

MY BENESCH MY TEAM



Benesch Shale Industry Report

Quarterly
Summary
Q4 2013



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1. Top Issues and Considerations

Top Issues	Considerations
<p>Rumors surfaced that Carl Icahn, who owns close to 10% of Chesapeake Energy, is seeking a cash bid for the company in the region of \$40 a share. ExxonMobil, BP and Royal Dutch Shell were <u>named</u> as potential buyers of Chesapeake.</p>	<p>Icahn and CEO Doug Lawler have already cut close to 1,200 jobs to make the company leaner, and we can expect more assets will be shed in 2014. With a sale in its future, and its Utica activity slightly out of target, Chesapeake may not have the capacity to seize all potential opportunities in Ohio.</p>
<p>House GOP leaders <u>introduced</u> HB 375, which includes:</p> <ul style="list-style-type: none"> • a 50% tax cut for traditional wells; • an exemption from the commercial-activities tax for those paying the new severance tax, and; • an income-tax credit for drillers operating as pass-through entities. 	<p>HB 375 proposes the lowest severance tax of three proposals issued in the past year, a tax that is also lower than most oil- and gas-producing states. Opponents of the tax insist it is too low and cushions the industry from burden, but this will be welcome by drillers and will ensure continued investment in the state.</p>
<p>Blue Racer Midstream's Natrium facility was completely <u>shut down</u> until at least January, due to a fire at the plant in September, putting a brake on its plan to offer transporting capacity in the region, and prompting drillers to look for alternatives. The incident has put some communities on alert about such equipment.</p>	<p>It is also a signal for other midstream companies building similar plants not to rush into production.</p>
<p>Alternatives to water-based fracking are surfacing:</p> <ul style="list-style-type: none"> • Canada-based GasFrac Energy Services is <u>using</u> a closed-loop stimulation process, which uses a propane-butane gel instead of water. • Engineers are <u>working</u> on carbon dioxide-based fracking, with benefits being that CO₂ could yield more natural gas and oil, that it can be recovered and used repeatedly, and that it can be sealed up underground after fracking. 	<p>Alternatives to water, such as these, could become viable alternatives to hydraulic fracturing. Before this becomes widespread, the industry must move forward to weigh in on safety as well as economic factors – not to mention effect on productivity.</p>

2. Shale Industry Moves

E&P – Overview for Ohio

- As of end of 2013, Ohio had 1,033 Utica wells permitted, 661 drilled, and 249 producing.
- In its Q3 production data report, the ODNR [said](#) a total of 1,332,477 bbl and 33,606,075 Mcf of natural gas were produced. Gulfport had both the best oil-producing and the best gas-producing wells, with its Boy Scout well in Harrison County producing 41,617 bbl, and its Stutzman well in Belmont County producing 1,249,739 Mcf of natural gas.
- Permitting activity is [going up](#) in southern Ohio. Since 2012, numbers have grown four to six times in Guernsey, Noble, Harrison and Belmont counties. The top 5 as of Oct. were Carroll (337 permits), Harrison (139), Columbiana (90), Noble (67), and Guernsey (60).
- The Ohio Department of Job and Family Services [reported](#) that employment in core industries developing Ohio's shale play have risen by 30% over a two-year period, standing at 8,192 jobs in Q1 2013, up from 6,263 in Q1 2011.
- O&G development in the Utica shale in eastern Ohio is said to be [outpacing](#) the rate of other plays in the country, thanks in part to many of the E&P companies that drill in the Utica applying lessons learned in other plays.
- [Highlights](#) from ODNR's *2012 Ohio Oil and Gas Summary* report include:
 - In total, \$706 million worth of natural gas and oil was drilled in Ohio in 2012;
 - The state's longest ever horizontal well was drilled - at 16,664 feet;
 - 36% of all wells drilled in 2012 were Utica Shale wells;
 - There are 5,836 registered well owners, including 4,368 domestic owners operating 64,570 wells (conventional as well as unconventional/shale);
 - In total, 553 oil and gas wells were drilled in 44 of Ohio's 88 counties; and,
 - Carroll County was the most active with 87 wells drilled.

2. Shale Industry Moves (cont.)

E&P – Company news

- **American Energy** raised about \$1.7 billion in private equity commitments and term loan proceeds to pursue a plan focused on the Utica in eastern Ohio. The company bought over 24,000 acres of leases from Shell Western E&P in Guernsey County, and received a transfer of 133 acres from **EV Energy**. It also formed a JV with **Red Hill Development** to explore deposits in Guernsey and Harrison. The company also hired former Chesapeake exec Jeff Fisher as chief operating officer.
- **American Energy Capital Partners** is seeking a \$2-billion offering as it plans to offer up to 100 million units priced at \$20 per unit.
- **Gulfport Energy** increased its Utica Shale acreage in the third quarter, adding about 9,000 gross acres and bringing its total acreage position to approximately 154,000 gross acres under lease in the Utica Shale.
- **Antero Resources** went public with a valuation of over \$11 billion, after selling 35.73 million shares at \$44 each, raising \$1.57 billion in its IPO. In its trading debut, the stock rose more than 18% to \$52.
- **Halcon Resources** said it will stop drilling in northern Trumbull County following disappointing results, and will instead focus on the southern part of the county.
- **PDC Energy** announced a capital budget of \$647 million for 2014, of which \$162 million is to spud 18 horizontal wells in the Utica in southeast Ohio.
- **EQT** said it would spend \$145 million in the Utica in 2014, and drill 21 wells in Guernsey County. EQT owns about 14,000 net Utica acres in Ohio.

2. Shale Industry Moves (cont.)

Financial Results

- **Chesapeake Energy's** Q3 profit was \$156 million, compared to a loss of over \$2 billion last year from significant impairment charges. Revenues grew by 10% YOY to \$1.59 billion. Utica Shale net production averaged roughly 164 Mmcfe/d in Q3, an increase of 91% sequentially from Q2 2013.
- **Antero Resources** [reported](#) Q3 profit of \$118 million, a 10% decrease YOY. Revenues were \$385 million. Net daily production averaged 566 MMcfe/d, a 128% increase over Q3 2012. In the Utica, Antero brought on line 10 new Utica wells, and completed one additional well since Q2 2013.
- **Cabot Oil & Gas'** Q3 profit [hit](#) \$69.9 million, up from \$36.6 million. Production for Q3 totaled 107.1 Bcfe, an increase of 61% YOY. Production consisted of 101.7 Bcf of natural gas and 898,000 barrels of liquids.
- **Hess Energy** [reported](#) Q3 net income of \$420 million, down from \$557 million in Q3 2012. Hess said it expects to commence Utica development in 2015. The company has about 73,000 acres in the Utica as part of its JV with CONSOL.
- **PDC Energy** [posted](#) a Q3 loss of \$16 million, compared to a loss of \$32.6 million a year earlier. Production for the third quarter of 2013 increased 29% to 18,600 Boe/d, from 14,400 Boe/d.

3. Ohio Shale Infrastructure

Midstream

- **Pennant Midstream**'s Hickory Bend Processing Plant in New Middletown was dedicated on Oct. 28. The project consists of 55 miles of wet-gas gathering pipeline facilities, and represents a \$375-million investment in the region. Pennant is also constructing a 12-inch, 38-mile NGL pipeline for roughly \$60 million to connect the Hickory Bend plant to the UEO Kensington facility in Columbiana County.
- **Utica East Ohio** opened its Harrison Hub facility in Ohio as the state's first integrated gas processing and fractionation complex serving the Utica region.
- **Enterprise Products** tested its ATEX pipeline in November/December, and began flowing ethane from the Marcellus and Utica shales to the Gulf Coast in December.
- **Devon Energy** and **Crosstex** signed agreements to form a midstream business, with about 7,300 miles of pipelines, 13 processing plants, and six fractionators.
- **Marathon Petroleum** is working on a 49-mile pipeline, called the Cornerstone Pipeline, from the Utica shale in eastern Ohio to its Stark County refinery. Marathon also said it expects to spend between \$400 million and \$500 million to upgrade its transportation and midstream network in the Utica.
- **Kinder Morgan Energy Partners** proposed to develop a Y-grade NGLs pipeline, known as the Utica Marcellus Texas Pipeline, to transport Y-Grade NGLs from the Utica and Marcellus to the Texas Gulf Coast. Kinder also signed a letter of intent with Targa Resources to form a JV to build NGL fractionation facilities in Texas to provide services for producers in the Utica and Marcellus shale plays.
- **Kinder Morgan Cochin** signed a letter of intent with NOVA Chemicals to develop a 210-mile products pipeline from Harrison County to its Cochin Pipeline in Michigan.
- **Halcon Field Services** proposed a 14-mile pipeline in Trumbull County.

3. Ohio Shale Infrastructure (cont.)

Downstream

- **Smith Dairy** [moved](#) its fleet of trucks to compressed natural gas, and built a CNG fueling station in Wayne County. Ten natural gas fueling stations are said to have been completed in Ohio in the past couple of years, with another 44 in progress.
- **Ford** [launched](#) its 2014 F-150 truck with a CNG or liquefied petroleum gas option. It is preparing to offer eight vehicles that can run on CNG/LPG later in 2014.
- **American Water Management Services** is [drilling](#) two injection wells in Weathersfield, Trumbull County.

Real Estate

- Businesses in the O&G industry in Tuscarawas County are [looking](#) for 10K-to-15K-square-foot buildings with two to five acres for outdoor storage. As these buildings are in short supply, county economic development expert [is looking](#) at Columbus.

Supply chain

- **Halliburton Energy** [shut down](#) some operations at its Weston, W.Va. site, and is transitioning cement plant jobs to Zanesville in the EastPointe Business Park.
- **Husky Energy** is seeking Ohio state approval for a \$300-million upgrade to a refinery in Lima, Allen County to refine tar sands from Alberta, Canada.
- Ohio-based **Fairmount Minerals** is said to sell more than \$1 billion worth of sand a year, mostly for fracking.
- The **Muskingum Watershed Conservancy District** [approved](#) a third short-term water sale from Seneca Lake in southeast Ohio with Antero Resources.

4. Government

Regulatory

- The **U.S. Coast Guard** issued a proposal allowing barges to carry fracking wastewater in bulk, but it wants barge owners to have each load tested and to make the results available to the Coast Guard.
- The state told O&G companies to give county officials and fire departments details on the toxic chemicals used in fracking, saying a federal right-to-know law trumps a 2001 state law that allowed them to send the details only to the **ODNR**.
- The **ODNR** approved and permitted exposed impoundments that hold fracking flow-back water. The impoundments serve as water-transfer stations for wells, helping reduce truck traffic and the water necessary to drill and frack the wells.
- The **Public Utilities Commission of Ohio** will now regulate gathering lines in the state. The ODNR oversees production lines in Ohio, and the FERC looks after transmission lines, but there was no real oversight of gathering lines.
- Ohio State Reps. David Hal and Sean J. O'Brien introduced bill HB 336 to offer tax credits for buying or converting vehicles to burn natural gas and gasoline.
- **Hess** could have to renegotiate several hundred lease agreements with property owners at premium prices in Jefferson County - or risk losing that acreage - as it hasn't drilled on the properties within the five-year period stipulated in the lease.
- The **FERC** cleared the way for **Rockies Express Pipeline** to offer westbound capacity on part of its system from the Marcellus/Utica region, without having to match for west-to-east customers the new service's lower rates.

5. Schools/Training

- **Stark State College** trustees approved plans for a \$1.3-million shale drilling training lab to train O&G workers. The indoor-outdoor facility is expected to be ready by the fall 2014. The parcel was purchased for \$179,900.
- **Switzerland of Ohio Local Schools** received more than \$1 million so far from Marcellus and Utica drilling deals. The school signed leases with Paloma, Gulfport and Eclipse.
- Researchers from **West Virginia University** and **Ohio State University** were awarded a National Science Foundation grant to study the microbial biodiversity found in deep underground shale formations. Ohio State's share of the award, \$1.65 million, will examine microbial life and function in kilometer-deep black shale.
- **Capital University Law School** in Columbus opened the Midwest Center for Energy Law and Policy for legal research on the Utica.
- **Marietta College** is building on its petroleum engineering program with a major and certification in land and energy management as Utica exploration grows.
- Welding programs are more popular throughout Ohio thanks to Utica development:
 - The **Career & Technology Education Centers** in Licking County added a structural and pipe welding fabrication course.
 - **Washington State Community College** approved a welding program and a project to build and equip an eight-station welding laboratory.
 - **Belmont College** is reporting increased enrollment in the school's welding program, from seven students five years ago to 60 this year.