



From Placement to Monitoring of Horizontal Wells

Highly deviated or horizontal wells are becoming a very important part of field development strategies in particular in reservoirs where vertical wells have low productivity; shale gas, water contact proximity, heavy oil, or naturally fractured. Evaluation, placement and monitoring of high angle and horizontal wells remain challenging due to the complexity of the measurements recorded and the inherent challenges posed by targeted reservoirs.

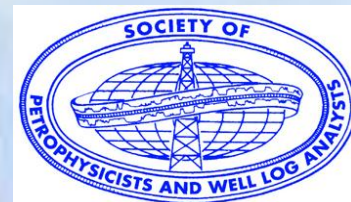
Landing, steering and producing a high angle well requires significant planning, evaluation and monitoring. It involves more than one domain of activities such as geological and geomechanical control, log and reservoir modeling, formation evaluation, production and reservoir monitoring. Advances in mud logging, coring, and logging measurements provide key input to execute and evaluate these wells.

Log evaluation is peculiar in horizontal wells as compared to vertical wells. The measurements are not perpendicular but sub-parallel to the layering, and therefore modeling even the most basic logs is often required to infer petrophysical properties. It forces petrophysicists to go beyond the 1D well-line description of the reservoir, and opens a completely new and exciting way of evaluating formations as it provides an additional dimension to 3D reservoir models.

Topics associated with high angle and horizontal wells include:

- **Geomechanics:** Wellbore stability, placing hydraulic fractures, 3D geomechanics
- **Well placement and geosteering:** mud logging, geochemical characterization, MWD/LWD and seismic guided geological control.
- **Petrophysical evaluation and uncertainty analysis:** Horizontal well core and log analyses in clastics, carbonates, naturally fractured, shale and tight gas, heavy oil reservoirs
- **Completion designs, production and reservoir monitoring:** Petrophysics for designing ICD, production logging and time lapse techniques.

2nd Topical Conference, SPWLA Kuwait October 28 to 31, 2013



Preliminary Agenda (Will be modified based on speakers' submitted talk titles)

Monday, 28th of October

- 9 am to 3 pm Short course (will be specified at later date)
- 7 pm Ice Breaker and registrations - Welcome from SPWLA Kuwait Chapter

Tuesday, 29th of October

- 9:00 am Welcome & Introduction - Opening & Keynote Address
- 9.30 am Morning – Presentation Session
- 12 – 1 pm Prayer and Lunch
- 1 – 2 pm Afternoon – Presentation Session
- 2 pm Breakout Team work session followed by Breakout Team reports
- 4 pm Close

Wednesday, 30th of October

- 9am Morning - Presentation Session
- 12 – 1 pm Prayer and Lunch
- 1 – 2 pm Afternoon – Presentation Session
- 2 pm Breakout Team work session followed by Breakout Team reports
- 4 pm Close
- 7.30 pm Evening Conference Dinner

Thursday, 31th of October

- 9am Morning - Presentation Session
- 12 – 1 pm Prayer and Lunch
- 1 pm Breakout Team work session followed by Breakout Team reports
- 3 pm Conference Closing Remarks

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Technical committee:

Ahmed Abdullatif,
Kuwait Oil Company

Ahmet Aki,
Halliburton

Christophe Darous,
Schlumberger

Doug Murray,
Schlumberger

Satya Perumalla,
Baker Hugues

Warren Fernandes,
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Ercan Ozer,
Core Labs

Khalid Ahmed,
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Mark Steel,
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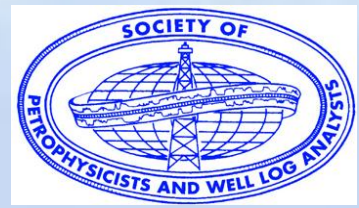
Raghu Ramamoorthy,
Schlumberger

Steve Miller,
Shell

William Bryant,
Kuwait Oil Company



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DISCUSSION GROUPS: Small breakout groups will further discuss the topics presented in the morning and then report back in a plenary session.

COMMERCIALISM is NOT encouraged in speaker presentations in line with the SPWLA mission and conference objectives. Company logos shall be limited to the title slide to indicate affiliations of presenter and others involved in the work.

Abstract have to be sent to:

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SPWLA Topical Conferences are informal, off-the-record discussions focused on a specific area. No papers or abstracts are published.

We seek presentations from people who wish to exchange their experience and ideas.

We welcome diversity of expertise to foster a genuine learning event.