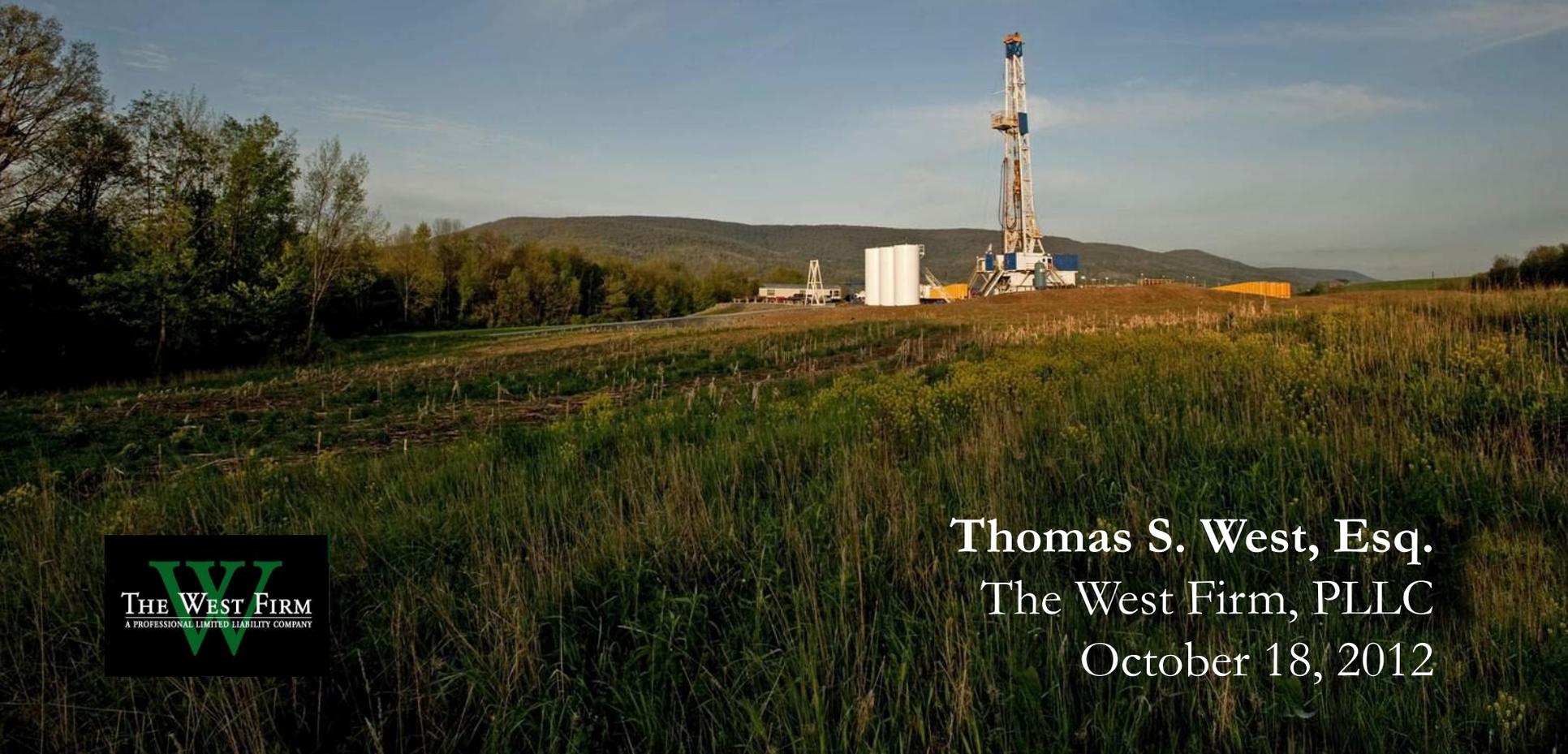


The Frick and Frack of Hydraulic Fracturing



Thomas S. West, Esq.
The West Firm, PLLC
October 18, 2012

The Source of the Controversy

- The controversy surrounding hydraulic fracturing will go down in history as one of the most controversial environmental issues of all time.
- Although the environmental community originally embraced natural gas as a transition fuel to renewable energy, the abundant supply of shale resources has changed the game entirely.

The Source of the Controversy

- With supply estimates exceeding 100 years, the environmental community considers shale development a threat to the transition to renewable energy.
- As a result, they have staked out strong opposition to hydraulic fracturing; however, hydraulic fracturing is both a necessary and proven technology for developing these resources and energy independence.

The Source of the Controversy

- Hydraulic fracturing came to the public forefront during tough economic times, circa 2008, when the environmental community was facing decreasing revenues and membership.
- The environmental community responded with strident opposition to hydraulic fracturing, which became a great source of revenue and membership.

A Total Lack of Consensus

- The environmental community attacked all aspects of the process, including everything from well siting to air emissions, water usage, water disposal, waste disposal, greenhouse gas emissions and more.
- The environmental community mobilized reference publics by defining, without scientific basis, threats to water supplies, such as the New York City water supply.

A Total Lack of Consensus

- Although the industry was slow to react, the industry ultimately defended the process, developed best management practices and supported full regulatory programs at the state level.
- As a result, industry and the environmental community cannot agree on much of anything.

The Resulting Stalemate

“Frack” vs. “Frac”

Some Leading Examples

- Natural gas has a greater greenhouse gas emissions than coal. *Park Foundation funded study by Robert Howarth and Anthony Ingraffea 2011.*
- The U.S. Department of Energy's National Energy Technology Laboratory issued a report showing that natural gas has roughly half the GHG emissions as coal. *DOE 2012.*

Global Warming, *Cont'd.*

- In a surprising turnaround, the amount of carbon dioxide being released into the atmosphere in the U. S. has fallen dramatically to its lowest level in 20 years and government officials say the biggest reason is that cheap and plentiful natural gas has led many power plant operators to switch from dirtier-burning coal. *U.S. Energy Information Agency as reported by Associated Press, 2012*

More Examples

- Hydraulic fracturing will lead to widespread groundwater contamination.
- But: State regulators from across the country have affirmed that hydraulic fracturing does not contaminate groundwater, consistent with findings from the U.S. Department of Energy and the Ground Water Protection Council.

More Examples, *Cont'd.*

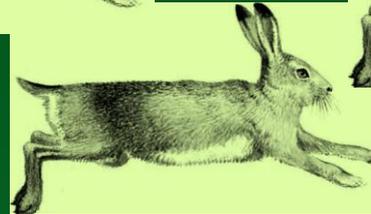
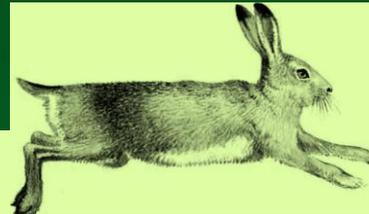
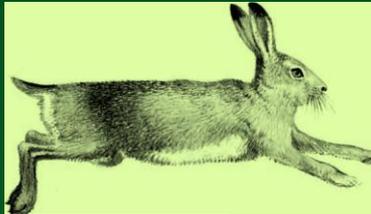
- And, New York state regulators spent years examining the possible risks of hydraulic fracturing, concluding that “there is no likelihood of significant adverse impacts from the underground migration of fracturing fluids.”
- Lastly, President Obama’s own EPA Administrator, Lisa Jackson, has stated on multiple occasions that there is no evidence that hydraulic fracturing has contaminated ground water.

Separating Fact from Fiction in Public Policy

- Consider naturally occurring methane and the potential for drilling induced methane migration.
- There is an ample body of scientific evidence and engineering studies to support the reality of these issues.
- These issues have nothing to do with hydraulic fracturing.
- These issues can be prevented by strong casing and cementing standards and regulatory oversight.

State Regulatory Approaches Are Varied

OHIO,
PENNSYLVANIA,
WEST VIRGINIA



FINISH

Varied State Approaches, *Cont'd.*

NEW YORK

START



Municipal Home Rule

- Industry favors preemption of local zoning and local regulation because of the need to develop oil and gas wells and units based upon geology, not political boundaries.
- Drilling opponents favor strong home rule rights, which has led to municipal bans in a number of states.
- All states, except New York, have ruled that municipalities may not ban oil and gas development, but some states allow regulation.

The Future of Fracing

- There is strong bipartisan support that the federal level for domestic energy production and strong state programs, with appropriate federal oversight.
- Most state programs will have stringent regulatory controls regarding drilling and completions i.e., strong casing and cementing standards, to prevent contamination of groundwater.

The Future of Fracing, *Cont'd.*

- Most states will implement robust stormwater and pollution prevention programs to prevent surface activities from contaminating surface water and groundwater.
- Most states will require disclosure of the chemicals used in the hydraulic fracturing process.
- Many states will track the recycling, reuse and disposal of liquids and solids produced at drill sites.

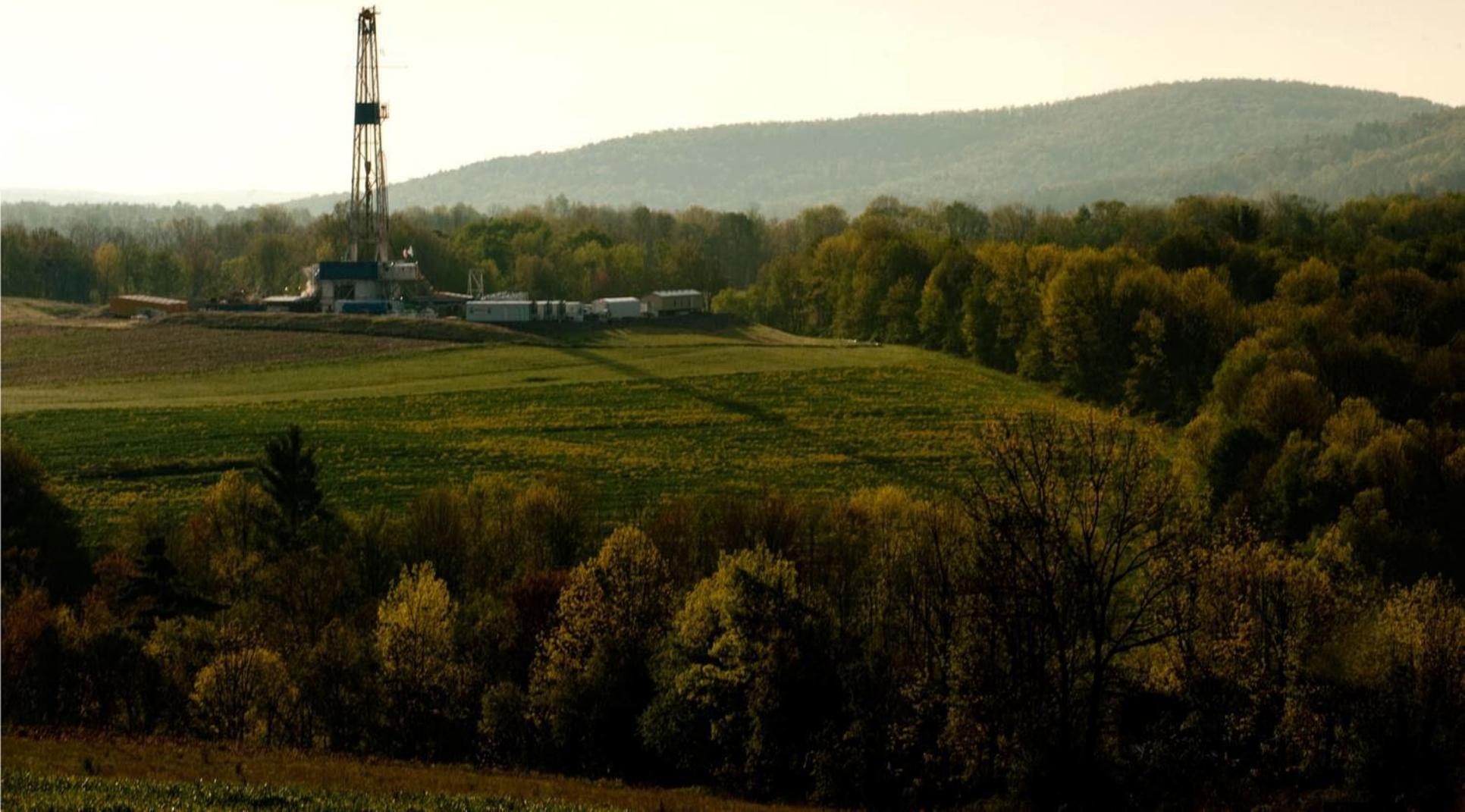
The Future of Fracing, *Cont'd.*

- Industry will continue to develop best management practices and ways to protect the environment.
- These include:
 - Secondary and tertiary containment at well pads.
 - A reduced dependence on chemical additives in the hydraulic fracturing process.
 - Green completions to avoid methane loss.

The Future of Fracing, *Cont'd.*

- In the final analysis, hydraulic fracturing coupled with strong regulatory standards and best management practices will:
 - Lead to the safe and reliable production of domestic energy without significant adverse environmental consequences.
 - Lead to energy independence.
 - Produce hundreds of thousands of jobs and billions of dollars of economic value for our country.

Questions?



RESOURCES

- **PA Marcellus Shale Committee**
 - <http://www.pamarcellus.com>
 - Drilling Video: <http://www.pamarcellus.com/web/>
- **IOGA NY Marcellus Facts BLOG**
 - <http://www.marcellusfacts.com/blog/>
- **Energy In Depth**
 - www.energyindepth.org
- **The West Firm Web Site and bLAWg**
 - <http://www.westfirmlaw.com/marcellus-shale.cfm>
 - <http://www.westfirmlawblawg.com>

THE WEST FIRM, PLLC

THOMAS S. WEST, ESQ.

677 Broadway, 8th Floor

Albany, New York 12207

Tel.: (518) 641-0500

Email: twest@westfirmlaw.com

Website: www.westfirmlaw.com

Blog: www.westfirmlaw.typepad.com

This presentation is made available by The West Firm, PLLC only for educational purposes as well as to give general information and a general understanding of the law. It should not be construed as the firm's legal advice or opinion regarding a particular issue or assessment of law for any particular jurisdiction. It also should not be construed to represent the position of any client represented by the firm.