (Oklahoma, Kansas, Missouri, Arkansas, Texas, New Mexico, and Colorado), but some presentations also will cover basic principles in other sedimentary basins of the United States.

Other sponsors and supporters of this workshop series

include: National Petroleum Technology Office of the U.S. Department of Energy, Kansas Geological Survey, PTTC, and International Association of Mathematical Geology.

The March workshop will consist of 20 papers presented orally, 15 formal or informal poster presentations, and about 10 commercial exhibits; it will be attended by 200–300 participants. It is being organized by Kenneth S. Johnson, Oklahoma Geological Survey, and Daniel F. Merriam, Kansas Geological Survey. The proceedings (including extended abstracts for the posters) will be published by the OGS about one year after the meeting.

For more specific information about the meeting, contact: Kenneth S. Johnson, Oklahoma Geological Survey, 100 East Boyd, Room N-131, Norman, Oklahoma 73019; phone, 405/325-3031; fax, 405/325-7069; e-mail ksjohnson@ou.edu. More information about the meeting also will be posted on the OGS web site:

<http://www.ou.edu/special/ogs-pttc>.

Specific information also will follow in the next issue of this newsletter.

Don't Forget—Morrow Gas Workshop in Norman on November 10

Don't forget the Morrow Gas Play workshop meets in Norman on November 10. This workshop is completely new and different from the previous Morrow FDD workshop of 1995.

Three guest speakers will provide additional information on field studies and drilling and completion practices of Morrow wells in the Anadarko basin. The new Morrow study and workshop includes regional mapping of the various Morrow sandstone zones from the upper Morrow chert conglomerate in the deep basin to the more shallow lower Morrow and Primrose sandstones along the eastern and northern play boundaries.

Other regional work included in the study are shelf-to-basin cross sections, a map showing fields that have production from the Morrow Formation, a Morrow structure map, and a production allocation map based upon current stratigraphic interpretations by IHS Energy Group (PI/Dwights).

Three field studies will be presented to represent typical Morrow gas reservoirs: the geology, depositional environment, production characteristics, and engineering parameters.

For more information, contact the OGS at the address and phone numbers on the front cover.