

MISSISSIPPIAN LIME

Miss-Understood Lime

'Unconventional Conventional' Play

What explorers know about the Mississippian Lime formation could fill a book. What they don't know about the Midcontinent play could fill a few more, industry experts said Wednesday.

The best way to describe the potentially 20-million acre formation is an "unconventional conventional," said Petro River Oil Ltd. Co-CEO Ruben Alba. Thousands of conventional wells already had been drilled hit-and-miss into the Kansas/Oklahoma formation before the unconventional operators began to claim stakes a few years ago. However, there's still a heck of a lot to learn about the carbonate play, a panel of experts told a packed audience at the Mississippi Lime Congress 2012 in Oklahoma City.

There are a lot of things operators know for sure about the carbonate formation play, which extends from northern Oklahoma into parts of Kansas and Nebraska, even if they haven't quite settled on a name. The Mississippian Lime, Mississippi Lime, Miss Lime, Mississippian Carbonate -- the list goes on. One of its attractions is the cost -- it's a shallow formation at 450-600 feet with low pressure.

...cont' pg. 3

REGULATORY

New York DEC to File 90-Day Extension to Finalize Frack Rules

In an effort to avoid having to restart the process from square one, the New York Department of Environmental Conservation (DEC) will file for a 90-day extension on Thursday to finalize rules governing high-volume hydraulic fracturing (HVHF).

The news comes one week after Gov. Andrew Cuomo conceded that the state Department of Health (DOH) would not complete a requested health impact analysis of the practice before a deadline Thursday (see Shale Daily, Nov. 21). DEC Commissioner Joseph Martens had asked the DOH to conduct a health impact analysis of HVHF before the DEC wraps up a supplemental generic environmental impact statement (SGEIS) on HVHF (see Shale Daily, Sept. 24).

"[We] will file a notice for a 90-day extension allowed by state law to continue to work as [DOH Commissioner Nirav] Shah's health

...cont' pg. 5

UTICA SHALE

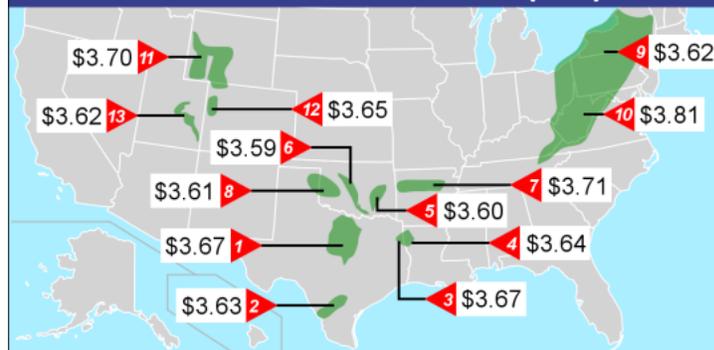
Gulfport, Seneca Announce Encouraging Utica Shale Results

In separate announcements, Gulfport Energy Corp. and Seneca Resources Corp. reported that they are achieving encouraging production results from some of the first horizontal wells drilled in the Utica Shale.

Gulfport said its Shugert 1-12H well in Belmont County, OH, near Kirkwood Township, tested at an average sustained 18-hour rate of 28.5 Mcf/d of natural gas, 300 b/d of condensate and 2,907 b/d of natural gas liquids (NGLs), assuming full ethane recovery and a natural gas shrink of 10%, or 7,482 boe/d.

Oklahoma City-based Gulfport said the Shugert 1-12H well was

NGI's Shale Price Indices (SPI)



| Basin/Region | Range | Avg | Chg | Vol | Deals |
|--------------------------|-----------------|--------|-------|------|-------|
| Gulf Coast | | | | | |
| 1. Barnett | \$3.58 - \$3.70 | \$3.67 | -0.07 | 280 | 37 |
| 2. Eagle Ford | \$3.54 - \$3.71 | \$3.63 | -0.08 | 588 | 120 |
| 3. Haynesville - E. TX | \$3.61 - \$3.69 | \$3.67 | -0.07 | 808 | 134 |
| 4. Haynesville - N. LA | \$3.57 - \$3.70 | \$3.64 | -0.07 | 104 | 28 |
| Mid-Continent | | | | | |
| 5. Arkoma - Woodford | \$3.55 - \$3.65 | \$3.60 | -0.07 | 244 | 54 |
| 6. Cana - Woodford | \$3.50 - \$3.62 | \$3.59 | -0.04 | 488 | 97 |
| 7. Fayetteville | \$3.62 - \$3.76 | \$3.71 | -0.05 | 536 | 95 |
| 8. Granite Wash* | \$3.56 - \$3.66 | \$3.61 | -0.08 | 1069 | 227 |
| Northeast | | | | | |
| 9. Marcellus - NE PA | | | | | |
| Tenn ¹ | \$3.22 - \$3.48 | \$3.31 | -0.04 | 240 | 55 |
| Other ² | \$3.28 - \$4.05 | \$3.75 | -0.13 | 593 | 101 |
| Combined ³ | \$3.22 - \$4.05 | \$3.62 | -0.10 | 834 | 156 |
| 10. Marcellus - SW PA/WV | \$3.76 - \$3.92 | \$3.81 | -0.07 | 3261 | 500 |
| Rocky Mountains | | | | | |
| 11. Green River Basin* | \$3.58 - \$3.74 | \$3.70 | -0.06 | 1519 | 236 |
| 12. Piceance Basin* | \$3.62 - \$3.67 | \$3.65 | -0.07 | 227 | 44 |
| 13. Uinta Basin* | \$3.60 - \$3.64 | \$3.62 | -0.06 | 262 | 48 |

Notes: Table represents negotiated, fixed-price delivered-to-pipeline transactions of gas traded Wednesday, Nov. 28, for Nov. 29 delivery. Changes calculated from transactions traded Nov. 27 for delivery Nov. 28. Prices are in USD/MMBtu. The deals column represents the number of transaction reports used by NGI in the calculation of the price and the volume column is the sum of the volume of those deals, in thousand MMBtu/day. These data are comprised of transactions that NGI believes represent trading activity in the respective resource plays and may contain gas that was produced from conventional formations. ¹ Tenn only includes deals east of compressor station 313 up to and including 321 in Zone 4 of Tennessee Gas Pipeline. ² Other is all other Marcellus NE Pennsylvania production. ³ Combined is the combination of the two. * Denotes a tight sands formation.

tested following the conclusion of a 60-day resting period. The well was flow tested over 48 hours, reaching an average sustained 18-hour rate of 28.5 Mcf/d of natural gas and 300 b/d of condensate. The company said it plans to begin flowing the well into a sales pipeline by the end of January.

"We are pleased to announce another strong flow test from our position in the Utica Shale of Eastern Ohio," said Gulfport CEO Jim Palm. "Our results to date continue to validate our high expectations for the play and...we look forward to maximizing the play's potential."

...cont' pg. 5

MANCOS SHALE**Black Hills Sees Mancos Shale as Low-Cost Gas Source**

The Mancos Shale plays in the Piceance and San Juan basins in Colorado and New Mexico are a potential gold mine of low-cost natural gas supplies, according to an executive from Rapid City, SD-based Black Hills Corp., who spoke Wednesday to Wall Street analysts at the J.P. Morgan SMid Cap Conference.

CFO Tony Cleberg said Black Hills is retooling itself as a predominantly utility holding company that makes occasional killings in the oil/gas patch, and he said what it did earlier this year selling 85% of its interest in the Bakken Shale in North Dakota for \$227 million is a model for later transactions (see Shale Daily, Aug. 27).

Noting that the North Dakota sale was "a very good transaction and something we are looking to repeat," Cleberg told analysts Black Hills holds 74,000 acres of Mancos Shale in the Southwest in which he sees a lot of upside potential to develop, partner with, and sell parts of. Even with depressed wholesale gas prices, the Mancos supplies can be economic at \$4/Mcf prices, he said.

"I know it is natural gas and prices have been low, but we see it with a lot of upside because it is probably the second lowest cost gas play in the United States," Cleberg said. "Therefore, \$4 gas is

economical for us."

With the Mancos, Black Hills estimates it could more than double its current 2.1 Tcf of gas reserves, seeing the potential for 2.2 Tcf even with more modest 160-acre spacing of wells. "We're a small player in oil and gas, so we are going to watch the other [larger] guys and see how they develop the area with the right well spacing and lateral capability and how many frackings are required," Cleberg said.

As the company has announced previously, Cleberg said Black Hills plans to drill some initial exploratory wells in the Piceance Mancos because there are the possibility of a lot more liquids there than in the San Juan, which is almost exclusively dry gas. "The possibilities are very significant and could be four times what we have estimated [2.2 Tcf]."

Cleberg said Black Hills intends to "learn from others" among the bigger, more experienced players in the Mancos. He said the company is looking at the possibility of drilling 460 new wells, and in pursuit of this goal the company will be looking for partners.

"We are looking primarily to be a utility company with a upside in the oil and gas business," said Cleberg, noting Black Hills is still "learning" the area before deciding what options it takes with its acreage. ■

MARCELLUS SHALE**West Virginia Supreme Court Rules Against Landowners**

The West Virginia Supreme Court of Appeals has ruled that state law doesn't give landowners the right to seek judicial review of well permits issued by the Department of Environmental Protection (DEP). However, the appeals court urged lawmakers to consider changing the law to give landowners more say.

The five-member high court ruled unanimously Nov. 21 against Matthew Hamblet, a resident of Doddridge County who had filed suit against the DEP and EQT Corp. in May 2010 (James Martin et al v. Matthew Hamblet, No. 11-1157).

"Mr. Hamblet's constitutional arguments are premised upon the notion that surface owners have an unrestricted right to enjoyment of their property," wrote Justice Margaret Workman. "A surface owner's rights, however, are subject to the mineral owner's rights. Here, EQT has a legally binding lease that grants it explicit rights of access to the oil and gas underlying Mr. Hamblet's property. It is this contractual obligation burdening Mr. Hamblet's surface estate that deprives him of an unrestricted right to enjoyment of his property, not the issuance of the well permit at issue. As such, the constitutional guarantees of due process and equal protection do not apply."

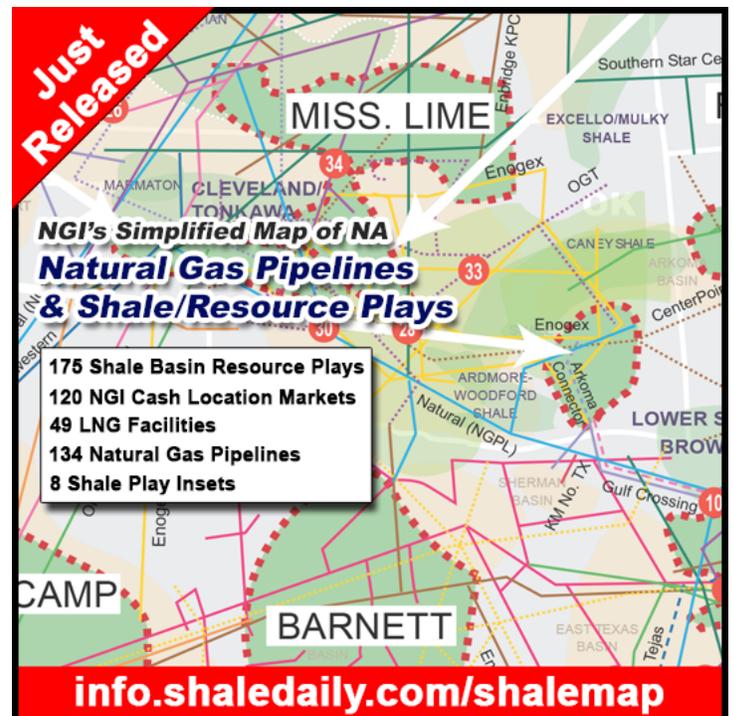
According to court documents, EQT owns a valid oil and gas lease dated in 1905 for 2,654 acres of mineral estate in Doddridge County, including about 442 acres owned by Hamblet. Over Hamblet's objections, the DEP's Office of Oil and Gas issued EQT a permit for its 513136 Lewis Maxwell well in April 2010.

"We understand our rights are limited but do not believe they are so limited as to deprive us of all the due process rights property owners should have," said Dave McMahon, founder of the West Virginia Surface Owners' Rights Organization (WV-SORO). "Surface owners are very disappointed, but we will not give up."

Despite ruling against the landowners, the justices urged the West Virginia Legislature to revisit the issue and consider ultimately amending the law, making it more accommodating to landowners.

"Given the fact that the statutes granting the right of judicial review discussed herein...were enacted prior to the extensive development of [the] Marcellus Shale in this state, this court urges the legislature to re-examine this issue and consider whether surface owners should be afforded an administrative appeal under these circumstances," Workman wrote.

A Doddridge County judge had ruled in favor of Hamblet on July 5, 2011, saying the DEP's permits could be revoked, citing a landmark decision from 2002 titled State ex rel Lovejoy v. Callaghan (see Shale Daily, July 25, 2011). ■



REGULATORY**Colorado Springs, CO, Adopts Fracking Rules**

On a 6-3 vote after dozens of citizens and business representatives spoke, the Colorado Springs, CO, City Council late Tuesday night approved rules to allow the use of hydraulic fracturing (fracking) in oil and natural gas drilling, mirroring similar statewide rules.

Within the new guidelines, drilling can move forward within Colorado Springs. Council member Tim Leigh, who voted in favor of the rules, told NGI's Shale Daily it is unlikely there will ever be much drilling around the city of nearly a half-million people south of Denver.

Leigh did not share any of the concerns of this three colleagues who voted against the measure. It cannot become law until it undergoes a second reading Dec. 11.

"We set up the infrastructure and the ordinances to allow [drilling and fracking]," said Leigh, who noted that one of the issues debated Tuesday was whether the city was going to stick closely to the state rules or go beyond them. In the end, "we're in alignment with what the state rules are. At the end of the day, I didn't think it was anything earth-shattering."

Leigh said in Colorado Springs if the drilling is "managed properly, it isn't a big deal in our locale because I am not sure anybody has much of an idea on how much oil and gas potential we have anyway."

Noting that there is little or no drilling ongoing in the Colorado Springs area, Leigh said the city is on the edge of the geologic basin where oil and gas is considered a potential. "The real supplies are about 100 miles north of us," he said.

The subject of drilling generally and fracking in particular had stirred emotions in Colorado Springs as it has in smaller towns more directly involved in drilling. A protest rally had been scheduled earlier on Tuesday in advance of the much-anticipated council meeting.

Earlier this year, agreements between two oil and gas

producers and the small Front Range Colorado town of Erie added to the state's already detailed rules covering hydraulic fracturing. The Erie agreements depend solely on the state for enforcement (see Shale Daily, Sept. 4). Memoranda of understanding (MOU) inked separately by Encana Oil & Gas Co. and Anadarko Petroleum Corp. with the city of Erie include several best management practices mutually agreed to with city officials and incorporated into state permitting requirements for new wells.

At the time, a Denver-based spokesperson with Encana called the MOUs a "first of its kind in Colorado." Encana and Anadarko executed almost identical agreements outlining a series of best practices that in some cases go beyond the state's requirements for our industry.

Tuesday's action in Colorado Springs comes three weeks after voters in Longmont, CO, approved a hotly contested ban on the use of fracking within its jurisdiction, passing a ballot measure (Question 300) by a comfortable margin (see Shale Daily, Nov. 8).

Question 300 bans the use of fracking by oil and gas drillers within the city limits, along with banning fracking waste storage in the city confines. Supporters of a ban argued that fracking is environmentally risky; opponents -- supported by more than \$500,000 from industry -- argued that the risks were exaggerated.

Gov. John Hickenlooper and the Colorado Oil and Gas Association has supported the state's fracking rules as a national model and urged collaboration with local governments (see Shale Daily, Oct. 1). In late September, Hickenlooper responded to criticism from state elected officials upset over his administration taking Longmont to court over its oil and natural gas drilling rules. Legal action was what Hickenlooper called a "last resort" in a letter he sent to various local officials considering similar local drilling rules (see Shale Daily, Sept. 11). ■

E&P companies undeterred despite uncertainty of what has been reported

Continued from Page 1

That means that drilling costs are low -- less horsepower is needed to drill. And the costs are a lot less than in some plays: from spud to release, wells cost around \$2.5 million.

Are all of the 20 million acres going to be productive? Probably not, said Petro River Co-CEO Daniel Smith, Alba's partner. "We are able to go in and make good wells." But some have brought in "8 b/d of oil and 8,000 barrels of water...Others are 1,500 b/d-plus wells. We know they are out there...The beautiful thing about the Mississippi Lime is that it's not an unconventional reservoir. It's always produced conventionally and it's got thousands of wells. It was not fractured...So what we are seeing is a hybrid, an unconventional conventional."

The play has its share of big operators, like Encana Corp., Chesapeake Energy Corp., Apache Corp., Royal Dutch Shell plc, as well as a lot of smaller, family-owned operations (see Shale Daily, Aug. 6). According to data compiled by NGI's Shale Daily from company documents, Chesapeake is currently the largest net acreage holder in the play with 2 million acres. Rounding out the top five are SandRidge Energy (1.85 million), Tug Hill Operating (788,000), Apache (580,000) and Devon Energy (545,000).

The carbonate is thick, in some places up to 2,000 feet, which

"provides a challenge," said Roxanna Oil Co. President Julie Garvin. "There's a tremendous variability through the section. Another variability is in the flow rates. In general, we have seen reported [initial production] rates from 100 b/d to 1,000 b/d...Very variable."

Even with the uncertainty of what has been reported, large and small exploration and production companies have been undeterred. About 700 unconventional wells now have been drilled, and there are more than 600 active permits, said Garvin. "By my estimates, we can easily expect 10-20 billion bbl of recoverable oil from the Mississippi Lime."

"It has the source rock but there is extreme lateral variability," said Garvin, whose company has been exploring the trend since 2007. The play is building by fits and starts using horizontal drilling and hydraulic fracturing, from along the Kansas-Oklahoma border, where the "core horizontal drilling really took off," and has since moved to the south to the Sooner Trend and east of the Nemaha Ridge. There also is a push to the north, west of the Kansas Uplift.

"If you think about all of the potential extensions, we come up with 20 million acres of potential play areas," Garvin said. "It's why there is a conference about a single reservoir."



Roxanna, which had been looking for a shale play when it began studying the Mississippian, has been drilling into the formation's Sooner Trend, said Garvin. "We have had wells in the same section, with one well that makes 5 b/d and has 100 barrels of water. And then we have a well with completely different results next to it."

Looking at the source rocks isn't enough, she said. Years ago small operators may have drilled deeply into the formation and come up empty. Today, "we are trying to target the highest fracture but the highest in-place resource, laterally and vertically." A "biggie" for operators is to increase the flow rates through better completion designs. "We are moving away from open hole fractures. These days we are thinking of physics, and the how fluids flow..."

"There is a multi-phase flow, with gas, oil and water -- three fluid types -- all competing for space." Only now have operators begun to achieve a level of expertise on how far to drill horizontally and how much to fracture the rocks."

Alba, who formerly worked for Halliburton Co., said "everybody's going to have a different approach on how to complete reservoirs...The key thing for us is that it is the same geological system, the same migration on a reserves basis." Whether the Mississippian wells are drilled horizontally or vertically isn't pertinent. "Both of them are right. We have to

derisk the play and some ways to do that are through 3-D seismic, which might indicate that it's more important to vertically delineate in one place or horizontally drill in another. "There's no doubt about it that hydrocarbons are there...It's a unique characteristic in coming up with completion techniques."

He told the audience that he'd studied "quite a few reservoirs," but the "oil in place here is truly tremendous. I wonder what I'm doing in Kansas quite often. But I'm a hydrocarbon hunter and I believe they're here to be extracted. We are at a point in the industry where we can tackle low-pressure hydrocarbon systems."

North America's explorers "did a great job on the shales," Alba said. "We have gone through the structure in North America in dealing with deep drilling the Utica, the Marcellus...Barnett. Kansas is a very different place with carbonate chemistry and the environment. We don't realize how much actual reserves there are on the North American continent.

"We know about carbonate chemistry," as the industry has in the past focused its attention on some formations in the Rockies. "The low-pressure reservoir systems bring their own challenge. They have to be drawn down. That's what we're excited about. The water cuts, how to identify the lamination areas, porosity systems that are

MISSISSIPPIAN LIME NET ACREAGE POSITIONS

| <u>Company</u> | <u>Net Acres</u> | <u>Company</u> | <u>Net Acres</u> |
|-------------------------------|------------------|-------------------------------|------------------|
| Chesapeake Energy | 2,000,000 | Doxa Energy | 3,600 |
| SandRidge Energy | 1,850,000 | Mesa Energy Holdings | 3,400 |
| Tug Hill Operating | 788,000 | American Petro-Hunter | 2,000 |
| Apache | 580,000 | Caddo Minerals | N/A |
| Devon Energy | 545,000 | Calyx Energy | N/A |
| Repsol YPF | 363,636 | CEJA Corporation | N/A |
| EnCana | 360,000 | Century Resources | N/A |
| Chapparral Energy | 280,000 | Cheyenne Exploration | N/A |
| Vitruvian Exploration | 200,000 | CMX Oil & Gas | N/A |
| Circle Star Energy | 175,000 | Constellation Energy Partners | N/A |
| Range Resources | 156,000 | Dorado E&P Partners | N/A |
| Sinopec | 145,000 | Dynamic Production Inc | N/A |
| Atinun Partners | 113,000 | EOG Resources | N/A |
| Petro River Oil | 100,000 | Glenn Supply | N/A |
| Midstates Petroleum | 82,000 | Lario Oil & Gas | N/A |
| Redfork Energy | 75,000 | Marathon Oil | N/A |
| Unit Petroleum | 75,000 | Mt. Dora Energy | N/A |
| Highmount E&P | 70,000 | Nadel & Gussman LLC | N/A |
| Halcon Resources | 45,000 | Orion Exploration | N/A |
| PetroQuest | 31,000 | Pablo Energy II | N/A |
| Plymouth Exploration | 26,000 | Roxanna | N/A |
| AusTex Oil Limited | 23,000 | Panther Energy | N/A |
| Natural Resource Partners LLC | 19,200 | Petrodyne Resources | N/A |
| Sundance Energy | 14,500 | Shell | N/A |
| Slawson Exploration | 13,500 | Special Energy | N/A |
| Evolution Petroleum | 11,940 | Spyglass Energy | N/A |
| U.S. Energy Development | 9,000 | Sullivan & Co. | N/A |
| Osage Exploration | 7,500 | Synergy Oil LLC | N/A |
| Atlas Resource Partners | 7,250 | Territory Resources LLC | N/A |
| Equal Energy | 7,250 | Twenty/Twenty Oil & Gas | N/A |
| Magnolia Petroleum | 4,319 | Woolsey Operating Co. LLC | N/A |

Source: Compiled by NGI's Shale Daily from company documents

occurring in saturations over time."

The Mississippian Lime, Alba said, "is not fully saturated; the oil is sitting on the top and water is on the bottom," which has confused some of the early drillers. "We have to know how to keep from drilling horizontals in the water systems and we have to stay in the oil systems..."

Early explorers "did what they thought was best at the time," he said. "There are a lot of hydrocarbons in Kansas," the first producers, mostly "mom-and-pop producers...just did it very slowly. Given what we know today about the reservoir, we can improve upon it...I believe as an industry we have more gas in the U.S. than we can shake a stick at. But I believe places like this can help us overcome and achieve energy independence. This is a great region to come to develop hydrocarbon reserves."

The formation can't be treated the same way as other types of unconventional plays, Smith said. "Some wells, you put a lot of fracks on them like shale wells, and they get better and better. You probably can't do that here. If you drill too far, you may not make anything and think there's no oil there. But there is oil there, you've got to figure out how to get to it...Those are some of the operational issues we're dealing with." ■

Thirty-day public comment period would follow release of draft rules*Continued from Page 1*

review of the SGEIS comes to completion," DEC spokeswoman Emily DeSantis told NGI's Shale Daily on Wednesday.

DeSantis said the extension will include a 30-day public comment period, which would begin after the revised draft regulations are released. The last of four public hearings on the proposed rules was held Nov. 30. Under state law, the DEC had one year after the last hearing to finalize the rules.

Cuomo had been expected to issue final recommendations on whether the state would allow high-volume drilling to restart after the DEC had completed its public review, which has been ongoing for more than a year (see Shale Daily, Dec. 1, 2011; Sept. 29, 2011; Sept. 8, 2011).

"Given [Cuomo's] decision to conduct a health review on hydraulic fracturing, DEC's move to extend by 90 days the implementation of regulations guiding this job-creating practice is a fair and appropriate step," Karen Moreau, executive director of the New York State Petroleum Council, told NGI's Shale Daily on Wednesday. "We hope and trust that the end of this decision-making process is now firmly in sight, and know that once it is done, the economic renewal of the Southern Tier is just around the corner.

"We know that safe natural gas development can create thousands of jobs, save family farms and lift entire communities because it has happened just across the border in Pennsylvania. We know that it can be done safely, consistent with protecting water, land and public health, because that is the track record around the country. We remain confident, even convinced, that the State will make the right decision for the people of the Southern Tier and all of New York state by finally allowing safe natural gas development to move forward when this extension is completed."

Brad Gill, executive director of the Independent Oil & Gas Association of New York, concurred.

"While we are extremely disappointed the state has missed the Nov. 29 deadline to release regulations governing future natural gas exploration in New York, we remain optimistic that the door is still open and that the state may soon begin to experience the benefits that safe development is bringing to many other areas of the country," Gill told NGI's Shale Daily on Wednesday. "We urge the state to complete the review process as soon as possible. The small businesses that make up our industry in New York are hurting needlessly, and many Southern Tier families are relying on the state to end these delays." ■

Test wells are in Belmont County, OH, and Forest County, PA*Continued from Page 1*

Gulfport also announced the first sales at the Cadiz refrigeration plant in Harrison County, OH. The facility was built by MarkWest Energy Utica, a joint venture of MarkWest Energy Partners LP and The Energy and Minerals Group. Gulfport said interim 60 Mcf/d operations have begun at the facility, supported by production from its Wagner 1-28H and Boy Scout 1-33H wells.

In October, Gulfport reported that its Shugert 1-1H well tested for 32 hours at a maximum rate of 20 MMcf/d of natural gas, 144 b/d of condensate and 2,002 b/d of NGLs.

Seneca announced that its exploration and production subsidiary, National Fuel Gas Co., flow tested its first horizontal well in Forest County, PA. The company said initial testing at the well began on Nov. 11, lasted six days, and tested at a peak 24-hour rate of 3.9 Mcf/d.

"The Utica Shale represents a great opportunity for National Fuel given its presence across a significant portion of our Appalachian acreage," said CEO David Smith. "In addition to our second

delineation well that was drilled earlier this year in Mt. Jewett, we remain committed to further evaluation of the Utica's potential."

Seneca said the tested well has been shut in as it awaits pipeline infrastructure and is expected to begin production in 2Q2013. The company has so far drilled two horizontal and three vertical wells in the Utica. The second horizontal well, in the Mt. Jewett prospect area of McKean County, PA, currently has three frack stages complete. Seneca said it is evaluating if the well can accommodate additional stages.

"Two additional horizontal wells in Pennsylvania are planned during this fiscal year, one in the Owl's Nest prospect area of Elk County, and another in the Henderson prospect area of Venango and Mercer counties," Smith said. "These delineation efforts will help us to further understand the extent, the characteristics, and the economics of the Utica across our acreage and the potential of the Utica to add to the value of our already attractive Marcellus Shale footprint." ■

NGI

Intelligence Press, Inc.

NGI's Shale Daily™
Thursday, Nov. 29, 2012
Vol. 3, No. 38

Natural Gas Intelligence's Shale Daily is produced and delivered every U.S. business day by Intelligence Press, Inc., © 2012. All rights reserved. Reproduction in any form is forbidden without the express written consent of the publisher. Although all prices are generated from data provided by sources deemed to be reliable, Intelligence Press, Inc. makes no warranty as to the accuracy of these prices, and it shall not be held liable for results obtained from using such prices.

Publisher: Ellen Beswick. Executive Publisher: Dexter Steis. Managing Editor: Alex Steis. 703-318-8848. editorial@intelligencepress.com. Senior Editors: Carolyn L. Davis (Houston), Joe Fisher (Houston), Susan Parker, David Bradley. Associate Editor: Charlie Passut. Correspondents: Richard Nemecek, (Los Angeles), Gordon Jaremko (Calgary).

