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This newsletter is intended for landowners and other members of the public with interest in the oil and gas industry. Each newsletter is also posted on our website at [www.msue.msu.edu/oilandgas](http://www.msue.msu.edu/oilandgas). If you would like to be added to the e-mail list to receive this newsletter, please contact the editor. You can also contact your local MSU Extension Office to obtain copies of the newsletter and other free oil and gas leasing information.

### **Information in this Issue**

1. Liability Issues in Gas Development Contracts
2. Farm Bureau "Oil Gas and Mineral Rights" Publication
3. Proposed State of Michigan lease auction to offer more than 122,000 acres
4. Michigan DEQ announces new hydraulic fracturing regulations
5. The magnitude of the royalty

### **LIABILITY ISSUES IN OIL AND GAS DEVELOPMENT CONTRACTS**

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The recent increase in natural gas exploration provides an opportunity for landowners to participate in the expansion of the natural gas industry. This opportunity includes the potential for an increase in income from rental and royalty payments, but it also includes questions about the increased costs the landowner could face in the future. In particular, landowners are faced with two major questions: If gas drilling activities result in damages to my land or property, will I face the risk of a major unanticipated cost in the future? And if I do face such a risk, what can be done today to help manage that risk? This article will examine some of the legal issues that landowners face in deciding whether to sign a gas development contract. This article is not intended to provide a comprehensive examination of the legal risks associated with gas development contracts. All landowners are advised to consult with a qualified attorney before signing any contract.

## **Contracts as a Balance of Risks**

The negotiation of a contract is an exercise in risk identification and risk allocation (DeSerpa, pp. 137-138; Cooter and Ulen, pp. 6-7). In doing so, negotiators of a contract must examine (a) the events that could create future risks in the context of the contract, (b) the risks (costs) that could arise with each of these events, and (c) the allocation of these risks (i.e., costs) between the contracting parties. In simplest terms, each issue in the contract should be approached with 3 questions:

- What event(s) could occur that would create risks (i.e., costs) in this exchange and what is the probability of their occurrence?
- What are the risks (costs) if the event occurs?
- Which party (the landowner or the developer) will bear the cost if that event occurs?

With this aspect of contract law in mind, it is possible to examine the liability issues that could arise under a gas development contract.

## **Liability Issues**

Perhaps no issue has drawn more attention during the recent expansion of natural gas drilling activity than the use of the process known as hydraulic fracturing (or “fracking”). Fracking is a process designed to stimulate natural gas production by “allow[ing] oil or natural gas to move more freely from the [underground] rock pores to production wells that bring the oil or gas to the surface” (U.S. Environmental Protection Agency). In the fracking process, vertical or horizontal wells (or both) are drilled. Fluids, including water and chemical additives, are pumped underground at high pressure to fracture rock formations and release the natural gas contained in those formations. The fluids are then removed and the production of natural gas can begin.

Much of the controversy over the fracking process is related to the issues of the potential contamination of groundwater sources by either the fracking fluids or the release of natural gas into groundwater sources. The EPA is conducting a study of the safety of fracking that is due to be released in 2012 and later years (U.S. Environmental Protection Agency). Whether this study will resolve the fracking controversy, however, is unclear.

Thus, landowners must face two unavoidable realities: First, the issue of the safety of the fracking (i.e., the probability that the landowner’s groundwater will be contaminated) is unlikely to be resolved in the near future. Second, landowners could face decisions about natural gas development contracts before the safety issue is resolved. Given these facts and the “balance of risks” approach to contract law discussed at the outset of this article, it is especially important that landowners understand the balance of risks contained in any contract that is offered by a gas development company. The remainder of this article provides a brief discussion of the liability (risk) issues that could arise in a gas development contract. Landowners are advised to seek more information about these issues (Schweikhardt and. Harsh) and to consult with a qualified attorney about any contract that is offered.

### **Liability issues in the drilling/fracking/production process:**

Who – the landowner or the developer – will be liable if the landowner’s groundwater table is damaged or contaminated during the fracking process or at any time during the natural gas production process (potentially a period of years)? This issue can be understood by examining the contract to determine whether it contains specific language that defines whether the developer is liable for any financial damages that occur. If the contract does not contain such language, the developer might still be liable for such damages, but the landowner is likely to face a more difficult challenge recovering such damages in court.

Similarly, if the developer hires a third party to perform some of the drilling/fracking/production processes, who will be liable if the landowner’s groundwater source is damaged or contaminated? If the third party is liable to the landowner but refuses or is unable to pay (e.g., bankrupt), will the developer then be held liable for the damage? Again, if there is no language in the contract that deals with such an event, the developer might still be held liable, but the landowner will once again face a more difficult legal challenge to recover the damages.

Finally, if the developer assigns (e.g., sells) the contract to a third party, will the developer continue to be liable for any damages committed by the third party? If not, the developer would have less incentive to sell the contract to a reputable third party, and, once again, the landowner could face a more difficult legal challenge in recovering the damages.

### **Other liability issues:**

Several other issues could create liabilities under a natural gas development contract. A full discussion of these issues is not possible in this article, but a partial listing of these issues should convince landowners of the need to discuss these issues with a qualified attorney:

- Is the landlord liable to the developer (or a third party) if the landlord damages the developer’s equipment or facilities?
- Is the landlord liable to the developer if a third party (e.g., a visitor, an employee, or a trespasser) damages the developer’s equipment or facilities?
- Is the developer liable to the landowner if the developer damages the landowner’s property (e.g., the landowner’s building or the surface of the land)?
- Is the landlord or the developer liable if a third party (e.g., a drilling worker, visitor, or trespasser) is injured as a result of the drilling/fracking/production operation?

### **Conclusion**

As should be obvious, many events could occur that would create unanticipated risks (costs) for the parties in a gas development contract. As a general rule, the outcome of such issues will be determined first by the language contained in the contract and then by the general principles of contract and tort (liability) law. Because the second alternative is likely to be more uncertain and costly, landowners might want to address such issues as a part of the contract. Finally, any contract offered to the landowner should be reviewed by the landowner’s insurance agent to provide an additional assessment of the liability issues that could arise under the contract.

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## **References**

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- U.S. Environmental Protection Agency. *Hydraulic Fracturing*. Available online at: <http://water.epa.gov/type/groundwater/uic/class2/hydraulicfracturing/index.cfm>

## **Michigan Farm Bureau and Michigan State University Extension cooperate to produce "Oil Gas & Mineral Rights" Informational Brochure**

Michigan Farm Bureau has actively supported and encouraged educational efforts for landowners in the leasing of mineral rights, in particular oil and gas. As a demonstration of their commitment, they have partnered with MSU Extension to create the document "Oil Gas & Mineral Rights". This provides landowners information and referrals to additional sources of information for these and other topics:

- What is a lease?
- Issues to look for in leases
- How to negotiate
- Who owns the mineral rights?

This document is now on the MSUE oil and gas website at [www.msue.msu.edu/oilandgas](http://www.msue.msu.edu/oilandgas). You can also contact your local Farm Bureau office to obtain one, or have one e-mailed to you by contacting Kate Kreps at [kkrepps@michfb.com](mailto:kkrepps@michfb.com)."

## **Upcoming State of Michigan Lease Auction to Offer more than 122,000 Acres**

Curtis Talley Jr.

Oil and gas companies are seeking to obtain oil and gas lease rights at the October 27, 2011 State of Michigan mineral rights lease auction. This auction, usually held in May and October, is conducted by the Michigan Department of Natural Resources. The top buyer at the May, 2011 auction, Westgrove Energy Holdings LLC, is also the biggest nominator of land for the October auction. Houston based Westgrove Energy Holdings LLC won the right to lease over one third of the acreage offered at the May, 2011 auction. The largest acreage concentrations for the October auction are in: Lake County -37,548.69 acres; Wexford County - 25,377.85 acres; Gladwin

County - 22,207.26 acres; Sanilac County - 13,987.9 acres and Osceola County with 8,261.42 acres.

At the May 3, 2011 auction, the lands were leased at an average price of \$19.48/acre. This acreage is much less than the total acreage auctioned in 2010 of 391,806 at an average bid price of \$480/acre. The State of Michigan typically receives a 1/6 royalty.

## **State of Michigan Department of Environmental Quality Announces Regulation Regarding High Volume Hydraulic Fracturing Well Completions**

Curtis Talley Jr.

Hydraulic fracturing is a well completion operation that involves pumping fluid (usually fresh water), proppants (usually silica sand) and chemical additives into the target geological formation to create artificial fractures or enhance existing ones. The goal is to improve the deliverability of hydrocarbons, such as natural gas and oil. In recent years, particularly with the advent of horizontal well drilling and multi-stage fracturing, large volumes of fluid exceeding 100,000 gallons have been used. For the deeper wells, several million gallons of fresh water is not uncommon.

This large water volume requirement has prompted oil and gas companies to drill a water well on site rather than haul water by truck. The withdrawal of water for oil and gas operations is currently exempt from the requirements of Michigan's water withdrawal statute (Part 327). To insure that a proposed withdrawal will not adversely affect surface waters or nearby freshwater wells, the Department of Environmental Quality has enacted Supervisor of Wells Instruction 1-2011 High Volume Hydraulic Fracturing Well Completions.

This water well assessment tool is the same one required of anyone that proposes to drill a large volume water well. One of the requirements of the Instruction, which was effective 6-22-2011, is that the applicant submit information about the volume of water needed, aquifer type, pumping rate and the location of the applied for well in contrast to any existing wells. The document in its entirety can be found at [http://michigan.gov/deq/0,1607,7-135-3306\\_57064---,00.html](http://michigan.gov/deq/0,1607,7-135-3306_57064---,00.html).

### **The Magnitude of the Royalty**

Oil and gas companies, as an incentive to lease, offer a one-time payment called the bonus. The lessor (landowner) must be careful to not over emphasize the up- front bonus payment at the expense of the royalty. The lessor should strive to negotiate a balance of the highest bonus payment possible along with the largest royalty rate possible. For a producing well, royalties

could easily be 10 to 20 times the bonus payment in the first year of production alone. Private landowners are normally offered the “standard” royalty of 1/8 share of production. The State of Michigan receives 1/6 royalty. In Michigan and all other states that mineral development is occurring, this royalty rate can be negotiated and in some cases increased. There are areas in Michigan right now that landowners located in “hot” areas are negotiating royalties as high as 25%.

Let’s take a look at a sample well and identify the potential royalties that can be earned. In our example, the Department of Environmental Quality has established a 40-acre drilling unit. In other words, a minimum of 40 acres must be leased in order for the oil and gas production company to obtain the drilling permit. The company has drilled one well and is successful and strikes a geologic formation that produces crude oil. In our example, the well pumps for 200 days per year, produces 25 barrels per day and the oil sells for \$60/barrel.

The total revenue from the well is calculated: 25 barrels/day x 200 days x \$60/ barrel = \$300,000/ year gross income from the well. If the landowner is aware that the lease can be negotiated so that he is paid based on gross income instead of net income the following royalties can be earned based on different royalty rates:

- 1/8 royalty = \$37,500/yr = \$937.50/acre/yr (.125 x \$300,000/40 acres)
- 1/6 royalty = \$50,100/yr = \$1,252.50/acre/yr
- 3/16 royalty = \$56,400/yr = \$1,410/acre/yr
- .20 royalty = \$60,000/yr = \$1,500/acre/yr
- .25 royalty = \$75,000 = \$1,875/acre/yr

The difference in payments to the landowner from negotiating a 1/6 royalty instead of a 1/8 royalty are \$157.50/acre in the first year (\$1,410 - \$1,252.50 = \$157.50/acre). Many times, landowners that concentrate only on the bonus payment short change themselves on the long term royalty that is generated. In “hot” areas where the likelihood a producing well will be developed is greater, some landowners negotiate no bonus in favor of a higher royalty payment.

Once the production of oil and gas begins, the lease stays in effect and can stay in effect many years. Attempting to re-negotiate the lease after realizing the importance of the royalty is not possible. Wells normally produce at their highest rates the first year and gradually decline. With the advent of new technology, wells can produce more than 30 years.

### **Landowner Informational Meetings**

MSU Extension personnel, private attorneys specializing in assisting landowners with oil and gas leasing and personnel from the Department of Environmental Quality have and continue to be willing to offer public meetings to educate landowners about the oil and gas industry in Michigan. Meeting topics include understanding and negotiating oil and gas leases, the role of the DEQ in regulating the oil and gas industry, new technology utilized in oil and gas exploration and the legal ramifications of leasing. If you would like a meeting, please contact the editor.