

## The New Gold Rush

Fracturing rocks in the Appalachian Basin with Thomas West

**"I don't think anyone could have predicted the size of Marcellus Shale,"** says Thomas West, referring to a large reserve of natural gas discovered in the Appalachian Basin. The natural gas is trapped in the pores of the thick black rock 5,000 to 8,000 feet below the surface of the earth. It's not a complete surprise that there is natural gas down there; what is surprising however, is just how much there might be. According to Penn State geoscience professor Terry Engelder, it's estimated that 363 trillion cubic feet of natural gas could be recovered from the shale.

West works for the gas companies that are trying to negotiate with private landowners who live on the land above the shale. West doesn't personally handle the negotiations. "[Landmen] typically meet the landowners at their houses to discuss leasing the mineral interests," West says. He comes in to assist the companies with their leasing drafts and, if necessary, litigate if landowners change their minds and break their leases.

Aside from fieldwork, getting to the natural gas involves legislative, regulatory and litigation expertise. And West began staking his claim in that territory in the 1980s, even before he worked at LeBoeuf Lamb. In 2006, West says he was content to take his two niches and combine them into something smaller—The West Firm. "Five years ago I had a practice that was 90 percent environmental and 10 percent natural gas. Now we're in the midst of having these two aspects really merge together and I'm having a lot of fun doing it," West says. He points out that there aren't many firms that can deal with this full spectrum. "We've adopted a total-service approach. Not a lot of firms have experience with this, which makes us the go-to firm in the state."

In addition to potential legislative snags and contract-breaking landowners, the biggest barrier to the natural gas is the shale



West with one of the massive natural gas drill rigs.

itself. Not only is it necessary to drill vertically into the earth like a regular oil well, the drilling then has to—up to 8,000 feet below the surface—go horizontal. It's a more efficient tactic, allowing the company to collect natural gas from multiple underground reserves from one central well rather than from multiple surface wells. (Think of the "I drink your milkshake" scene from the movie *There Will Be Blood*.)

The process of fracturing the shale is called hydrofracing or hydraulic fracturing. This method uses sand, a colossal amount of water and various chemicals to fracture and lubricate the shale so the natural gas can be collected. This is where West's permit and legislative experience comes in. "The primary purpose of an oil and gas lease is to negotiate the business terms and not environmental terms," West says. So while he does not negotiate environmental deals with landowners themselves—that's part of the landmen's

job—West does pave the way for those negotiations by working with the legislature to update old policies in relation to new drilling technology. Also, because of the chemicals and the amount of water needed for hydrofracing, the New York State Department of Environmental Conservation required an Environmental Impact Statement before allowing any drilling. Plus, the Susquehanna River Basin Commission and the Delaware River Basin Commission got involved too.

Despite all of the environmental concerns, West says the industry is improving the lives of people in the area. "The sweet spot [for the gas reserves] is in areas of the Northeast, an area that is challenged economically. We've delivered checks in excess of a million dollars," West says. "[Some] people go from having trouble paying their real estate taxes to needing tax advisers."

—Courtney Mault