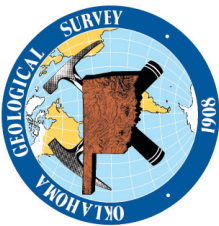




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OKLAHOMA GEOLOGICAL SURVEY

College of Earth and Energy
University of Oklahoma
Sarkeys Energy Center
100 E. Boyd, Room N-131
Norman, Oklahoma 73019-1001

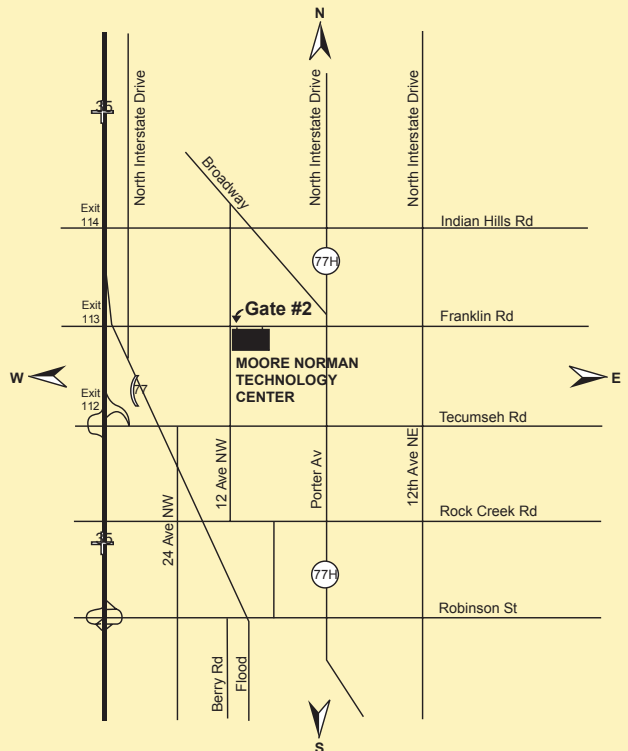


INFORMATION

Oklahoma Geological Survey 405/325-3031 or 800/330-3996; Michelle Summers 405/325-7313, mjsummers@ou.edu; Sue Crites 405/325-8076, scrites@ou.edu.

TRANSPORTATION

Will Rogers World Airport is 25 minutes from the Moore Norman Technology Center in Norman. Ground transportation (taxis, rental cars, and airport shuttle for hire) is available in the baggage claim area. Parking at the Moore Norman Technology Center is free.



Moore Norman Technology Center (MNTC)
Main Campus - (405) 364-5763
4701 12th Avenue NW, Norman, Oklahoma

Southbound I35 from Oklahoma City take Exit 113 (left exit onto South 77) and turn left on Franklin Rd. at first traffic light. Turn right at MNTC Gate 2 parking lot entrance (just past stop sign at 12th and Franklin).

Northbound I35 (south of Norman) traffic take Exit 112. Turn left on Tecumseh Road. At 2nd traffic light, turn left onto South 77/Flood Ave. Turn right at light onto Franklin Rd. Turn right at MNTC Gate 2 parking lot entrance (just past stop sign at 12th and Franklin).

PREREGISTRATION FORM—Make checks payable to “University of Oklahoma.”

Please fill out form, detach, and return with check to: Oklahoma Geological Survey, 100 E. Boyd, Room N-131, Norman, Oklahoma 73019

NAME: (Last) _____ (First) _____ (Nickname for badge) _____ (Initial) _____

AFFILIATION: _____

MAILING ADDRESS: _____

CITY: _____ STATE: _____ ZIP: _____ PHONE: _____ FAX: _____

E-MAIL: _____

Check must accompany this form. *Use separate form for each registrant.* Sorry, we are unable to accept credit cards.

Workshop Registration \$175.00 ☐

Tuesday, Nov. 19 Field Trip * \$200.00 ☐

Thursday, Nov. 21 Field Trip * \$200.00 ☐

If you have a special disability, medical, or dietary needs, please check here. ☐

Total Amount Enclosed \$ _____

FAX number 405-325-7069

**Note: Field-trip attendees must also register for the conference. Limited number of field-trip seats are available.*



Oklahoma Shale Gas and Oil Workshop

November 20, 2013

Oklahoma
Geological
Survey

G. Randy Keller, Director



The University of Oklahoma
MEWBOURNE COLLEGE OF EARTH & ENERGY



Purpose and Scope of Meeting

A nearly decade-long search for shale gas in Oklahoma has expanded from producing gas in the Arkoma Basin to liquid hydrocarbons (condensate and oil) in the western Arkoma Basin, Anadarko Basin (Cana and South Central Oklahoma Oil Province plays), Ardmore Basin, and north-central Oklahoma. This workshop will emphasize lessons learned from operators and researchers in Oklahoma shale gas and oil exploration and development with particular emphasis on the Woodford Shale. Presentations will focus on the geologic, geochemical, petrographic, mineralogical and engineering factors that are beneficial for commercial production of liquid hydrocarbons from tight, silica-rich shale.

Field Trip Description



A one-day field trip, offered on both **Tuesday, November 19**, and **Thursday, November 21**, will visit five extended stops in the western Arbuckle Mountains and eastern Criner Hills in southern Oklahoma.

Exposures of the Woodford Shale will be viewed to compare and contrast source-rock and reservoir quality for oil and gas shales, correlate lithologies in outcrop to electric logs in the subsurface, and examine the occurrence, extent, and orientation of fractures in outcrop that are the source of permeability in the subsurface.*

***Note: Field-trip attendees must also register for the workshop. Limited number of field-trip seats are available — register TODAY!**

Program Agenda

- 8:45 Welcoming Address**, by Randy **KELLER**, Oklahoma State Geologist / University of Oklahoma (OU) Mewbourne College of Earth & Energy (MCEE) ConocoPhillips School of Geology & Geophysics
- 9:00 Woodford Shale: Correlating Rock Properties in Outcrop and Core with Wireline Log Characteristics**, by Jim **PUCKETTE**, Oklahoma State University, Stillwater, OK
- 9:30 Overview of Oklahoma Shale Resource Plays**, by Brian J. **CARDOTT**, Oklahoma Geological Survey, Norman, OK
- 10:00 Coffee Break; Exhibits; OGS Publications Available**
- 10:30 Keynote Address—Generation, Retention, Recovery: Unconventional Shale Oil from a Geochemist's Perspective**, by Tim E. **RUBLE**, Weatherford Laboratories, Houston, TX
- 11:30 Woodford Exploration in the Anadarko Basin**, by Walter J. **LAMLE**, Devon Energy Corporation, Oklahoma City, OK
- 12:00 Lunch; Exhibits; OGS Publications Available**
- 1:00 Cana Woodford Shale Play, Anadarko Basin: The Effects of Mudrock Lithologies and Mechanical Stratigraphy on Completion and Production**, by Craig D. **CALDWELL**, Cimarex Energy Company, Tulsa, OK
- 1:30 Data Driven Woodford Shale Risk Characterization**, by Kevin **MORGAN**¹, Phil **FOX**¹, John **THORKELSON**¹, Madhav M. **KULKARNI**¹, Timothy **JENSEN**¹, ¹Marathon Oil Corporation, Oklahoma City, OK
- 2:00 Woodford Shale Development in the Ardmore Basin, Oklahoma: Initial Thoughts on Beginning an Infill Drilling Program**, by Sam **HENDERSON**, Merit Energy Company, Dallas, TX
- 2:30 Coffee Break; Exhibits; OGS Publications Available**
- 3:00 Chemostratigraphy and its Applications to the Woodford Shale, Oklahoma**, by Bryan **TURNER** and Roger M. **SLATT**, University of Oklahoma, School of Geology and Geophysics, Norman, OK
- 3:30 Influence of Thermal Maturity on Organic Shale Microstructure**, by Mark E. **CURTIS**, University of Oklahoma, Mewbourne School of Petroleum and Geological Engineering, Norman, OK
- 4:00 End of Workshop**

November 20, 2013

REGISTRATION AND INFORMATION
Moore Norman Technology Center
7:30 a.m. - 2:15 p.m.

TECHNICAL PROGRAM
9:00 a.m. - 4:00 p.m.

EXHIBITS
9:00 a.m. - 3:00 p.m.
(during breaks and lunch)

**LIMITED NUMBER OF SEATS —
PLEASE REGISTER EARLY!**

CONTINUING EDUCATION CREDITS

8 CEU's or PDH's for workshop

8 CEU's or PDH's for fieldtrip

SUGGESTIONS FOR HOUSING

Embassy Suites Norman 405/253-3539

The Montford Inn 405/321-2200

Courtyard By Marriott Norman 405/701-8900