“Life of Field” Development Decisions, DOE-Supported Simulation Software As A Decision Support Tool

Dr. Mason Medizade, President/CEO, Petrolects, LLC

September 10, 2010; 9:00 am - 5:00 pm
NRCCE Building, Morgantown, WV

Sponsored by
Petroleum Technology Transfer Council

Course Description
From early in the exploration process through eking the last hydrocarbon from a reservoir, decisions must be made that will determine the recovery ultimately experienced. Decisions include initial field spacing and well orientation, and infill development decisions during primary, secondary recovery, reservoir damage analysis, and ultimately enhanced oil recovery (EOR) processes. DOE-developed simulation software packages are an affordable decision support tool to help make those decisions. This one day course demonstrates how user-friendly versions of two reservoir simulators originally developed by DOE – BOAST and CO2 PROPHET – can be used. Through theory and by example with common development decisions, attendees will learn how to use these tools to solve real problems.

Topics Covered
• Introduction to Benefits of Reservoir Simulations,
• Oilfield Development Strategies – Effects of Spacing, Geology, and Well Geometry,
• Oilfield Development Strategies - Infill Development Decisions During Primary,
• Oilfield Development Strategies- Secondary Recovery,
• Oilfield Production Strategies- Reservoir Damage Condition Monitoring,
• Oilfield Reservoir Management Strategies - EOR (WOR management),
• Oilfield Development Strategies- Special Topics : EOR (Thermal, Chemical, Polymer flooding, ASP or lower concentration flooding, and CO2).

Who Should Attend
Petroleum Engineers, Managers, Geologists, Non-PE Engineers, Personnel with Assignments in Production and Reservoir Engineering, Regulatory Bodies and State Agencies.

Learn/Know After Attending
Be able to know how these simulators work, how to run the models, what their limitations are, and how they could help to understand fluid flow in porous media during primary as well as secondary injection and production. The final outcome is to help individuals become better decision makers.

Instructor
Dr. Mason Medizade, Cal Poly State University in San Luis Obispo, has twenty five years of worldwide experience in the oil and gas industry in reservoir engineering, drilling and completion, EOR and production, and has taught numerous short courses for various clients. He has been involved in
consulting, research and teaching in renewable and non-renewable energy sources since 1984. Dr. Medizade is president and CEO of Petrolects, LLC, a petroleum engineering consulting and training services company focusing in digital oilfields. In a DOE-supported project, Petrolects designed and field tested an innovative flow measuring sensor for pump-off control of rod pumps. Petrolects has since completed field installations targeting challenging high-temperature, heavy-oil reservoirs under steamfloodin in California. Medizade holds Ph. D and M.S. degrees from the University of Southern California in petroleum engineering and a B.S. in chemical engineering from Abadan Institute of Technology, Iran.

LOCATION
National Research Center for Coal and Energy, West Virginia University (Evansdale Campus), Morgantown, WV

REGISTER
Pre-registration is required and will begin now and end September 3rd; no refunds after September 3rd. Please use the registration form below. On-site check in and continental breakfast will begin at 8:00 am.

PDH CREDITS WILL BE GIVEN.

Lodging and Directions:

**NRCCE:** The easiest access to NRCCE is from the Star City/WVU exit off I-79 north of the I-68 interchange. Turn right off the ramp if coming from the south, left if coming from the north. Follow the signs for U.S. 19 south/ Rt. 7 East (Monongahela Blvd./Jerry West Blvd.). Go through 4 lights (the 4th is at the Coliseum). At the 5th light, turn left onto Evansdale Drive. The Creative Arts Center will be on your left. A map of WVU’s Evansdale Campus is attached (see last page) and should help you find your way to the NRCCE building once you turn onto the campus.

**HOTELS:** For workshop attendees who prefer to stay in Morgantown, the following is a list of hotels convenient to NRCCE. The first two are right off Monongahela Blvd./Jerry West Blvd. Directions to the hotels are given from the I-79 Star City exit:

Best Western – 800-528-1234 (turn left at the third traffic light from the Interstate, hotel is immediately on the right) 366 Boyers Ave.
Quality Inn – 304-599-1680 (hotel is just before the WVU Coliseum on the right after the third traffic light) 1400 Saratoga Ave.
Hampton Inn – 304-599-1200 (turn left at the 4th traffic light on Monongahela Blvd onto Patteson Drive; hotel on left immediately after the 3rd light) 1053 VanVoorhis Rd.
Euro-Suites – 304-598-1000 (continue past Hampton Inn to the next light and turn right; the hotel is immediately on the left) 501 Chestnut Ridge Rd./Milan Puskar Blvd.
Hilton Garden – 304-225-9500 (continue past the Euro-Suites; turn right at the 4th light) 105 Suncrest Towne Centre Drive

**PARKING:**

Paid Parking is available in the short-term pay lot next to the WVU Greenhouse (see map; #1). Rate is $1.00 per hour and the machine accepts only $1 bills and coins and does not give change. Therefore, attendees need to arrive early with at least 8 $1 bills in their possession to use this option.

Free Parking is available in the WVU Coliseum parking lots (see map). Attendees may park at the Coliseum and ride the free university shuttle bus to the Mineral and Energy Resources Building and from there walk (5 minutes) over to NRCCE. Attendees also may choose to walk directly from the
Coliseum parking lot to NRCCE. Attendees who choose one of these options should allow an extra 20 minutes to park, catch a bus/walk to NRCCE. Buses depart from the Coliseum Blue Gate every 10 minutes from 7:30 a.m. until 5:00 p.m., and every 15 minutes from 5:00 pm to 10:00 pm.

Access to the NRCCE Building is through the front (first floor) entrance for those who park at the Coliseum and take the short walk from the drop off point, or through the rear (ground floor) entrance for those who park in the pay lot next to the Greenhouse and walk to the NRCCE building. The workshop room will be immediately on the left as one enters the front entrance.

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Registration form - PTTC Workshop
“Life of Field Development Decisions, DOE-Supported Simulation Software as a Decision Support Tool”

NAME: _________________________________________________________________

COMPANY:  ____________________________________________________________

ADDRESS:  _____________________________________________________________

CITY:  _______________________________ STATE: ___ ZIP CODE: ____________

E-MAIL: _______________________________________________________________

PHONE: ___________________________

The registration fee for this workshop is $195. This fee covers the entire workshop, continental breakfast, morning and afternoon breaks and lunch. Please make checks payable to “PTTC” and return with this form to arrive by September 3, 2010 to: Douglas Patchen, P.O. Box 6064, Morgantown, WV 26506-6064.

Registration may be limited. No refunds will be issued after September 3.

A Certificate for six (6) Professional Development Hours will be issued at the end of the day.

For further information contact: Doug Patchen at 304-293-2867, x5443, or Megan Tennant, 304-293-2867, x5446