Drilling for Gas in Affluent Neighborhood



Geologist Tom Wood oversees drilling using hydraulic fracturing technique.

Nov. 19, 2010 6:42 a.m.

By Dan O'Brien

CANFIELD, Ohio -- The houses in the quiet, affluent neighborhood along Pebble Beach Court near Tippecanoe Country Club range between \$200,000 and \$500,000 -- hardly a place you'd expect to find handfuls of workers standing in mud, drilling for oil and natural gas.

This residential area -- and others like it around the state -- are prime areas to drill, say industry specialists who spent much of Wednesday morning using a technique called hydraulic fracturing to tap into a reserve of natural gas here.

"It's integral to drilling into Clinton sandstone," relates Tom Wood, a geologist and principal of Frontier Resources Inc., Cuyahoga Falls. "Without hydraulic fracturing, you can't drill in this formation."

Wood is the acting consultant on a project spearheaded by Everflow Eastern Inc., Canfield, that calls for drilling into the Clinton formation, a tightly packed layer of sandstone found throughout this area. It contains repositories of natural gas 4,000 feet below the surface of the earth.

Hydraulic fracturing -- commonly known as "fracking" -- uses high a concentration of water and sand to break open tightly pressed rock formations beneath the surface of the earth.

Large energy companies have descended on parts of Pennsylvania, Ohio and West Virginia to explore for gas, particularly in the Marcellus Shale, a large rock formation that may contain as much as 500 trillion cubic feet.

New technology has enabled these companies to use fracking and horizontal drilling to extract these reserves.

But the process has come under fire in areas of southwestern and north central Pennsylvania, where some residents have charged that fracking has led to contamination of the well water there.

"I've been a consulting geologist for 33 years," Wood says. "I've drilled 2,300 wells and fracked 1,300 and we have never damaged any water wells through any hydraulic fracturing that I've been involved with."

The project on Pebble Beach took roughly four hours to complete, Wood said, but nearly 11 years to clear the venture with all the landowners, neighbors and stakeholders in the community."We wouldn't be drilling if we didn't have the support of the neighbors," he stated.

In this case, Wood said, 113,700 gallons of water and 77,500 pounds of sand at the site were pumped at a surface pressure of 2,013 pounds through four pump trucks. A large service rig stabilized the small wellhead as workers drilled.

Nevertheless, organizations such as Neogap, the Northeast Ohio Gas Accountability Project, have launched initiatives calling into question the use of fracking in oil and gas exploration.

The group's Web site includes resources pointing to the possible environmental hazards of fracking, such as a State University of New York at Buffalo study that found the process could unearth uranium naturally trapped inside the Marcellus.

And, just this week, Pittsburgh City Council voted unanimously to prohibit oil and gas drilling within city limits.

The state of New York has imposed a temporary moratorium on hydraulic fracturing. A similar measure would destroy the industry in Ohio, leading to widespread job loss, Wood said.

"If we couldn't use hydraulic fracturing, we'd be out of business," he said.

Rhonda Reda, executive director of Ohio Energy Proud, an outreach program designed to educate the public about the oil and gas industry, said that 1.1 million gas wells were drilled without incident over the last 60 years using hydraulic fracturing.

"What we need to do is to start informing the public," she said. "There's a lot of misinformation out there."

Wood said the Pebble Beach project is 10 times smaller than those in operation in the Marcellus, noting there are hundreds of gas wells in Mahoning County that operate safely every day.

The Pebble Beach well should produce about 200,000 to 250,000 million cubic feet of natural gas throughout its lifetime, which could be 20 years, Wood added.

Come spring, Wood said, there should be very little evidence that a well is operating at this site. Natural landscaping such as bushes and trees are often used to cloak the well, or sometimes they are enclosed with decorative fencing.

"I'm confident that we frack these wells safely," he said. "It's a safe, regulated process that I'm very comfortable with."

Copyright 2010 The Business Journal, Youngstown, Ohio.