



Regional Update

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Mankin named new Energy Center Director

Dr. Charles J. Mankin, director of the Oklahoma Geological Survey since 1967 and PTTC South Midcontinent Region program manager, is adding an additional assignment at the University of Oklahoma to his activities. Mankin was named Director of the Sarkeys Energy Center by the OU Board of Regents at their October meeting, and officially assumed the office on November 1.

"Charles Mankin is nationally and internationally respected by both government and private sector leaders in the energy field," OU President David Boren said, noting Mankin's years of experience as an OU faculty member and OGS director. "Given his unparalleled knowledge of the entire history of the Sarkeys Energy Center and a clear understanding of its mission, Charles Mankin is the best possible person to provide leadership for the Energy Center as it moves to an even higher level of performance."

The mission of the Sarkeys Energy Center is to foster world-class interdisciplinary energy research and education and, through various means of technology transfer, strengthen and enhance regional economic growth as well as national energy and economic security. The Energy Center programs include six interdisciplinary institutes and a special institute that focuses on the Western Hemisphere. These institutes incorporate faculty from the colleges of Geosciences, Engineering, Arts and Sciences, Business, and Law to develop programs and technology that advance the energy industry in Oklahoma and throughout the world.

"The Sarkeys Energy Center was created to promote interaction among the University of Oklahoma, industry, and government to address issues relating to energy," Mankin says. "Institutes have been created in the Center to examine high priority areas of mutual interest. Our goal is to have the Center be the first point of contact for those seeking answers to energy issues."

As well as its mission and philosophy, the physical setting of the Energy Center also is impressive. The Center is a four-square-block, seven-acre, 340,000 square-foot teaching and energy research complex located on the northeast corner of the Norman campus of the University of Oklahoma. It houses more than 200 teaching and research laboratories, 30 classrooms, faculty and administrative offices, and the Geological Survey main offices.



Charles J. Mankin

Spotlight on: Coalbed methane – a hot topic

Exploiting coal beds as a possible reservoir of natural gas currently is of great interest in the oil and gas industry nationwide. Here in Oklahoma, known information on coal quality (e.g., extent, thickness, rank), shallow coal beds, wells already drilled (in many cases), and existing pipelines together make an enticing prospect, one within the financial reach of many independent operators. The Oklahoma Geological Survey (OGS) has responded in two ways to the growing interest in this relatively new industry. First, it has presented several workshops dealing exclusively with coalbed methane (CBM) and the factors involved in its successful assessment and development as a resource. Second, the OGS has made available a database that reflects coalbed methane activity within the State. It is this database that is described in detail here.

The coalbed methane completions table, a component of the Oklahoma coal database, is maintained by Brian J. Cardott, a geologist at the Survey. Using mostly PI Newsletter reports, Cardott compiles the data reported by operators on 1002A forms. He also includes wells from the Natural Resources Information System (NRIS) oil and gas database that list a coal bed as their producing formation. His initial list in 1998 contained about 400 wells. Today the list contains about 1,100.

The table includes information on operator, well, API number, location, gas field, coal bed(s) and depth(s), completion (as a CBM well) date, initial gas and water production, pressure data, and a column for remarks. Among other details, the remarks section offers information on whether the well is openhole; is a workover of an older well; or has been completed horizontally and, if so, the lateral distance. To assist users wishing to map the well spots, Cardott provides latitude/longitude values calculated from TRS quarter-quarter-quarter section data.

Accessing the data is easy and depends primarily on which method is most appropriate for your situation.

Online search: A searchable version of the coalbed methane completions table is found at the Survey's web site: <http://www.ou.edu/special/ogs-pttc>. (Click on the Coal Data button.) You can search by county, operator, coal bed, initial production, or production depth range. Search results are presented in a format similar to that shown in Figure 1.

Digital data file: If you want a digital data file to use in your own programs, we can mail one on a diskette or attach it to an e-mail. The file is normally sent as an Excel

spreadsheet but can be provided in other formats upon request. This file is prepared at the time of your request. Consequently, it contains the latest update made to the data. The charge to obtain the digital data, by diskette or e-mail, is \$17.

County: Washington

Coal Bed: Mulky

T23N R13E SEC26 NE/4 of SW/4 of NW/4 of /4

Latitude: 36.448129 **Longitude:** -95.891894 [map](#)

Operator: Devon Resources

Completion: 7/10/96

Well Name: 6 Loewen

Initial Depth Range (ft.): 0713-0717

Initial Gas Rate (MCFGPD): 50

Comments: OWWO; CBM

Figure 1. A sample result from an online search of the Oklahoma Coalbed Methane Completions file.

It has been suggested that we offer a subscription service to those who receive the CBM data file via email, whereby we would regularly (monthly or bimonthly) send them an updated file. In general, the Survey does not have the resources to allocate to such programs. However, if there is sufficient interest to justify a subscription service in this case, i.e., for e-mail receipt only, we will consider setting one up on a trial basis. Contact Jane

Weber (see below) if you are interested in supporting this specialized service.

So, don't delay. If you are involved in the exploration and development of coalbed methane (or would like to be), take advantage of this readily available information source.

To request digital data, indicate interest in a proposed subscription service, make a lab appointment, or obtain further details on using coalbed methane completions data, contact Jane Weber at the OGS. Phone: 405/325-3031, 405/360-2886, or call toll free at 800/330-3996. Fax: 405/325-7069. E-mail: jlweber@ou.edu.

OGS NRIS Facility

If you do not have access to a computer but want to examine the list of coalbed methane completions, make an appointment with Jane Weber to visit the NRIS Facility computer lab on West Rock Creek Road in Norman. Staff will assist you in accessing and viewing the data. Computer-use fees of \$10/hr may apply.

Upcoming Events

February

2/27 GIS Day at the Capitol; Oklahoma City

March

3/15-16 Petroleum Production and Potential of the Arkoma Basin and Ouachita Mountains, field trip, OGS, OU School of Geology and Geophysics

April

4/4-5 Springer Play, one-day workshops, Norman, *OGS, PTTC

4/10-11 Springer Play, one-day field trips, Ardmore, OK, *OGS, PTTC

May

5/8-9 Two-day workshop, Oklahoma City, *OGS

5/22-23 Hunton Play Field Trip, One-day trip, presented both days, Ada, OK, *OGS, PTTC

June

6/8 Trade Fair, Oklahoma City, *MWC, PTTC

July

Underbalanced Drilling Workshop, Norman, *MWC, PTTC

October

Coalbed-Methane Workshop and Field Trip, *OGS, PTTC
Earth-Sciences Week

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

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

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

PTTC needs your ideas for workshops!

It is very important for PTTC to have your ideas for new workshops. Please tell us if there are additional plays you would like to examine or if there are technical issues that should be addressed in a workshop and publication.

PTTC is here to provide the answers and information that you want and need. Please write to the address on the front, call 405/325-3031 or 800/330-3996, or e-mail cjmankin@ou.edu.

Mankin receives award

Dr. Charles J. Mankin, OGS director and PTTC South Midcontinent program manager, received an "Energy Advocate of the Year" award at the 2000 International Energy Policy Conference held December 1 in Oklahoma City.

The meeting was hosted by the International Society of the Energy Advocates. Honorary Chairman of the meeting was Denise Bode, vice-chairman of the Oklahoma Corporation Commission.

Springer workshop and field trip set for April

The upcoming Springer Formation workshop will be presented twice in April, giving you a chance to attend on either April 4 or 5, a Wednesday or Thursday. The meetings will be hosted at the Moore-Norman Technology Center in Norman. A companion one-day field trip will run on April 10 and 11, on a Tuesday or Wednesday, based out of Ardmore. The field trip is formatted to show surface to subsurface correlations in regard to reservoir quality, log characteristics, and interpretation of depositional environments. Led by LeRoy Hemish, a retired OGS geologist, with assistance from Rick Andrews, principal presenter of the workshop, this outing will bring together all the material presented and give participants an entire day to see the Springer in the field and ask questions during the trip.

The workshop itself is structured to assist in the regional understanding of the Springer, including discussion of stratigraphic nomenclature as used at the outcrop and projected throughout the Anadarko and Ardmore basins. Additionally, the meeting and publication will provide detailed reservoir information in the form of three field studies and statistical data compiled in extensive appendix tables, Andrews said.

Guest speakers will provide information on the Springer regarding drilling and completion practices of Springer wells in the Anadarko basin, and participate in a discussion of the hotly-pursued Springer plays along the Mountain View fault where it is overturned.

Andrews says the study and workshop reviews regional mapping of the various Springer sandstone zones (including the Cunningham, Britt, and Boatwright), in addition to the equivalent carbonate deposits in northwest Oklahoma and the Panhandle. Other regional work included in the study are shelf-to-basin cross sections, a map showing fields with production from the Springer, a Springer structure map, and a production allocation map based on current stratigraphic interpretations by IHS Energy Group.

The three field studies represent typical Springer gas reservoirs and their geology, depositional environment, production characteristics, and engineering parameters. Two of these studies pertain to the traditional marine sandstone reservoirs, while the third pertains to the Springer Britt and Boatwright carbonates that often are referred to as "Chester."

The workshop also will include displays of Springer core and hand samples, and interpretations of important reservoir characteristics and environments of deposition.

Field trip and guidebook

The guidebook to the field trip is being prepared by Hemish, who has extensive field experience in Oklahoma.

The book will present information on selected sandstone units in the Springer Formation, which straddles the Mississippian-Pennsylvanian boundary, and units in the lower Golf Course Formation (Pennsylvanian) in the Ardmore basin of south-central Oklahoma. The guidebook will be divided into two parts: Part 1, general geology of the field-trip area; and Part 2, which contains descriptions of six field-trip stops near Ardmore.

Hemish says the focus of the field trip is on viewing outcrops of rocks that represent the best exposures in the area and, that in the subsurface, are hydrocarbon reservoirs. Surface gamma-ray profiles will be compared to subsurface well-log signatures.

Interpretations of depositional environments are important in petroleum exploration and field development, and Hemish believes the guidebook will help readers understand methods for making interpretations of depositional environments and facies changes that will help them successfully predict the potential of a reservoir rock.

For more complete information about the workshops or the field trips, contact the OGS at 100 E. Boyd, Rm. N-131, Norman, OK 73019-0628, or call 405/325-3031 or 800/330-3996. Information also will be posted on the web site: <<http://www.ou.edu/special/ogs-pttc>>.

New publication examines Hunton oil and gas reservoirs

A new book and accompanying maps, the outgrowth of two one-day workshops attended by more than 200 people, examines one of Oklahoma's most prolific producing sequences, the Hunton, and examines its exploration and development in Oklahoma and the Texas Panhandle.

The 131-page book, OGS Special Publication 2000-2, contains 135 illustrations, 12 tables, and 6 oversized plates enclosed in an envelope. The plates include isopach maps of the Hunton, Woodford, and Chimney Hill groups, a structure map of the Hunton, stratigraphic cross sections, and a pre-Woodford subcrop map of the Oklahoma and Texas Panhandles that shows the wells examined in this study. The book begins with a general overview and follows up with Hunton stratigraphy, as well as field studies on the Leedy Field, East Arnett Field, and Prairie Gem Field.

The book is \$17, plus \$3.40 shipping and handling, and is available by mail, by phone (405/360-2886), by e-mail at ogssales@ou.edu, or at the sales office, 1218-B West Rock Creek Rd., Norman.