Testimony of Lloyd H. Hetrick Newfield Exploration Company to the

Subcommittee on Energy and Mineral Resources U.S. House Committee on Natural Resources "The Future of Hydraulic Fracturing on Federally Managed Lands" July 15, 2015

Chairman Lamborn, Ranking Member Lowenthal and distinguished members of the Committee, my name is Lloyd Hetrick. I am a registered professional engineer and the Operations Engineering Advisor for Newfield Exploration Company based in The Woodlands, Texas.

I have more than 36 years of diverse experience spanning all phases of the exploration and production industry, including: drilling, completions, production, Health, Safety and Environmental (HSE), and mechanical integrity. I have served a leadership role in the standard setting process for hydraulic fracturing via multiple federal agency advisory panels and industry trade association committees working to develop and implement appropriate governmental regulations and standards.

Thank you for having me here today.

Newfield is a Fortune 500 independent energy company engaged primarily in crude oil and natural gas exploration and production onshore here in the United States. We are focused on developing unconventional oil and gas reservoirs in the Anadarko and Arkoma Basins of Oklahoma, the Bakken formations of North Dakota and the Uinta Basin of Utah. Roughly 55 percent of our wells drilled domestically during 2014 were administered by the Bureau of Land Management (BLM).

Newfield is the largest oil producer in Utah with more than 225,000 mineral acres in the Uinta Basin including federal, state, tribal and private leases. Our Uinta Basin operations include one of the largest federal secondary recovery units in the continental United States. We maintain a field office near Roosevelt, Utah, with more than 400 employees. Approximately 85 percent of our wells drilled in Utah during 2014 were administered by BLM.

All of our Utah development activities – regardless if conducted on federal, state, tribal or private leases – will ultimately be affected by BLM's new hydraulic fracturing rule. As I'll discuss further, there is no practical scenario in which Newfield can hold its state or private leases to a different standard than its federal or tribal leases and coherently manage a compliance program in its Utah operations.

Therefore, this rule impacts everything we do in Utah and adds significant uncertainty and cost to an already low-margin resource play to further complicate the future of hydraulic fracturing on federally managed lands.

The recent downturn in global crude oil prices has resulted in a reduction of Newfield's investment and workforce in the Uinta Basin and has impacted peer companies similarly – significantly impacting the employment of local contractors and related commerce. At this same time last year, there were 28 rigs running in Utah. Today, there are seven. The economic realities of production in Utah are further undermined by the BLM rule.

This reduction in drilling and production has and will continue to adversely affect employment, wages, federal royalties, taxes and all of the related socioeconomic benefits enjoyed during times of robust development.

It is important to remember that every \$1 million of upstream capital expenditure by independent oil and gas producers results in \$1.1 million in total taxes, \$5.1 million in overall contribution to U.S. GDP and six direct and 33 total upstream jobs. When midstream and downstream factors are considered, America's oil and gas industry supports 9.2 million U.S. jobs and 7.7 percent of the nation's GDP according to the American Petroleum Institute. The industry pays almost \$86 million in federal rents, royalties, bonus payments and income tax payments daily.

Revenue in the form of royalties, rents, bonuses and other payments to American Indian tribes nationwide for the production of oil and gas in FY2014 was reported by the Office of Natural Resource Revenue (ONRR) to be more than \$1.1 billion.

America's oil and gas resources are among the nation's largest sources non-tax revenue to the federal government. For every dollar the government spends administering the federal onshore program, companies return \$83.69 in royalties and leasing revenue to the American taxpayer.

From Utah's federal onshore lands for Fiscal Year 2014, the ONRR reported oil and natural gas revenue in the form of royalties, rents, bonuses, and other payments to the U.S. Treasury in excess of \$302 million.

Unfortunately, the decline Utah activity has already occurred and may continue to negatively impact Utah and especially the Uinta Basin for the foreseeable future.

In addition to the negative economic effects caused by the downturn in crude oil prices, significant regulatory uncertainty already existed for Newfield and other Uinta Basin operators due to the lack of predictability associated with agency reviews mandated by the National Environmental Policy Act (NEPA). While outside the scope of this hearing, it is worth mentioning as an example that Newfield is now in its seventh year of agency review for an infill development Environmental Impact Statement (EIS).

BLM's hydraulic fracturing regulation creates an additional layer of regulatory uncertainty that will materially undermine the ability of the Uinta Basin to compete on an economic basis with other plays in the nation. When any operator is faced with such uncertainty, capital and resources will be redirected to areas where the regulatory process is more certain. This was not anticipated in the rulemaking process and is discussed further below.

I will not dwell on often-recited and *legitimate* arguments by industry that this new rule is unnecessary because of sufficient and continually improving state regulations and lacks appropriate data to justify these new rules. I would however, like to remind the Committee of the EPA's finding of "no widespread, systematic impacts" from hydraulic fracturing in their recently released "Assessment of the Potential Impacts of Hydraulic Fracturing for Oil and Gas on Drinking Water Resources."

I respectfully offer the Committee three categories of concerns and include Newfield-specific examples to support my assertion that if this new BLM regulation is to be implemented, it still needs more work.

I want to recognize my peers at BLM for reaching out to all stakeholders during the rulemaking process. Since 2012, BLM has listened to concerns from all sides and – to a large extent – attempted to find reasonable middle ground. The following arguments are not an indictment of the agency nor of those who have worked to craft the rule in response to direction from more senior political leadership, rather they reflect the complexity of this process.

The BLM rule, in many cases, impacts non-federal minerals, causes delays and creates inefficiencies that were not properly addressed in the BLM's economic analysis:

- For operations located in certain BLM regions like North Dakota and Montana operators
 with state or private leases that are combined within a drilling and spacing unit also
 including federal minerals, the entire unit becomes subject to the new rule. Other BLM
 regions such as Utah and Oklahoma limit the extent of the new rule to apply only when
 the federal tract is penetrated by the wellbore within the drilling and spacing unit.
- With most unconventional oil and gas plays in which horizontal extended reach wells are utilized to properly develop the lands, drilling and spacing units tend to be larger than the conventional vertical units and encompass more lands within the development drilling and spacing unit. Therefore, previously non-applicable minerals are more likely to fall under this new BLM rule. This particular scenario is most clearly demonstrated with the "checkerboard" federal mineral ownership pattern common across the western United States. Although only 50 percent of the checkerboard has federal minerals, 100 percent of the checkerboard becomes subject to the new rule. A similar, but more dramatic scenario exists in Newfield's Oklahoma operations where a small amount of federal minerals causes a much larger area to become federal jurisdiction. Roughly 1 percent of our Anadarko position is federal minerals, yet even with this small subset of federal minerals, the new rule will apply to more than 10 times that amount. Neither the federal checkerboard nor the Oklahoma example was contemplated in BLM's new rule.
- In some instances, inadequate cementing records or some potential technical disagreement on Cement Evaluation Log (CEL) interpretation not a shortfall in well integrity may result in a new well that cannot be hydraulically fractured or an existing well than cannot be refractured. The cost of such a problem ranges from a few hours of lost operational downtime up to the cost of a \$10 million well.
- Specific to the downtime referenced above, every hydraulic fracturing job requires at least a 48-hour notice to obtain BLM approval of cement-related assurances. However, BLM is barely staffed to provide support during a normal 40-hour work week, certainly not 24/7/365 support.
- Finally, the Office of the Inspector General has recognized that inefficiencies in the Department of Interior's permit review process impede productivity and that neither BLM nor the operator can predict when permits will be approved. Since site-specific operational plans cannot often be finalized months in advance, operators may be forced to submit applications that include multiple scenarios to ensure operational flexibility. Although some of the proposed operational scenarios may never be implemented, an already overburdened BLM staff will be required to review all components of the new applications.

This rule has portions that duplicate, contradict or increase confusion with respect to existing state regulations, or in some cases, presents perplexing requirements:

- Duplication Surface casing cementing rules are essentially the same in the new BLM rule as are required in all oil and gas producing states.
- Contradiction The new BLM rule requires pressure measurement on all casing strings during hydraulic fracturing, but the North Dakota Industrial Commission requires the surface annulus to be kept open to protect the surface casing and provide pressure relief, in case a leak occurs.
- Deferral with Uncertainty The BLM rule says *all* usable water must be protected and further defers the identification of what "usable water" must be protected to states and tribes. This deferral is unambiguous as long as states and tribes use a threshold of 10,000

mg/l TDS, but not all states use this threshold, nor do all states protect *all* usable water. Please remember that "usable" does not necessarily mean "useful" to plants, wildlife or humans.

- Deferral with Uncertainty –BLM recognizes the use of FracFocus for chemical disclosure, but adds additional onerous steps which limit a company's ability to protect trade secrets and inhibits innovation in this technology-driven part of our business.
- Perplexing The BLM rule requires that operators make seven illogical affirmations in order to claim trade secret protection when providing public disclosure for proprietary chemicals used during hydraulic fracturing.
- Perplexing The BLM rule requires a certification that attests to a company's compliance with all federal, state and local laws, rules and regulations. However, with increased local challenges and initiatives, this certification might be impossible to achieve without a time and date stamp.

The BLM's strategy to use public review as a secondary regulator will create foreseeable challenges for BLM and the operator and confusion for the public:

- BLM's stated incremental processing time for each new well application is only four hours, so there cannot be much technical analysis planned for the significant amount of new information submitted.
- Considering BLM statements that public access to this information will be facilitated, it appears BLM is promoting several predictable outcomes:
 - The public will be reviewing substantial technical and specialized industry information, of which many will not be familiar. Confusion about the technologies or the processes required to effectively achieve desired environmental and safety outcomes will result in further questions of, and petitions to, BLM and operators.
 - The predictable outcome will be a further-inundated regulator while the operator is faced with the ongoing task of educating the public that hydraulic fracturing has been, and will continue to be a safe well completion technique for almost seven decades.
 - In short, the rule will have failed to provide the public with assurances about the safety of hydraulic fracturing technology while adding delays, costs, and uncertainty for industry and consumers.

In conclusion, if this final BLM rule is to be applied, additional actions need to be taken to provide an economic analysis, operational clarifications and a fundamental clarification on the role of the BLM as the primary regulator for federal and tribal minerals.

Finally, Newfield wishes to associate itself with any written testimony submitted to the committee on this topic by the Independent Petroleum Association of America, the Western Energy Alliance, or the American Exploration & Production Council.

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