

LOS ANGELES BASIN GEOLOGICAL SOCIETY MEETING ANNOUNCEMENT

October 24th (Thursday) – 11:30 AM Dr. David Larue

Fluvial Architecture and 4D Saturation Modeling of a Steamflood: Kern River Field, California

Abstract

The Late Miocene Kern River Formation at Kern River Field is a thick succession of braided stream deposits. Because the oil field has been penetrated by more than 21,000 wells with well spacing typically of 2.5 acres, high quality imaging of the reservoir can be accomplished using well logs. The field contains more than 650 observation wells recording temperatures and saturation, such that heating and drainage of the reservoir can be characterized over time. Oil and gas saturations in a 360-acre study area within the Kern River Field were modeled in 3D over time, creating a 4D earth model. Changes in oil volumes in the 4D model match produced volumes, within a 10% error. Next, categorical descriptions of net oil saturation were made (best oil, background oil, partially drained and residual saturations), and temporal evolution of the volumes of the different categories was modeled. By characterizing the reservoir in detail using the well log data to define a reservoir framework and the observation wells to characterize changes over time. significant challenges in steamflood reservoir management can be addressed, including determining which parts of the reservoir are producing the most, and recognition of parts of the reservoir that are not actively draining.

Speaker's Biography

Dr. Dave Larue was a professor for 11 years, and then worked in the oil industry with both Exxon and Chevron for 25 years. He spent 15 years studying reservoirs in the San Joaquin Valley with Chevron, and is now retired. His expertise is in Sequence Stratigraphy and earth modeling.

> Please join the LABGS to see Dr. Larue's presentation!

LABGS Needs HELP

LABGS is losing Wanjiru, our secretary.

AAPG rules do not permit her to be an officer of PSAAPG and an affiliate organization. We could sure use someone stepping up to the plate to fill the secretary position. Please consider becoming involved with your local organization. Meeting Time, Place, Cost, and Reservations

When:

Thursday, October 24, 2019

Meeting Agenda

Lunch Served: 11:30 AM to 11:45PM Announcements: 11:45 AM to 12:00 PM Guest Speaker: 12:00 PM to 12:45 PM Questions/Close: 12:45 PM to 1:00 PM

Place:

The Grand at Willow Street Conference Center

located at 4101 East Willow Street, Long Beach, CA (562-426-0555). Take Lakewood Boulevard south from the San Diego Freeway (I-405), turn west onto Willow Street, and turn right onto Grand Avenue at the sign for the Center. Park for free in the multi-level garage structure.

<u>Cost</u>:

Lunch and Speaker:\$30.00 with reservations\$\$40.00 without reservationsRetired:\$\$25.00Student:\$\$10.00PAYMENTS IN CASH OR CHECK ONLY

Meeting Reservations:

We encourage you to make your reservations using the LABGS web site, at <u>www.labgs.org</u>

Or, call **Wanjiru Njuguna** at (818) 739-9154 or email her at <u>wanjiru.njuguna@gmail.com</u>.

Reservations must be made by: 10:00 AM Tuesday October 22nd

to receive reservations discount price indicated above (this will be strictly adhered to) But, as always, walk-ins are welcome!

OUR WEB SITE ADDRESS: www.labgs.org

LABGS Board

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ANNOUNCEMENTS:

The LABGS has <u>expanded our meeting raffles</u>. We would appreciate raffle prize donations! *Please bring donation items to the next meeting.*

Do you know if your PSAAPG/LABGS membership is current?

If you don't know, and want to, check via the PSAAPG website: http://www.psaapg.info/cloud/miscellaneous/dues.php

Please inform a LABGS Board member if you have a pertinent announcement.