

TIPS

Horizontal Wells

Uses and Abuses

Granger J. Low

Horizontal wells are not always the right answer.

Many companies have used horizontal wells to reduce infill density, increase productivity and improve recovery. Horizontal wells have been a spectacular boon in many circumstances.

However some have drilled horizontal wells into perfectly good reservoirs but have failed to get any production from the new well. A non-productive horizontal well is a huge waste of capital.

Horizontal wells work best:

- In homogeneous reservoirs
- In single-phase reservoirs
- Intersecting natural fractures
- As infill wells

Horizontal wells might not work:

- Drilling through fluid contacts
- Drilling across pool boundaries
- Drilling exploration wells

Where selective water shut offs are required in the horizontal leg

In the right application, horizontal wells can improve productivity by many times. One horizontal well we proposed for a client increased gas production from 900 mcf to 5 mmcf per day.

In the wrong application, horizontal wells can be a waste of money. One horizontal well we reviewed intercepted a gas cap, an oil leg and

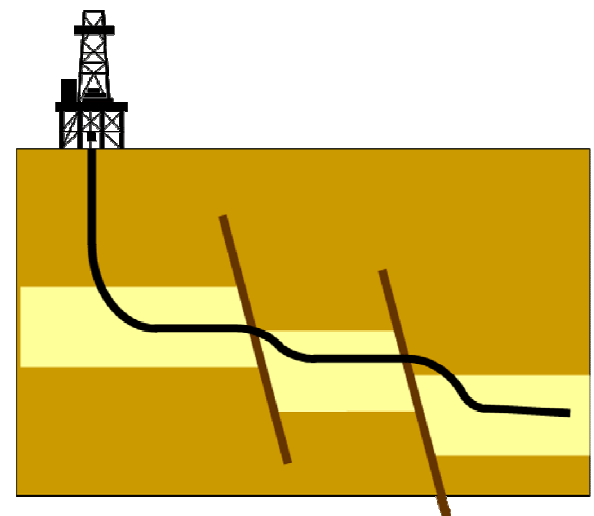


an aquifer. The well only flowed water. One horizontal injector only took fluid in one spot along the horizontal leg.

Pressure regimes and permeability breaks should be thoroughly investigated before drilling a horizontal well.

Know the reservoir surprises before drilling horizontal.

“A non-productive horizontal well is a huge waste of capital”



This Month:

Horizontal Wells

The ins and outs of horizontal well usage

New EUB Leadership

Calgary lawyer is appointed to reign in the EUB

MetroPetro

How to spot a spy

Staff Spotlight

More love for the engineering department



Industry

New EUB Leadership

Bill Tilleman steps up to the plate

The EUB is in trouble due to several incidents of spying on land ownership meetings. In an effort to set things right, management has been rearranged, and one Dr. William Tilleman has been newly appointed as chairman of the EUB.



Dr. Tilleman practices environmental law, and has worked to represent individuals, industry, and government. He served as the Chair of the Environmental Appeals Board from its inception in 1993 to 2004 when he took a temporary position as Vice-Chair until he was reappointed as the Chair of the Environmental Appeals Board.

Dr. Tilleman also lectures at the University of Calgary and edited

the second edition of The Dictionary of Environmental Law and Science.

With his experience and expertise, the Alberta Government hopes to reestablish the lost trust due to the recent spying scandals.

Company News

The Newest Addition to Our Engineering Team

Proven Reserves is pleased to announce Maria Tjoa as our newest engineer in training.

Maria decided to return to Canada and pursue a career as a reservoir engineer.

Originally from Brazil, Maria came to Canada to study electrical engineering and computers at Dalhousie University in Halifax. Upon graduation, she returned to Brazil and worked for a year as a Wireline field engineer. There she worked mostly with open hole evaluation with both onshore and offshore environments.

Maria says that her goal is to maintain a steady learning curve to increase her understanding of reservoir dynamics and provide excellent service to her clients.

In her spare time, Maria enjoys playing tennis, running, and swimming (weather permitting, of course).

Welcome Maria!



Upcoming Events

SPE Technical Luncheon
Steam Injection in Fractured Carbonate Reservoirs
Oct. 16, 2007
Calgary, Alberta
www.speca.ca

CWLS Technical Luncheon
Low-field Nuclear Magnetic Resonance
Oct. 22, 2007
Calgary, Alberta
www.cwls.org

SPE Continuing Education
Modern Production Decline Analysis
Oct. 22-23, 2007
Calgary, Alberta
www.speca.ca/education

