



This Month

Regulators Prefer Waterfloods

Why using your produced water to flood will benefit you even more

MetroPetro

Is everything old about to be new again?

Industry News

The airship and its proposed impact on arctic recovery

Company News

The technical sales team gets outdoorsy

Regulators Prefer Floods

Water Disposal Not Encouraged

Granger J. Low

To flood or not to flood; is that the question?

Often engineers ask us: Why should we flood when we can dispose of water instead?

Getting regulatory approval in Canada to dispose produced water into a producing zone is difficult. Since regulators set very few re-

strictions on disposal rates, they are concerned that the reservoir receiving disposal water will not be carefully managed to maximize oil and gas recovery.

On the other hand, regulators believe that flooding maintains pool pressure, improves sweep and recovery.

Therefore regulators prefer a flood because they know that if you flood a pool, they can increase the government's share of future reserves.

Regulators are very interested in good management of a flood. After flood approval, they will track the pool voidage replacement and pool pressure to ensure it meets their requirements. If you stray from the conditions they impose, they will enforce measures to compel you back into compliance.



"Regulators believe that flooding improves sweep and recovery."

Hence the proverb of disposal approval: If you don't want to deal with regulatory restriction, inject into a non-producing zone.

Over the last few months the ERCB in Alberta has processed and approved disposal applications in about 4 months – on average one month longer than they take to approve water floods.

Disposing water in does not require finding make-up water. Make-up water is always necessary to maintain full voidage replacement. For a flood, a compatible source of make-up water must be found.

Regulators like to see a water flood application that commits to replacing full voidage. They are concerned that injecting less will compromise recovery. They worry that injecting more will cause early breakthrough and zone over-pressuring.



Zeppelins to Transport Arctic Oil? Airship Technology Could Revolutionize Arctic Resources

The Canadian Arctic, besides being very cold, is rich with petroleum deposits. Currently, these resources are being transported via trucking routes, but such routes are limited and dangerous.

As an alternative method, several companies – including Calgary-based SkyHook – are looking to airship technology for shipping, and are in the midst of developing zeppelins capable of transporting 80,000 lbs (more than 36,000 kg) over 200 miles (~322 km).

13 of these companies looking into airship solutions are meeting in Calgary in mid-October for the Airships to the Arctic 5th annual symposium.

Whether or not airships are the right solution for arctic resource



transportation or not remains to be seen, but SkyHook is estimating that their ships may be in the air as early as 2014.

Company News Technical Sales Grows Again

Proven Reserves is pleased to announce the appointment of Sonia Kohli to our Technical Sales Team as a Business Development Engineer.



Sonia was born and raised in Abu Dhabi, UAE, but moved to Calgary in 2003 and attended the University of Calgary. She graduated in Mechanical Engineering, and has worked for Flextronics in their manufacturing department.

Sonia describes herself as an

“outdoors person,” and enjoys hiking, camping, water sports, and Desert Safaris back in the UAE. She also enjoys road trips, dancing, and huge family get-togethers.

Sonia says she hopes to have a houseboat for her and her family to enjoy by the

time she is 32. As for work-related goals, Sonia wants to be “someone respectable and who has carved a niche for herself,” and plans to continue to grow in her career.

Welcome, Sonia!

MetroPetro



Zeppelins: Almost Useful Again

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Upcoming Events

Conference
Engineering Sustainable Oil
Sands Development
October 5-7, 2009
Banff, Alberta
www.cspg.org

Technical Luncheon
An Unconventional
Approach to
Unconventional Reservoirs
October 13, 2009
Calgary, Alberta
www.cwls.org

Technical Luncheon
Evolution of Alberta's In-Situ
Heavy Oil & Oil Sand
Development
October 22, 2009
Calgary, Alberta
www.apegga.org

