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.

HOUSING

Embassy Suites Norman 405/364-8040 (code: MPW)
Residence Inn By Marriott 405/366-0900 (code: UNOG)

INFORMATION

Oklahoma Geological Survey 405/325-3031 or 800/330-3996; Michelle Summers 405/325-7313, mjsummers@ou.edu; Tammie Creel 405/325-3034, tcreel@ou.edu.

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

Southbound from Oklahoma City take Exit 113 and turn left on Franklin Rd. Turn right at Gate 2 entrance.

Northbound traffic take Exit 112. Turn left (east) on Tecumseh Rd. Turn left (north) on 12th Ave NW. Turn right (east) on Franklin Rd. Turn right at Gate 2 entrance.
The Mississippian Osage of northern Oklahoma has long been an important producing horizon. This zone has been one of the primary reservoirs almost from the beginning of the Petroleum Industry in Oklahoma. However, in its development, geologists were often confronted by many problems when attempting to correlate and develop this reservoir. The early operators learned that the major part of the production seemed to generally occur at the top of the reservoir, in a residual or detrital chert facies, while the bulk of the reservoir appeared to consist of alternating porous and impermeable strata that was often barren, erratic, and random. This set of assumptions lead to a general misunderstanding of the reservoir’s potential which has lead to bypassed reserves.

In the 1960’s the Mississippian Osage became the major focus for exploration with the discovery of commercial production in north-central Oklahoma. With this development came the discovery that major reserves could be obtained from almost any stratigraphic interval within the Mississippian Osage. But the problems that faced the early explorationist were also encountered by these operators. Correlation of the strata seemed to suggest a random and erratic depositional pattern, and a lack of understanding of the depositional geometry can lead directly to bypassed reserves.

Today, operators have brought a new life into this reservoir’s development. Horizontal drilling has demonstrated the ability to produce prolific reserves. However, these wells are expensive and the need to understand the targeted reservoirs depositional and producing characteristics couldn’t be more important.

The Oklahoma Geological Survey recognizes the need to understand the various complexities inherent with the exploration, development and production of the Mississippian Osage. One of the Survey’s primary responsibilities is to disseminate the information needed to assist operators who wish to successfully exploit this reservoir.

This OGS workshop will therefore consist of subjects that operators should find necessary in their search for reserves from this reservoir. These subjects will include papers on the stratigraphy and depositional environments of the Mississippian Osage, exploration concepts for discovering its reservoirs, electric log evaluation, horizontal drilling techniques, and completion procedures.

Field studies will be devoted to understanding the various types of porosities within the Mississippian Osage and to the importance of understanding fracturing, reservoir drainage and in-fill drilling potential. Cores of the Mississippian Osage will be available that have been chosen to provide lithologic examples for many of the concepts presented by the papers.

—Kurt Rottman, Consultant

Program Agenda

9:00  Welcome and Introduction, by Larry GRILLOT, University of Oklahoma (OU) Mewbourne College of Earth & Energy (MCEE)
9:15  Mississippian Regional Setting and Overview, by Kurt ROTTMAN, Consultant
9:30  Stratigraphic Architecture of the Kinderhookian to Meramecian Series, by Kurt ROTTMAN, Consultant
10:30 Break; Poster Session; OGS Publications Available
11:00 Seismic Expression of Mississippian Plays, by Kurt MARFURT, OU MCEE ConocoPhillips School of Geology & Geophysics
11:30 Initial results of a Six Horizontal Well Drilling Program targeting Mississippian Osage Reservoirs in NE Oklahoma, by Shane MATSON, Spyglass Energy Group, LLC
12:00 Lunch; Poster Session; OGS Publications Available
1:00 Petrophysical Evaluation & Identifying Natural Fractures from Conventional Wireline Logs, by Cody KNEPPER, NuTech Energy Alliance
1:30 Borehole Image Interpretation Techniques and Examples: Mississippian of Northeast Oklahoma, Greg FLOURNOY, Schlumberger
2:00 Historical Overview of Mississippian Production in NE Oklahoma, by Charles WICKSTROM, Spyglass Energy Group, LLC
2:30 Break; Poster Session; OGS Publications Available
3:00 Field Examples of Osagean/Meramecian Reservoir Systems, by Kurt ROTTMAN, Consultant
3:45 Field Examples of Fracturing and Drainage, by Kurt ROTTMAN, Consultant

Please note: Discussion of presentations may cause minor shifts in scheduling.