

## Local News

> News > **Local News**

Print this Page

[«--back to story](#)

### Industry looks for more than sites to drill on

By BOB ROLLEY - [brolley@lockhaven.com](mailto:brolley@lockhaven.com)

POSTED: April 2, 2010

LOCK HAVEN - Drive the highways and back roads of central Pennsylvania and it becomes abundantly clear the Marcellus Shale natural gas play is intensifying.

The industry isn't just looking for land on which to drill, but to park trucks, tank trailers, pipe - miles and miles of pipe - compressors and equipment, for office space, to treat water, to draw water.

They're looking for housing for employees, boosting occupancy rates at select area hotels and motels in the region ... the list goes on.

To drill and extract the gas from the shale 5,000 to 8,000 feet deep in the earth, they need sand and water - a very great deal of water - and their plans to use area streams and the Susquehanna River create challenges for local governments to balance progress with safety, serenity and conservation.

Drilling has been going on in earnest for some time in northeastern Pennsylvania.

Now it is central Pennsylvania's turn.

Investment to find clean natural gas is well under way and only will ramp up this year, according to industry officials.

Companies are pouring millions of dollars into the "play," as they call it.

Houston, Texas-based Anadarko Petroleum Corp. is a primary player in Clinton County. That company had invested an estimated \$340 million through January in the entire Marcellus Shale region, individually and in partnership with Chesapeake Energy Corp., and including operated and nonoperated sites.

Part of that is the roughly \$52 million paid to Pennsylvania to lease state forest land for drilling. The firm has 250,000 net acres under lease in Pennsylvania.

"This is significant. We're one of several operators that are ramping up activities," M. Chris Doyle, general manager, Appalachian Basin, for Anadarko, said recently from the company's Williamsport office. "That is sizeable, and it's extremely exciting for us and the Commonwealth."

Pennsylvania College of Technology's Marcellus Shale Education and Training Center did an analysis of public statements from energy companies with operations in this area. That study suggests the number of wells drilled regionally could increase from 21 in 2008 and 26-plus wells in 2009 to 48 wells in 2010.

Principal energy companies operating in this region include Anadarko, Exco North Coast Energy, Chief Oil and Gas, Chesapeake Energy, Rex Energy and Range Resources.

To get an idea of the scope of just Anadarko's ambitions in the Marcellus Shale, the company's CEO, Jim Hackett, recently said the company anticipates "drilling more than 4,500 wells over the coming years."

Putting that in perspective, Doyle said that number represents the firm's full partnership with Chesapeake "over the entire expanse of its Marcellus Shale leases.

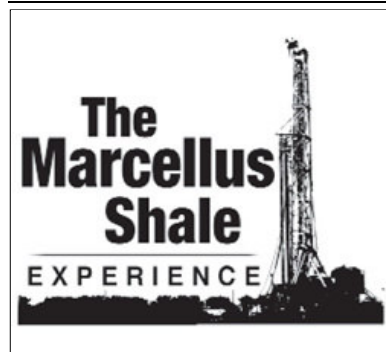
"That's 15 to 20 years in the making ... spread out over decades of activity," he said. "That would require virtually every single acre and it's definitely the high end. And in order to even approach that number, we need to work with all of the stakeholders."

Those 4,500 wells come at about four to six per four-acre pad based on the hydro-fracturing technology companies are employing - and because of the mountainous terrain here. That minimizes the environmental footprint, Doyle said.

In simple terms, the wells are drilled vertically, then horizontally into the shale. Special casing is used to protect aquifers. Explosive charges are set deep into the well and exploded to fracture the shale. Water and sand, along with other substances, are injected into the wells at high pressure to push the gas up and out.

Anadarko is looking to "mobilize two more rigs at or by mid-year so that we're at five to seven rigs in the next six months. We're at a slower ramp up than others; we're getting more comfortable with our operations," Doyle said.

#### Article Photos



"Bouncing" among public and private land leases in Clinton, Lycoming and Centre counties, Anadarko is mobilizing a fourth rig now that should produce its first well any time.

#### Shale thickness

In Clinton County, geologists have determined the Marcellus Shale runs at thicknesses from 75 to 150 feet, though some estimates go as high as 200 feet. The thickest shale formations are found in areas within Grugan, Gallagher, Beech Creek, Pine Creek, Dunnstable and Leidy townships.

Of course, getting gas from the wells is only half the challenge; getting the gas to market is the other.

So Anadarko hopes to start building a new pipeline in northern Clinton County starting around June (depending on final permit approval) and along an existing pipeline built in the 1980s by Texaco, Doyle said. It should take through August to complete if all goes as scheduled.

"We have nine local hires working on that project; surveying crews, a biologist and others," Doyle said. It will consist of a 10-inch pipeline that should have the capacity to move about 100 million cubic feet of natural gas per day, a "significant volume for Pennsylvania," he added.

In fact, Doyle said gas in the pipeline will "be the first significant royalty generated off of the state forest."

Meanwhile, Anadarko could learn of a critical decision in two weeks when the Chapman Township Zoning Hearing Board resumes its hearing on the firm's request to use a plot of land near Hyner Bridge to pump water from the Susquehanna River to take to its wells to extract gas.

The company pledges to have minimal impact on the plot near Route 120's Hyner Bridge as it works to reduce truck traffic from and to Jersey Shore and Bellefonte to haul water. At last report, the hearing is set for April 13 at the fire hall at North Bend.

Essentially, Anadarko's plans to use .89 of an acre for trucks and a dry hydrant. They say it will minimally impede the view from nearby Hyner View and, importantly, Doyle said, it would "take trucks off the road and reduce emissions" as the firm tries to get as close to its operations as possible.

Local officials say minimizing truck traffic on area roadways is a priority. Sections of state Routes 144 and 44 - in the area of drilling in Grugan and Gallagher townships - are being destroyed by heavy trucks supporting drilling and logging.

Pumping water from the Hyner site "will significantly reduce congestion on that two lane road (Hyner Mountain Road) where there is so little opportunity to pass," added Mary Wolfe, an Anadarko liaison based in Williamsport.

Water would be pumped only at periods of high flow in the Susquehanna so there is "no conflict with the needs and opportunities for recreational boaters ... and the spirit of tourism and recreation are not compromised," she said.

#### Jobs and skills

Doyle and Wolfe discussed the need for skilled workers as drilling progresses.

They agree that it's quite a challenge, especially for firms that serve as site contractors and suppliers for the exploration companies.

And while the general public might gripe that they're not seeing the kind of job growth industry experts predicted, there are opportunities.

Reportedly, one local gas field support company advertising for positions including welders, truck drivers, pipefitters, general laborers, electricians and more received 400-plus job applications in a matter of two weeks.

As it stands, site contractors are having to import workers from the southwest and Canada, mostly "roughnecks" who know how to work a drilling rig.

But Louis D'Amico, of the Independent Oil and Gas Association of Pennsylvania, said "that is not our long-term solution."

Larry L. Michael, executive director, Workforce and Economic Development at Penn College, co-authored the Marcellus Shale Workforce Needs Assessment released last June.

"On average, a drilling rig is on site from three to five weeks. During that time, there are 20 to 30 subcontractors. You have to figure out who those 20 to 30 contractors are to find the jobs. They could be a water hauler, welder, pipefitter, surveyor, logger and, of course, roughnecks or 'roustabouts' as they're also called," Michaels said.

"Roughnecks by far make up largest percentage of jobs," he continued. "They are typically general labor but need certain training, including safety. In fact, our largest training need is for roughnecks. They need a basic understanding of the industry, need to undergo rigorous safety training and generally obtain certificates to work in the industry."

Matt Carmichael, senior public affairs representative for Anadarko, said it's not just about finding workers to train; recruiting people to do the training is another obstacle.

"There's no critical mass up here, no (drilling industry) retirees who live here and can teach roughnecks how to work a rig floor, for example."

Rhonda Engh, human resource manager for Precision Drilling Inc. - a Canadian-based drilling contractor for the exploration companies here -said the firm's short-term manpower needs are being met by qualified but imported workers "to insure we are operating in a safe and productive manner."

"Our long-term plans include aggressive training for local individuals who haven't had the opportunity, but have the desire to pursue a career in the oil and gas industry," she said.

Asked if Precision is finding qualified local people to work, she said, "The definition of qualified depends largely on the position being filled. However, we have hired at the entry level positions with local people who do have the desire to work in this type of industry."

"Entry level positions do require a minimal qualification due the scope of work they must be able to perform," she added. "However, training is still required for this position, but does not require the level of training as do the more critical positions."

Desire can't be overstated, she said.

Roughnecks and associated drill site laborers typically work 28 straight days of 12 hour shifts, with 14 days off under a three-shift rotation, she said. The firm provides housing for each rig, with some housing on site and some off.

"We use local welders and other craftsmen to support the rig needs," she added.

Though the number likely is higher now, she estimated earlier this year that Precision's labor force was 160 and counting. Precision drills for Anadarko, Range Resources, Fortuna and Ultra Resources. The firm has opened a field office in the Williamsport area.






"Our investment in office construction and moving full time support staff to the area demonstrates Precision's commitment to a long-term presence in the area," she said.

[Subscribe to Williamsport Sun-Gazette](#)

**Share:**

[Facebook](#)
[MySpace](#)
[Digg](#)
[Stumble](#)
[Buzz up!](#)
[Mixx](#)
[Fark](#)
[del.icio.us](#)
[LiveSpaces](#)

**Tonight in Prime Time**

	8:00 PM	8:30 PM	9:00 PM	9:30 PM	10:00 PM	10:30 PM
 WNEP	Dancing With the Stars Live		Lost New		V New	
 WYOU	NCIS New		NCIS: Los Angeles New		The Good Wife New	
 NBC WBRE	The Biggest Loser New				Parenthood New	
 WOLF	American Idol Live				FOX 56 News at Ten New	
 WSWB	90210 New		Melrose Place New		Friends	That '70s Show
 WVIA	NOVA New		The Mormons			
<a href="#">View complete TV Listings</a>						