THE PIT RULE – The True Economics

Keep New Mexico's Common Sense Safeguards

January, 2011

If the Pit Rule remains in effect will industry choose to drill in neighboring states rather than in New Mexico?

No. The fact is, the Pit Rule has not chased the oil and gas industry out of New Mexico and costs associated with the Pit Rule are not prohibitive or onerous.

The tired argument that increased regulations drive away business is a myth that has been repeatedly shown to be false. For example, in Colorado, a suite of new oil and gas regulations were enacted in 2009. As reported in the *Denver Post*,

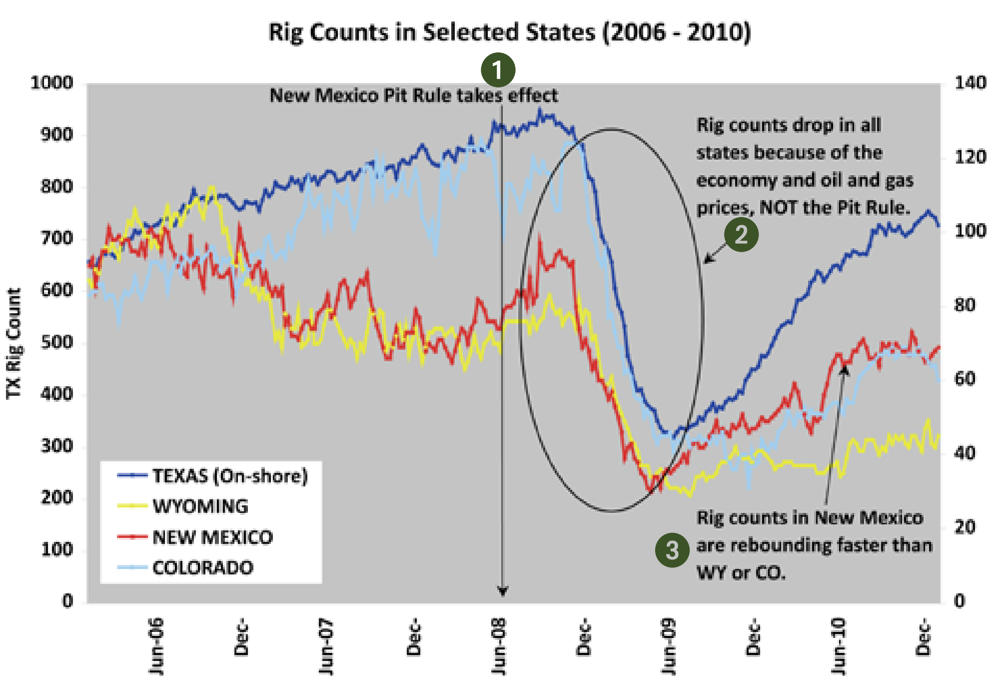
> *"Permits issued by the Colorado Oil and Gas Conservation Commission are projected to top 6,000 [in 2010], up at least 16 percent from 5,159 in 2009. The increase suggests that Gov. Bill Ritter's tightening last year of regulations governing drilling — hotly contested by the energy industry — have proven manageable for producers."*[1]

Similarly, in New Mexico, the oil and gas industry is alive and kicking – despite the passage of more protective pit rules AND the global economic downturn. Applications for permits to drill (APDs) increased dramatically 96% between 2009 and 2010 (from 327 to 642), and actual drilling permits rose by almost 50% (from 207 to 310).[2]

> **Applications for NM permits to drill increased by 96% between 2009 and 2010.**

RIG COUNTS HELP TELL THE STORY

As seen in the chart at left, during the first several months after passage of the Pit Rule drilling activity in New Mexico increased. By the end of 2008, however, rig counts in New Mexico were plummeting, as they were across the country. The reason was not the Pit Rule, which could not have affected rig counts in other states, but the global recession and the subsequent dampening of demand for oil and gas. Drilling has rebounded since the depths of the global financial crisis, and in fact, the drill count in New Mexico has rebounded faster than in other western states. Between April 2009 and December 2010 the number of rigs in NM increased



1. **Drilling activity in New Mexico increased for several months after the Pit Rule took effect. (Red line.)**
2. **The global recession and reduction in demand was the cause of the decreased drilling (in the oval).**
3. **Since the depths of the global financial crisis, New Mexico has rebounded faster than any other western state. Between April 2009 and December 2010 the number of rigs in NM increased by 130%, compared increases in Colorado (20%), Wyoming (30%) and Texas (95%) over the same time period.[3]**

by 130%, from 30 to 69 rigs, compared to smaller increases in Colorado (20%), Wyoming (30%) and Texas (95%) over the same time period.[3]

The truth is, a rise in oil and natural gas prices will bring more revenues and drilling to the state.
The global recession had a strong negative impact on the demand for oil and gas, and as a result of lower demand the prices of oil and gas fell. When oil and gas prices are low, the profits generated by oil and gas wells decrease, which results in smaller amounts of oil and gas tax revenue that can be collected by the state of New Mexico. The decline in the price of oil and gas, not the Pit Rule, is responsible for the decline in New Mexico's oil and gas revenues.

But companies like ConocoPhillips, the largest gas producer in the state, have vowed to start drilling again when natural gas prices increase. According to the company, *"we've identified over 1,000 drill-ready opportunities out there. . . as prices come back we will drill those opportunities in San Juan."*[4] This is already starting to happen. Tax revenues from oil and gas in New Mexico are beginning to see a resurgence – in San Juan County revenues from oil and gas production that occurred during July through December 2010 increased by 19% over the same period in 2009.[5]

Costs to comply with the pit rule are not prohibitive, and are only going to decrease.
The costs of complying with the Pit Rule are not prohibitive for many companies. Since the rule came into effect, numerous companies have proudly proclaimed their use of closed-loop drilling systems in the state.

Approach Resources, Inc.: "Approach Resources Inc., both recognizes and shares Governor Richardson's concerns for the unique hydrologic resources in the Tierra Amarilla area. . . we laid out a comprehensive environmental sound drilling program for this area [which includes] using a closed loop drilling system with above-ground steel tanks and no below-grade pits. . ." [6]

BP: "BP successfully partnered with State of New Mexico to voluntarily install tanks in the place of earthen production pits and utilize closed-loop drilling systems several years prior to passage of the recent pit rule."[7]

Chevron: "Even before the state adopted stricter rules for the use of pits, the company opted for a steel closed loop system for each of their wells in Southeast New Mexico."[8]

Cimarex: According to Dorsey Rogers, field drilling superintendent for Cimarex, who has drilled more than 100 closed-loop wells in the state, "Closed-loop systems have evolved to a point where they cost no more than conventional drilling and are actually cheaper in most cases."[9]

Devon: "In 2008, the BLM honored Devon for its environmental leadership and creativity in minimizing the impact of oil and natural gas development on the state's public lands. To accomplish this, we employ techniques such as . . . using closed-loop drilling system, which eliminates the need to dig pits for drilling mud. . . at our New Mexico well sites.[10]

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Tecton Energy: "Tecton Energy has said it will use "closed-loop" drilling systems in Galisteo, in which all wastes are enclosed in tanks and hauled away, and waste pits are not created."[11]

Returns on investment...
Testimony from the oil and gas industry indicates that adhering to the pit rule still allows companies to make a healthy profit margin. During the Pit Rule hearing, testimony was heard that indicated most oil and gas companies will only develop wells if they make more than a 7 or 8% rate of return on their investment.[12]

Tom Mullins from Synergy, testifying on behalf of the Independent Petroleum Association of NM, said that complying with the pit rule would increase the cost to drill a 1000-foot well by $30,000, which would lead to a decrease in a well's expected rate of return on investment from 29% per year to 24% per year.[13]

Tyson Foutz from Merrion testified that the company could make 11% rate of return on money invested even if they use closed-loop drilling on their Dakota wells.[14]

Business Opportunities...

Costs for closed loop drilling services will continue to come down as companies become more familiar with the technology, as more companies provide closed-loop services (increased competition), and as innovation occurs.

New Mexico-based companies have been able to capitalize on the business opportunities presented by the Pit Rule. Prior to the passage of the Pit Rule Jason Sandel, Vice President of Aztec-NM-based Aztec Well Servicing stated that, "*We are planning ways to package our services to help provide a turnkey type service to address that issue.*"[15] Aztec Well Servicing, through its sister company TOTAH Rental and Equipment, is *"now renting closed loop drilling mud systems."*[16] And in January of 2010, another company, Terra Tersus out of Farmington, filed a patent for a "Drilling mud closed loop system."[17] As more companies take advantage of the market opportunities, more jobs and income will be generated in New Mexico.

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