

2-2007

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Recommended Citation

Butler, David F., "So You Want to Be in the Oil & Gas Bidness? Circumstances That Arise When Drilling an Oil & Gas Well - The Flood at Blue Mountain Lake" (2007). *Annual of the Arkansas Natural Resources Law Institute*. 63.
<http://scholarworks.uark.edu/anrlaw/63>

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SO YOU WANT TO BE IN
THE OIL & GAS BUSINESS?
CIRCUMSTANCES THAT ARISE WHEN
DRILLING AN OIL & GAS WELL - THE
FLOOD AT BLUE MOUNTAIN LAKE

David F. Butler

**SO, YOU WANT TO BE IN THE OIL AND GAS BUSINESS?
CIRCUMSTANCES THAT ARISE WHEN DRILLING
AN OIL & GAS WELL-THE FLOOD AT BLUE MOUNTAIN LAKE**

By: David F. Butler, Kinard, Crane & Butler, Magnolia

Prior to drilling an oil or gas well, a lot of effort is spent putting the prospect together, including, but not limited, to the acquisition of oil and gas leases, securing a title opinion, negotiating damages on the drillsite, locating a drilling rig, building a location, and ultimately, drilling the well. Along the way, lots of bad things can happen to you.

I. BEWARE

My talk concerns a special well that was drilled, and several issues that evolved from drilling this well. Ross Exploration Company of Ft. Smith drilled a well on United States Department of the Army Corp of Engineers property under the terms and conditions of a Bureau of Land Management (BLM) lease.

The landowners who are considering participation in one of the Fayetteville Shale Wells, and the lawyers representing these landowners, should observe what happened in this well.

First of all, let's talk about the geographical location of this well. In the southern portion of the Arkoma Basin, in Yell County, approximately 50 miles southeast of Fort Smith, Arkansas, a field identified as the Waveland Field was established. I am going to look at the slide and take you to Mt. Magazine.

Mt. Magazine, the tallest mountain between the Rockies and the Appalachian Mountains, has an elevation of approximately 2,700 feet. Located south of Mt. Magazine is Blue Mountain Lake. Blue Mountain Lake, which was constructed in 1947 by the Army Corp of Engineers, covers in excess of 2,900 acres. The boundary for the Army Corp of Engineers lakes in Arkansas includes the lake, and a buffer zone along the shoreline where there is little or no development, and any activities along the shoreline are regulated by the Army Corp of Engineers. When I was in law school, one of my professors talked about the fact that Oklahoma had wind, Texas had oil, but Arkansas had water, and water law might be one of the big issues to consider as far as what you might specialize in, if anything.

Arkansas is fortunate to have several Army Corp of Engineers lakes. In fact, west of town, we have Lake Ouachita, nationally recognized as one of the cleanest and clearest lakes in the nation. This particular Corp of Engineers lake has headquarters at the base of the dam several miles west of Hot Spring, and the Corp staff ultimately reports to the Colonel down in Vicksburg, Mississippi. I had occasion to deal with the lawyers for the Corp of Engineers down in Vicksburg a couple of years ago, and when you deal with the Corp of Engineers, you are subject to the hierarchy of the United States Army.

II. PROBLEM NO. 1: THE ARMY CORP OF ENGINEERS HAS TO ISSUE A SURFACE USE PERMIT, AND THE LEASE TERM WILL TERMINATE WITHIN A FEW HOURS

Getting something done with the Army is comparable to picking up the phone and calling general information in Washington D.C., and saying you want to talk to the President of the United States. Permitting an oil and gas well on Corp property takes a while. In this particular situation, a well was to be drilled on the north side of Blue Mountain Lake which necessitated the acquisition of a permit from the Corp of Engineers, and in this case, as has happened from time to time in this business, you get down to the lick log because the primary term on the lease was about to expire. The Corp of Engineers drug its feet, issues were negotiated back and forth, stipulations were cussed and discussed back and forth, and ultimately the permit was not secured from the Corp of Engineers, until literally, a few hours before the lease was to expire. The Operator was sweating bullets.

III. “UNLESS” LEASE PROVISIONS

This particular lease had an “Unless” clause. If you will please look at the diagraph on the screen, you will see the following language:

Notwithstanding anything contained in this Lease to the contrary, it is expressly agreed that if the Lessee shall commence operations

as provided herein at any time while this Lease is in force, this Lease shall remain in force and its terms shall continue so long as such operations are prosecuted, and if production results therefrom, then as long as production is maintained.

IV. OPERATIONS: WHAT ARE OPERATIONS?

This language that we have just talked about is contained in the model form Lease that was recently adopted by the Arkansas Oil and Gas Commission. Another provision contained in the Lease form provides as follows:

Operations on any part of any lands so pooled shall, except for the payment of royalties, be considered operations on leased premises under this Lease, and, notwithstanding the status of a well at the time of pooling, such operations shall be deemed to be in connection with a well which is commenced on leased premises under this Lease. The term "operations" as used herein shall include, without limitation, the following: Commencing drilling, testing, completing, reworking, recompleting, deepening, plugging back, repressuring, pressuring maintenance, cycling, secondary recovery operations, or the production of oil and gas, or the existence of a shut-in well capable of producing oil or gas.

V. NEW LEASE FORMS

Modern leases taken in Arkansas contain the following language:

Operations on any part of any lands so pooled shall, except for all the payment of royalties, be considered operations on the leased premises under this Lease, and, notwithstanding the status of a well at the time of pooling, such operations shall be deemed to be in connection with a well which is commenced on leased premises under this Lease.

The term “operations” as used herein shall include, without limitation, the following: Commencing construction of roadways, preparation of drillsite, drilling, testing, completing, reworking, recompleting, deepening, plugging back, repressuring, pressuring maintenance, cycling, secondary recovery operations, or the production of oil or gas, or the existence of a shut-in well capable of producing oil or gas.

VI. Drilling Operations

In the lease that was involved in this particular wellsite, the question arose: “How do you define drilling operations?” For those of you who have practiced in front of the Arkansas Oil and Gas Commission in the last year, a couple of the operators, namely Chesapeake and SEECO, have built a location

on wellsites and brought in a spudder rig wherein an intermediate size drilling rig is utilized to drill a well that penetrates the Fayetteville shale. These wellbores are called “pilot holes.” Or, a small rig may be used to set conductor pipe.

Oftentimes, in South Arkansas, when you drill a well, you set conductor pipe, and then surface pipe is installed with a drilling rig. It is my belief that if you have a lease that necessitates spudding the well to save the lease, that simply means you must turn the bit to the right, and I guess that would mean one foot. So, if you set conductor pipe, which is run before you set surface pipe, then you will probably be okay. Conductor pipeline is generally set 100-250 feet.

VII. SPUDDING: WHAT IS SPUDDING?

According to the Oil and Gas Terms Manuel, spudding is defined as follows:

The first boring of the hole in the drilling of an oil well.

One definition is contained in *Hilliard v. Franzheim*, 180 So.2d 746 at 747 (La. App. 1965).

Because of the nature of the earth at the surface, regular drilling tools are not necessarily used to drill the first hundred or so feet of hole. Often, a special “spudding bit” will be used, and then

regular drilling tools are substituted as the well gets down to rock formation. Under an Unless Lease (q.v.) providing “If operations for drilling are not commenced on said land” or containing similar wording, it is usually held that spudding in amounts to commencement of operations of drilling. In fact, preliminary activities prior to spudding in will satisfy the clause.

In *Vickers vs. Peake*, 227 Ark. 587, 300 S.W.2d 329 (1957), the Arkansas Supreme Court addressed the issue of whether or not certain drilling operations (prior to the spudding of a well) were sufficient enough to comply with the terms contained in an assignment. The Court held the drilling of the well commenced by bringing in the majority of the equipment to the drillsite which included the drill pipe, butane tanks, pipe racks and other materials.

While this particular lease necessitated the well be spudded, it appears in Arkansas, (it also depends on the language in the lease, of course) that if you have commenced drilling operations, you are probably okay unless there is language that says you must spud.

VIII. PROBLEM NO. 2: IT’S RAINING

The good news is the Operator was able to move the rig in with the Corp of Engineers’ permit, but it started to rain before the rig arrived. For those of you here who are familiar with drilling activities, you can envision the scenario

where you are building a location, and there is nothing but mud, and when you bring in your drilling rig, you use a bulldozer to drag your rig in. But, you have it get it done.

IX. PROBLEM NUMBER THREE: IT'S STILL RAINING

It's raining and it's not stopping. You are drilling ahead. It continues to rain, and it's much like it was on that ark back during Noah's time. It's raining, raining, raining, and it's not letting up. While the rig is drilling ahead, the drilling contractor encounters gas. So, you have a show in the well, and it continues to rain. Since the Driller finds gas, "mudding up" is necessary.

Located on the edge of the location on Blue Mountain Lake, if the Corp will let you have some water, you hook up the water pump. When you drill a well, you have to have water. If you have drilling mud, of course, you mix water with the drilling mud, and that's what keeps the operation going. The mud goes through the drill bit, the rock is crushed, it flows back to the top, it then goes to the shale shaker, and the rock cuttings are then dumped into a hole in the ground known as a reserve pit. It is an environmentally safe operation most of the time (unless the dam breaks).

Unfortunately, when the Roughneck goes to the water pump, he notices the water has gotten up to the level of the water pump. So, the Roughneck goes and tells the Driller, the Driller tells the Tool Pusher, and the Tool Pusher tells

the Drilling Superintendent that we've got a problem. The Drilling Superintendent then calls the Operator and says, "We've got a problem." Operator says, "That's not possible." Roughneck says, "But there's water over the top of my boots."

X. PROBLEM NO. 4: CORPS OF ENGINEERS SAYS "NO PROBLEM, TRUST ME"

The lake is rising. So, Operator calls the Corp of Engineers. Look at the picture on the screen. The Corp of Engineer guy says, "Not a problem." "You should still be well above what would be the worst case scenario if the lake rose 50 feet." So, the Driller continues to drill ahead. The Driller hopes the dam gates will be opened, and the water level will recede. The water pump goes under water, the water is creeping up to the edge of the location, and the water is dangerously close to the reserve pit, and ultimately creeps up to the pipe racks. What is a prudent Driller to do? The Driller has to decide whether to believe the Corp of Engineers representative who says, "We don't have a problem", or are does he dare trust his own eyes. The Driller decides to go ahead with what he sees, and not what he's been told. So, the Driller decides to get the equipment out. So, what do you do now? First of all, you pull out of the hole.

XI. PROBLEM NUMBER 5: YOU HAVE ENCOUNTERED

GAS WHILE DRILLING, AND YOU'RE STUCK

I want you to picture this. The pipe is somewhere in the hole. It's stuck where it's not going to come out of the hole. You have elevators wrapped around the drilling pipe, you're pulling out of the hole, and you will see the block raise up and the pipe come up. You're actually stretching the pipe. If you stretch it too much, it will actually separate. In this case, according to the Operator, there was not enough horsepower on the rig drawworks motors to pull the pipe loose. The Driller is jarring on it trying to get it out of the hole, and he can't do it. The water is rising. What to do? The Driller decides to abandon ship, and leave some of the pipe in the hole.

XII. IADC Contract

When a drilling contractor signs a contract with an Operator, it is typically an IADC contract (International Association of Drilling Contractors). This contract generally provides a list of equipment, and that list will include the mud pump, air compressor, and what is known as the downhole assembly. The downhole assembly includes drill pipe and drill collars. The drill collars, which are very expensive, are attached to the bit. The end result of not getting all the pipe out of the hole is you are leaving the most expensive equipment (pipe) down in the hole. That's what happened in this case. The Driller pulls

out of the hole, and the drill pipe is stacked in the derrick. This means there are two thirty foot sections of pipe screwed together in the derrick. They are lashed off in the derrick, and the stuck drill collars are left in the hole. The Driller gets the motors and the mud pump out by dragging with bulldozers. The Operator has a well capable of making production, but there are drill collars left in the hole. The Driller and Operator are not happy with each other. The Operator is not happy with the Corp of Engineers. The Corp of Engineers is not happy with the Operator, no one is happy with the weatherman, and now you have the new player that no one ever dreamed was a party, the SURVEYOR.

XIII. PROBLEM NO. 6: SURVEYOR ERROR

As all of you should be aware, before you drill a well, you stake the location, and when you are drilling next to a lake, you secure a survey for elevation purposes. Obviously, if the water comes up a little bit, you want to make sure your wellsite, for now and in the future, will not be in the ocean.

It was ultimately discover the surveyor's elevation was off by fifty feet. The location could have been moved up to a much higher elevation, but it would have cost a lot more money to level out the location. This was the cheapest place to drill the well, and should have been rather harmless because the location appeared to the naked eye to be well above the lake level. Ultimately, the drill collars and lots of pipe have been left in the hole. Here are

several photographs of what happened actually when the water was on the way down. I have already showed you what Blue Mountain Lake looked like on a normal day. Here is a picture looking back toward Blue Mountain Lake, and you'll see that drilling rig is pretty close to the water. Well, actually it's under water. On this particular rig floor, the substructure is 15 feet tall. All of that is under water. The mud tanks, reserve pits, pipe racks, and the substructure were all submerged.

Well, how bad was it. Lots of stories came out of this well. One of them was that while the rig hands were out there trying to get everything out, the water was flowing by the rig, and there were actually cows floating by. Later on, the story was that hunters set up a duck blind on the rig floor. But to tell you how bad things were, I need to show you this picture. As a general rule, you know you're a redneck oil and gas driller if you can tie your bass boat up to the doghouse. Look at this photograph. Unfortunately, in a typical IADC drilling contract, bass boats are generally not listed as "equipment."

XIV. Force Majeure Clauses

Who gets the blame for this disaster, and what happens if while drilling a well, you have a flood. Let's talk about Force Majeure Clauses. The following language is contained in standard oil and gas leases:

The term “force majeure”, as here employed, shall mean an act of God, strike, lockout, or other industrial disturbance, act of the public enemy, war, blockade, public riot, lightening, fire, storm, flood, explosion, governmental action, governmental delay, restraint or inaction, unavailability of equipment, and any other cause, whether of the kind specifically enumerated above or otherwise, which is not reasonably within the control of the party claiming suspension.

There are two Arkansas oil and gas cases which discuss the interpretation of Force Majeure Clauses. The first case involves a governmental regulation. In *Gordon v Crown Central Petroleum Company* 284 Ark. 94, 679 S.W. 2d 192 (1984), the Arkansas Supreme Court addressed the issue of the relationship between a force majeure clause in a lease and a rule and regulation of the Arkansas Oil and Gas Commission.

In *Gordon*, the principal issue was a conflict between an express provision contained in an oil and gas lease, and the regulations of the Arkansas Oil and Gas Commission. In *Gordon*, a lease limited the amount of land that could be pooled to 660 acres, and the Arkansas Oil and Gas Commission, through a field order, determined the unit size to be 726 acres. The Trial Court held the parties by their lease instrument contemplated and provided for such

conflicts by having a “governmental regulations” or “force majeure” clause in the lease and that the pooling clause applies to voluntary pooling only.

One provision discussed in *Gordon* is as follows:

All express or implied covenants of this lease shall be subject to all Federal and State Laws, Executive Orders, Rules or Regulations, and this lease shall not be terminated, in whole or in part, nor lessee held liable in damages, for a failure to comply therewith, if compliance is prevented by, or if such failure is the result of, any such Law, Order, Rule or Regulation.

The *Gordon* Court further stated:

A covenant has been defined as an agreement calling “for the performance or nonperformance of some specified duty” which “may constitute an agreement to do or not to do a particular act.” Under this definition, the Oil & Gas Commission’s regulations are the equivalent of covenants since they call for the performance of a specified duty—pooling the lessee’s interest in the drilling unit with other lands. In the force majeure clause the parties provided that covenants in the lease were subject to all state and federal laws and regulations. The clause is therefore applicable to the Commission’s regulations as well.

The Arkansas Supreme Court held there is no doubt that when a pooling or unitization agreement is imposed by compulsory process, the provisions of the agreement prevail over any inconsistent lease provision.

The second case, which is more on point with our case, is *Wilson v. Talbert* 259 Ark.535 (1976), 535 S.W. 2d 807. In *Talbert*, the Lessee had a rupture in an oil tank, and the Lessee waited six months to repair the rupture. The Court addressed the matter based upon the Lessee's attempt to use the force majeure clause as an out. It was held the lease terminated because the Lessee's actions were not reasonable. The Court found that the Lessee knew about the tank rupture, and ultimately an alternate tank could have been used to store oil.

XV. PROBLEM NO. 7: SURVEYOR IS A TURNIP

The surveyor, as it turned out, was judgment proof, so Operator and Driller get involved in blaming each other, ultimately getting lawyers involved, and eventually mediation was agreed upon. Mediation was a success because all parties were upset with an agreed upon resolution.

XVI. SILVER LINING IN THE CLOUD

Since Operator made a small well in the initial wellbore, and the geologist didn't get a chance to fully test the prospect, a second well was drilled about 50 feet from the initial wellbore. What would you expect? Of course, a good well was the end result. Another good piece of news is the Corp of

Engineers has so many problems with water, this wellsite was much akin to a knat on an elephant.

XVII. CONCLUSION

Even though this well encountered unusual problems, only those persons or entities sophisticated in this business should risk their money in an oil and gas well. If your friends, neighbors, clients, or family wants to participate in an oil and gas well, make sure the money they are going to spend is money they don't need and won't miss. Remember, an Authority for Expenditure (AFE), is only an estimate. Parties who participate in an oil and gas venture are responsible for the costs incurred in drilling the well.