

Reservoir Engineering

TIPS

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This Month

Waterflood Patterns

Getting more from your existing wells with water

MetroPetro

Is your summer vacation affecting your work?

Industry News

Why the newly approved Canada-US pipeline is big news

Company News

Meeting the new programmer

Adding Water Flood Value

Looking for Infills and Upside in Old Water Floods

Kathryn Tingle

In today's high oil price environment, companies are looking to older oil pools for increase value.

Oil and gas production has been a major part of Alberta's economy for over 60 years. Because of this, and the fact it is in an older sedimentary basin new pool discoveries are less and less every year.

Proven Reserves has experience assisting our clients to improve oil recovery in older water flooded pools.

Often Proven uses an "Upside Report", in which we review our client's pool and well files looking for data to help determine upside for a pool and estimate untapped reserve value.



Through careful review, older wells can benefit from increased recovery

Upside reports accomplishes three things. It helps Proven learn about the pool quickly. It reduces the need for our client to provide support. Finally, it allows us to see opportunities to add value with our own unique perspective.

When looking at an older pool there are many areas we review.

We review the production and pressures maintenance depletion trend in the oil pool. By doing a quick pressure history in the pool we can learn how the pool has performed under a water flood scheme.

We look to see if pressure is being maintained throughout the pool, or in smaller areas only. This helps, in part, find areas where additional

injection may be required. In areas where the pressure is maintained, there can be either good water support from existing injection, or poor drainage due to low porosity or permeability.

Using this information, in conjunction with other data, Proven can suggest areas to increase, or remove injection. Pressure studies also help in choosing infill locations.

Proven also reviews the existing flood patterns and water flood performance. Sweep diagrams are a basic way to analyze what the water flood pattern currently is, and find areas that have not been swept by water. Infills can be proposed for unswept areas to recover additional oil. Injector conversions are proposed to improve sweep.

Proven Reserves

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The American Oil Dilemma

And Where Does Canada Fit?

The United States, our neighbor to the South, consumes over 22% of the world's petroleum output. In recent years, oil discoveries within the US have slowed, and analysts have predicted that by 2012, the country would not be able to support the vast majority of its own petroleum usage with domestic production.



However, a recent agreement has been reached between Canada and the States to build a pipeline between Alberta's oil sands—the second largest deposit of crude oil in the world—and the heart of the US' refinery industry.

This agreement, though initially thought to fall through due to President Barack Obama's 'Buy America' plan, will ensure a much more stable oil supply future for the US, and will continue to push the development of the Alberta Oil Sands ahead.

Company News

New Programmer Joins Proven

Proven Reserves is pleased to announce the appointment of Gavin Low as an Information Technologist.

Gavin recently graduated with his CIT certificate from Lethbridge College, having received training computer technology field programming, network, and computer maintenance. He is planning on pursuing a

degree in electrical engineering.

Gavin was born in High Level,



Alberta, but was raised here in Calgary.

He enjoys programming, drawing and other creative projects, gaming and video game collecting, and spending time with friends.

Gavin hopes to enhance his computer programming skills and networking abilities while at Proven, and says he wants to "expand my knowledge and experience to not only better myself but to become more

of an asset to those I work with."

Welcome, Gavin!



Upcoming Events

APEGGA Annual Golf Tournament Calgary Branch

September 10, 2009 Calgary, Alberta www.apegga.org

Technical Luncheon Enabling Global Innovation in E&P

September 15, 2009 Calgary, Alberta www.speca.ca

Techincal Luncheon Global Leadership & Best Practices in Mass Transit Solutions

September 17, 2009 Calgary, Alberta www.apegga.org

