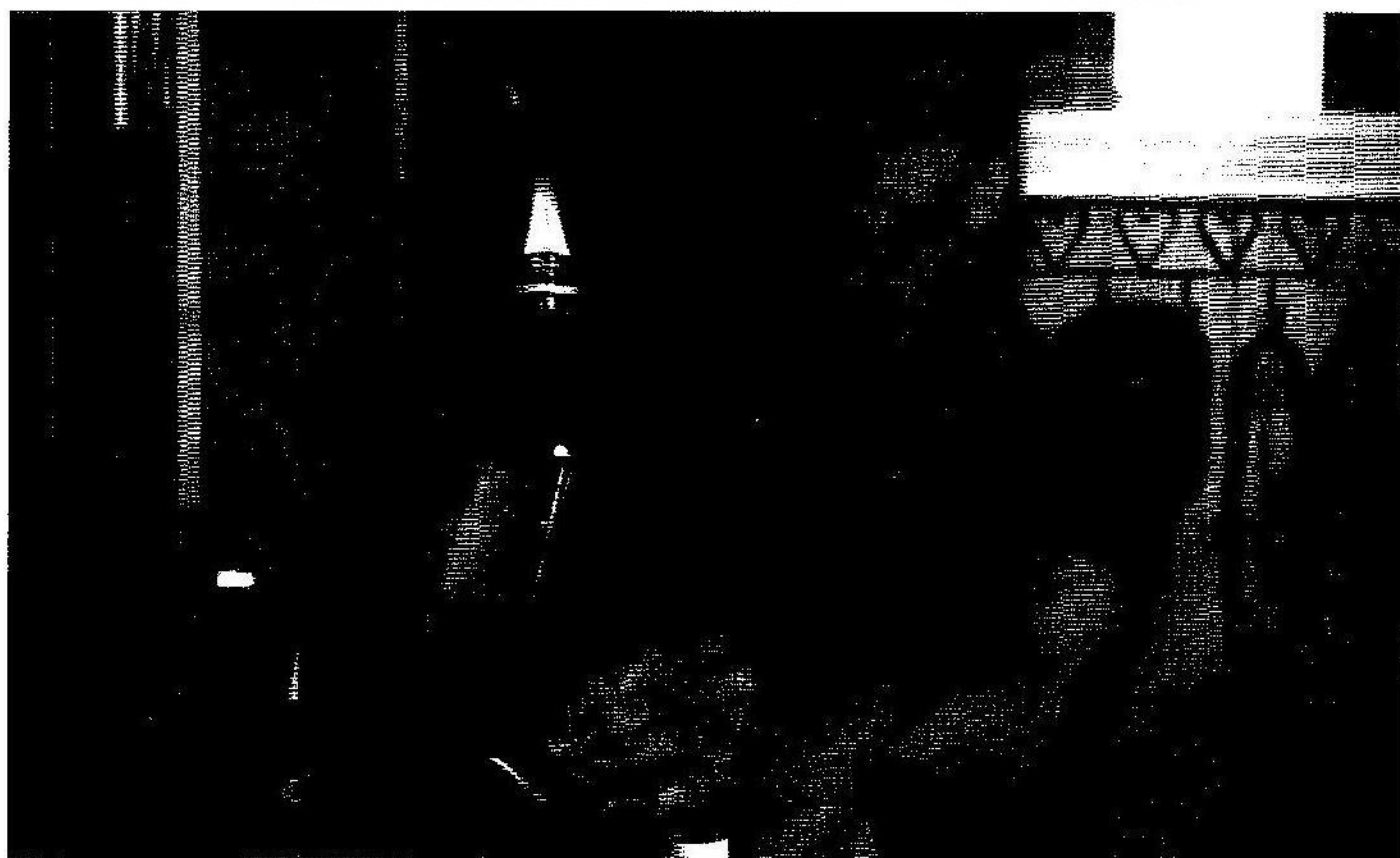


INFLAMING A CON

ALBERTA LANDOWNERS CLAIM COAL-BED METHANE DRILLING CONTAMINATES THEIR WATER. OR ARE THEY JUST REVIVING OLD RIVALRIES BETWEEN FARMERS AND INDUSTRY? ■ BY CYRIL DOLL



Jessica Ernst of Rosebud, Alta., sets her tap water alight. She claims her well is contaminated by methane from nearby CBM drilling sites

Sure Alberta is awash with oil and gas, but pulling the valuable resources out of the ground doesn't make every Albertan grin from ear to ear. In fact, you'd have to be pretty cheesed—as 120 landowners apparently were—to give up watching your province's own Edmonton Oilers battle out game two of the Stanley Cup finals to attend a government-sponsored symposium on the safety of coal-bed methane. At a spartan community hall in Trochu, Alta., farmers let their emotions do the talking as they heatedly challenged officials from the government and the energy industry, who were trying calmly to reassure the audience that there was virtually no danger to their well water as a result of nearby coal-bed methane drilling. But locals weren't buying it. "Just because you have

distinctions at the end of your name doesn't mean nothing," shouted one farmer at the panel—which included members of the Farmers' Advocate, Alberta's Energy and Utilities Board, the Canadian Society for Unconventional Gas, and Alberta Environment—before storming out to audience cheers.

Landowners insist that they're the sacrificial lamb on Alberta's holy altar to oil and gas—and the billions in revenues it brings the province. As energy firms tap methane deposits attached to coal seams thousands of metres below the surface, using shockwaves (known as fracing, pronounced "fracking"), rural dwellers say that, at the same time, the methane is vibrating its way into their groundwater. Ever since the coal-bed methane industry took off in 2003, at least three Albertans

CONFLICT

have reported being able to light their well water on fire, due to high gas concentrations. As CBM work expands across the province—in 2004 there were only 800 CBM wells; today more than 6,000 have been drilled—country residents fear the problem is only going to get worse. “I started to notice my water change,” says Jessica Ernst, an environmental consultant from Rosebud, Alta. “First I was getting a lot of pulverized coal, powders and bits in my water after area fracing. Not only would I light my water on fire, but it would explode.” She pins the blame on Calgary-based energy giant Encana Corp., which owns most of the methane wells in her area.

Ernst claims there are at least 20 water wells around Rosebud that have been contaminated by Encana’s drilling. Nearly 113 miles away, around the Albertan town of Wetaskawin, residents are making similar claims. In both places, they say their water was clean before the gas companies came along.

That’s too bad for the 20 or so Albertans lodging these complaints, say industry officials, but there are hundreds of methane wells currently active in the province, and the overwhelming majority have caused no problems for nearby residents. “Here are the facts: we’ve drilled over 6,000 coal-bed methane wells in Alberta and there have been two or three cases reported of water-well contamination,” notes Mike Dawson, president of the industry group, the Canadian Society for Unconventional Gas. “And from that, the media and others are drawing a link between coal-bed methane wells and in the proximal area water-well damage.”

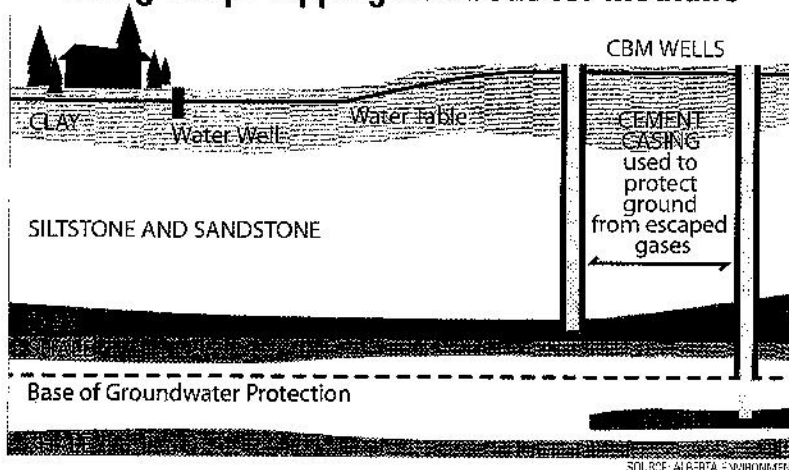
Perhaps some misunderstanding about coal-bed methane stems is predictable, since it’s a fairly new technology. The U.S. began to experiment with CBM drilling in the early 1980s, but it didn’t take root in Alberta in any meaningful way until 20 years later, as conventional gas extraction peaked, and energy producers began looking at unconventional resources. As big as it is already, CBM drilling shows astonishing potential for much larger growth. Actually, CBM is often called the oilsands of gas, since, unlike conventional natural gas, which is easily extracted from porous rock formations, CBM is abundant, but difficult to sequester. Last year, the Canadian Gas Potential Committee released a report estimating that Alberta is sitting on anywhere from 150 trillion to 500 trillion cubic feet of coal-bed methane reserves, compared to 223 trillion cubic feet of conventional natural gas estimated by the National Energy Board and the Alberta Energy and Utilities Board. By 2005, the unconventional gas society

believes CBM will make up 80 per cent of all drilling activity in Canada and account for 50 per cent of total gas production.

But while the industry may be booming, the Alberta Energy and Utilities Board, which regulates energy production, insists the growth is being carefully controlled for safety. Among other things, the EUB mandates that any well casings that cross aquifers must be insulated with cement, that toxic drilling fluids are not allowed below the base of groundwater protection, and any saline water extracted from the drilling process—which has the potential to sterilize the earth—must be buried in deep underground reservoirs (in the U.S., producers used to dump the salt water into open pits). “The EUB will not approve an application [for CBM drilling] unless we’re 100 per cent sure that groundwater will be protected,” says Leo Touchette, team leader for the EUB’s public safety/field surveillance branch in Red Deer, Alta.

But even without the EUB’s requirements, the fact is that many drilling companies, no doubt anticipating the headaches that conflicts with landowners often bring, have been implementing their own rigorous standards for drilling. Encana claims it’s been testing water wells

Going deep: Tapping coalbeds for methane



for a radius of 400 metres around all of their CBM operations since 2003; the EUB didn’t start requiring companies do that until May of this year, though the regulator requires all wells within a 600-metre radius get tested. Scott Ranson, manager of public affairs for Encana, says it’s in his company’s interest to know what effects CBM drilling has on the surrounding area, though he doesn’t say so, the fact that a billion-dollar oil firm like Encana probably looks like a juicy target to those who think a little bad publicity, or even a lawsuit, can win them an easy million-dollar settlement. (One of Encana’s predecessor firms, Alberta Energy Co., was also frequently the target of oilpatch vandalism by disgruntled landowners.) “It’s smart for us because we want to be able to tell if our operations have caused [harm] and we also need to be able to tell if they haven’t,” says Ranson.

There has been plenty of bad publicity. In March, the headline of an *Edmonton Journal* story warned "Beware coal bed methane," while a December *Calgary Herald* item reported the story about the "taps of fire." Naturally, TV newscasts have lapped up the footage of drinking water set aflame. But

the fear-mongering may be misplaced: Alberta's environment ministry maintains that methane is non-toxic and isn't poisonous when it's dissolved in water. It's non-explosive, and it can't burn your skin. CBM may not even be the reason for the supposedly flammable tap water at all. "Groundwater containing gases is very common," notes Walter Ceroici, head of the science and innovation section of Alberta Environment's

environmental policy branch. "These gases can contain methane, carbon dioxide, oxygen and nitrogen." Ceroici says he encountered flammable tap water before CBM fracing was common in Alberta.

Still, there's a long history of tension between industry and rural landowners—who usually aren't too fond of watching strangers tearing across their private property on ATVs or Hummers to get to drill sites. Unfortunately for farmers and ranchers, that's life in Alberta, where land ownership means the right to work the surface of the land, but where what's underneath it is a different matter. Provincial law treats mineral rights as an entirely separate entity, and makes all landowner rights subject to the equally valid rights of those who own the deed to the oil and rocks below the surface. Even if property owners don't want wells and pump jacks on their land, Alberta's surface-rights board can and will force them to allow mineral rights owners on their land, though they are entitled to some moderate compensation (usually a couple of hundred dollars a month). "It's a very touchy issue," says Tom Nahirniak, executive secretary with the Alberta Surface Rights Federation. But in the end, he says, "the industry pretty much gets what they want."

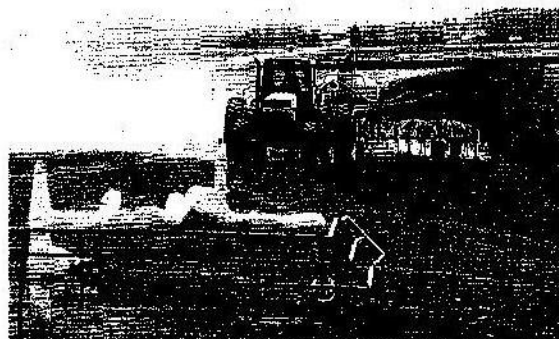
Over 600,000 Albertans count on groundwater as their primary source of water. And with many rural folks already certain they're getting the short end of the stick, tales of contaminated and useless wells and flammable tap water only chafe all the more.

Energy firms are keenly aware of how ugly these conflicts can get. Everyone in the industry recalls the horrible incident in 1998, when oil executive Patrick Kent was shot to death by Wayne Roberts, while Kent, a father of four, was supervising a well cleanup on Roberts' Bowden, Alta., cattle ranch. And they remember WeiBo Ludwig, who bombed an oil service road that same year, claiming the industry, which he called wolves, had polluted his air and land. (Ludwig, too, would eventually go on to kill—shooting at a pickup truck that had ventured on to his land, but was full of joyriding teens, not oil executives. His victim was a 16-year-old girl.)

The challenge for industry is convincing landowners that oil and agriculture can co-exist peacefully, says Glynn Davis, manager of community engagement for Trident Exploration Corp., a Calgary-based CBM production company. "We may have to agree to disagree at times," Davis says, but adds the key to getting along is when both sides are convinced that government is a fair dealer when it comes to balancing the interests of citizens and business. "What every Albertan should want is a reliable commitment that government is looking after the public good."

The meeting in Trochu was the first of 13 the provincial government has planned for across the province to put landowner concerns about CBM to rest. Judging by the hostile response at the initial forum, they don't stand much of a chance. And the argument that a handful of complaints amongst thousands of CBM sites hasn't eased the mind of Ernst, who says she's been trucking in water from Drumheller, Alta., since she refuses to drink her well water. She believes that there are more contaminated wells in the province, but landowners aren't speaking up. "I think some if it is a matter of people not knowing," she says, though she also claims that the oil industry is "buying people out" and making them sign confidentiality agreements to cover up the problem.

And yet there's no evidence that Ernst's claim against Encana's CBM drilling has any basis. She's refused to allow Encana to test her well, so earlier this year, Encana hired an Australian environmental firm, Worley Parson Komex, to test Ernst's neighbour's well, and the results, says Ranson, exonerate his firm. The tests found that gas concentrations in the well were nearly the same as results "obtained in 1983, 2003, and 2004," according to Worley Parson Komex's final report, released in March. But the tests did bring up other problems with the water that weren't related to methane: "The Laurisden Well and water distribution system should be treated for biofouling," it said, referring to a common accumulation of bacteria in the water. Unlike Ernst's claims against Encana, the report wasn't picked up by Alberta's newspapers or evening newscasts. But who wants to read a 70-page report, when there's footage of flaming tap water to shoot? ■



EVERYONE IN THE INDUSTRY RECALLS HOW OIL EXECUTIVE PATRICK KENT WAS SHOT TO DEATH BY FARMER WAYNE ROBERTS