

# TIPS

## This Month:

### CBM Porosity

A look at the different types of porosity, and what they mean for your flow rate

### GAS BUFFER REVISION

The gas buffers in Alberta have changed, and may affect you

### MetroPetro

The Conservatives are on the hunt to make Alberta green

### GO Expo '07

What it is, when and where it will be, and more great reasons from Proven to attend

### Presidential Spotlight

Profile on the President of Proven Reserves

## CBM Porosity Explored

Where the gas is stored and where it flows

Granger J. Low

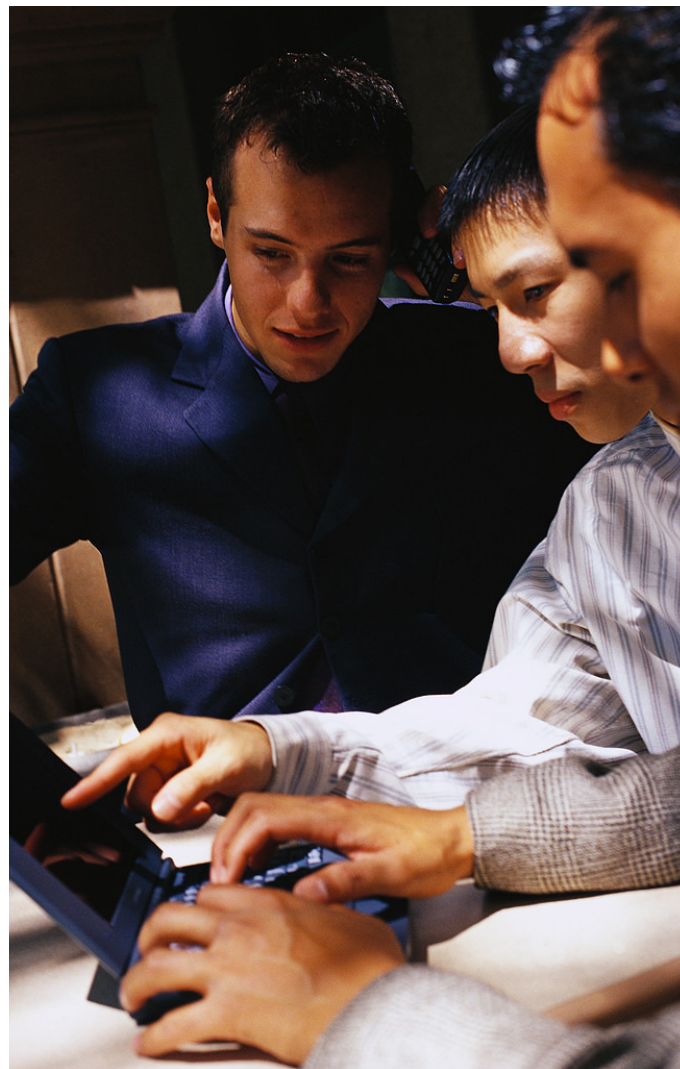
In CBM (coal bed methane) reservoirs gas is stored in several spaces including microporosity, mesoporosity, natural fracture porosity, induced fracture porosity and the well bore. Different flow characteristics control the flow rate in each type of porosity.

Most operators hydraulically fracture their CBM wells upon completion. This efficiently connects the coal cleats with well bores. Gas charged induced fractures flow more freely than the other types of porosity. Successful fracture apertures can be measured in centimeters.

**“Different flow characteristics control the flow rate in each type of porosity”**

Some free gas is stored in coal natural fractures. In coal, these fractures are called cleats. Cleats usually contain water as well except in the shallow coals of the Edmonton and Belly River formations of Alberta. Natural fracture pore throats can be measured in millimeters.

Mesoporosity is measured in nanometers. As the pressure and gas concentration drops in the rest of the system, gas desorbs from the coal and flows through



**Understanding CBM porosity can lead to more successful and profitable recovery**

the mesoporosity. Diffusion is the main controlling flow mechanism in mesoporosity.

Microporosity holds most of the natural

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Industry News

# Proven at GO Expo 2007

More great reasons to visit the GO Expo this year

June is upon us, and with it, the annual Gas & Oil Expo (GO Expo). This year promises to be the biggest GO Expo yet, with new workshops, conferences, and seminars, and, of course, networking opportunities around every corner.

We at Proven Reserves will also be at the expo, at booth 1373, to answer any questions any clients or interested parties may have regarding our services, or how you can add value to your reservoir engineering projects. In addition, we will also have set up a mini-golf course and a chance to win one of three dinners for two at the Cactus Club.



GO Expo 2007 will take place from June 12-14 on the Calgary Stampede Grounds. But hurry, online registration closes on June 8, 2007.

Get more info on the expo and the goings-on there at [www.petroleumshow.com/goexpo/](http://www.petroleumshow.com/goexpo/) or send an e-mail to our sales department ([karen.gowans@provenreserves.com](mailto:karen.gowans@provenreserves.com)).

Hope to see you there!

Tips & Tricks

## GAS BUFFERS REVISED

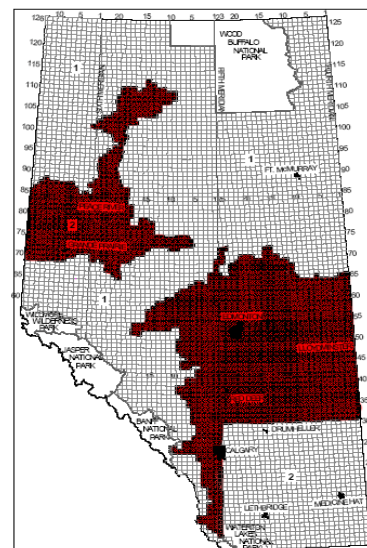
New policies affect portion of area 2

within new gas holding applications (or the amendment of existing spacing unit orders). This applies to the portion of Area 2 not covered by the fall 2006 gas spacing revision (see attached map).

The EUB is requesting a South by West buffer configuration for this area. For most instances, the standard 300 meters from the boundary will apply, however this may vary depending on individual application circumstances. EUB Board Order SU 1088 may be referenced for the basis of a South by West buffer configuration

In the fall of 2006, the EUB revised oil and gas spacing regulations for the area south of Township 53, all of the 4th meridian. For gas, the revised

buffer is 300 meters on the South and West boundaries of the drill spacing unit (“DSU”).



Affected areas of the fall 2006 revision



The newly revised buffers could affect your area of interest

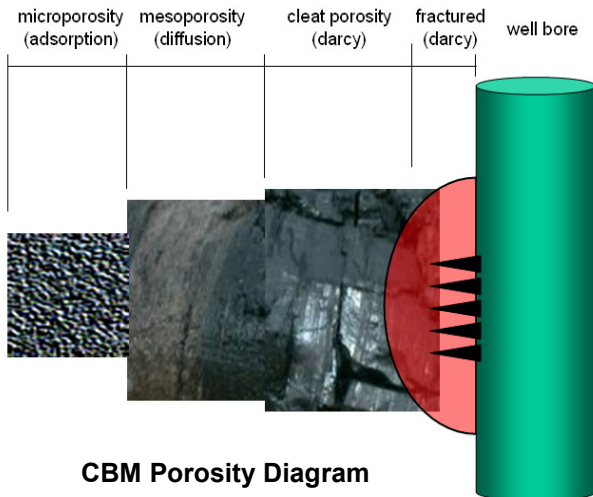
Bill Winnick

Recently, the EUB requested a revision for the buffer configuration

### CBM Porosity

(continued from page 1)

gas in coal. Pore throats at the micro level are also measured in nano-meters. At this level, gas is adsorbed on to the coal. Pressure decreases cause the gas to desorb from the coal. Gas flow rate in this porosity is controlled by the sorption rate from the coal.



CBM Porosity Diagram



click for larger image

## Company News

### Spotlight on Proven President, Granger Low



Granger J. Low is the president of Proven Reserves and principal engineer.

Granger was born and raised here in Calgary. He has a bachelor and master degree from the

University of Calgary in petroleum engineering, and, in his 24 years working in the oil & gas industry, has worked all over the Western Canada Sedimentary Basin. At the beginning of his career, he worked four years in the field in Rainbow Lake. His work specialties include pressure transient analysis, reservoir exploitation, and petroleum economics.

Granger enjoys serving in the community when he's not at work. He has served as the CEO of a local charity, and is currently a scout leader with Scouts Canada. He also is training in karate.

### Upcoming Events

**GO Expo 2007**  
June 10-12, 2007  
Calgary, Alberta  
[www.petroleumshow.com](http://www.petroleumshow.com)

**Young Professionals' Workshop**  
June 18-19, 2007  
Calgary, Alberta  
[www.speca.ca](http://www.speca.ca)

**Technical Luncheon**  
June 25, 2007  
Calgary, Alberta  
[www.speca.ca/events](http://www.speca.ca/events)

