2011.10.28 15:55:31 Kansas Corporation Commission /S/ Patrice Petersen-Klein



LEGAL SECTION

THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

Before Commissioners:

Mark Sievers, Chairman

Ward Loyd

Thomas E. Wright

In the Matter of Establishing Rules for) Docket No. 12-CONS-117-CEXC
Horizontal Wells Drilled in the Mississippi)
Formation in the State of Kansas.) CONSERVATION DIVISION

PRE-FILED TESTIMONY

OF DOUGLAS C. LOUIS

- 1 Q. Please state your name and business address.
- 2 A. Douglas C. Louis, Kansas Corporation Commission, 130 South Market, Room 2078,
- Wichita, Kansas 67202.
- 4 Q. By whom are you employed and in what capacity?
- 5 A. I am employed by the Kansas Corporation Commission as the Director of the
- 6 Conservation Division.
- 7 Q. How long have you been employed in this position?
- 8 A. Four and a half years.
- 9 Q. Prior to that what was your position?
- 10 A. I was supervisor of the KCC District No. II field office in Wichita for eleven years, and
- prior to that I was employed as the district Geologist for the District No. II field office for
- seven years.
- 13 Q. What is your educational background?
- 14 A. I have a degree in Geology from Wichita State University and a MBA from Wichita State
- University. I'm a licensed Geologist in the State of Kansas.
- 16 Q. Have you previously testified before the Commission and were your credentials as an
- 17 expert witness accepted?
- 18 A. Yes.
- 19 Q. Are you acquainted with the application filed by Staff in this docket?
- A. Yes, I reviewed the application before it was filed.
- 21 Q. Will you describe for the Commission the process Staff went through prior to filing its
- 22 application in this docket?
- A. In January 2011, Staff was contacted by two operators, Chesapeake Exploration, LLC
- 24 and SandRidge Exploration & Production, LLC. They wanted to meet with Staff to
- discuss their plans for developing the Mississippi formation in Kansas and to learn more
- about our horizontal drilling regulations.
- 27 Staff met with both operators and was informed of the large, successful Mississippian
- 28 play operations in Northern Oklahoma by drilling horizontal wells. They planned on
- 29 extending those operations into Southern Kansas, expecting extensive drilling programs
- to start around mid-2011, accelerating thereafter.

Shortly after, staff began receiving applications to drill horizontal wells. Staff had many technical questions concerning the new technology. Operators, drilling contractors and service companies answered staff's questions in a very cooperative manner. After going through this question-and-answer process, on a dozen or so applications, a formula application was developed to preemptively answer common Staff questions.

At that point it became obvious to Staff and operators, if we were going to keep up with an increasing number of applications, the well-permitting process needed to be streamlined. It also became obvious a number of our regulations, which were adopted to regulate vertical wells, did not adequately address horizontal wells.

Staff convened a horizontal well workgroup consisting of industry, Staff, and other State agencies interested in horizontal drilling. The workgroup's purpose was to propose ideas to streamline the well permitting process, while collecting critical well-information and adopting or amending regulations specifically designed for horizontal wells. The first meeting of the workgroup was held on August 11, 2011.

At this meeting, the group decided the best approach was to form four sub-groups to discuss the following areas: applications, allowables, notice, and environmental issues.

Subsequently, the four sub-groups held meetings, then made recommendations to the whole workgroup on September 28, 2011. At this meeting, there was general agreement on a number of issues, but there were other issues needing more study and discussion for future sub-committee meetings.

Q. How did Staff proceed?

- A. Staff filed the application in this docket to establish special field rules for horizontal drilling and horizontal wells producing from the Mississippi formation.
- Q. Why an application for special field rules only covering horizontal wells in the Mississippi formation, rather than seeking a general regulation change?
- A. Horizontal drilling in the Mississippi formation is where the highest concentration of activity is occurring. As of the date of my testimony, we have had 96 applications for horizontal drilling in the Mississippi formation since January 1, 2011. The pace of application filing is accelerating. Currently, we receive very few applications for horizontal drilling in other formations. Modifying or creating new regulations usually takes from nine months to one year (sometimes longer) to complete. Neither Staff nor

- industry wanted to wait long to get specific regulations in place, because of the impact it would have on the development of the state's resources, therefore we decided to apply to the Commission for special field rules.
- 4 Q. Is there precedent for special field rules covering specific formations in Kansas?
- 5 A. Yes there is. There are special field rules for the Hugoton field, Panoma field,
- 6 Greenwood field, and many smaller fields in the State. In addition, the Commission has
- 7 previously adopted special field rules for drilling horizontal wells in the Niobrara
- 8 formation in Sherman County, Docket No. 07-CONS-108-CEXC.
- 9 Q. Will you explain each of the proposed rules in the application and why Staff believes each is appropriate?
- 11 A. Yes, I will:

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• Eliminating Notice Requirements:

Staff is proposing to allow wells drilled horizontally in the Mississippian formation to be permitted using a modified intent-to-drill process, rather than requiring operators to file an application pursuant to K.A.R. 82-3-103a, as long as the proposed well will meet all setback requirements. Staff will need additional information, (e.g. the intended path of the horizontal leg) and this information will be provided on the attachments to our regular intent-to-drill form.

As no application will be filed, no notice will be required, making it similar as if multiple vertical wells would be drilled on the same tract. It should be noted, all intent-to-drills are on our website for interested parties to access.

• Modifying Crude Oil Allowables:

Staff proposes an allowable of 200 barrels of oil per day for each 660 feet of horizontal completion interval. Vertical wells drilled along the same path as a horizontal well would have to be spaced 660 feet apart, with each well receiving a 200 barrel per day allowable. This provision would assign an allowable approximately the same as a series of vertical wells.

• Modifying Natural Gas Allowables:

Staff proposes a gas well allowable of 3 mmcf per day for each horizontal well. This volume was recommended by industry members based on experience with these wells. Currently, gas allowables for vertical wells are calculated by using a percentage of the open flow potential as calculated by testing pursuant to K.A.R. 82-3-303 and K.A.R. 82-3-304. As described below, testing for horizontal wells is not practicable. Initially, the allowable subcommittee proposed 2 mmcf, by taking into account the 250 mcf minimum production for exemption from testing for vertical wells. Industry members were concerned 2 mmcf would be too low, resulting in many applications for exceptions to the allowable. Three mmcf was proposed as a more workable amount. In addition, 3 mmcf is the gas equivalent of a 200 bbl oil allowable per definitions in K.A.R. 82-3-101(a)(81)(E) and K.A.R 82-3-101(a)(81)(I).

• Eliminating Gas Testing:

Staff proposes horizontal wells drilled in the Mississippi formation be classified as gas wells, exempting them from testing under the provisions of K.A.R. 82-3-303 and 304. Although these regulations provide a process for testing gas wells, the regulations were designed to test vertical wells, and cannot easily be adapted to test horizontal wells. One of the purposes of the test is to use the results to assign a gas allowable to the well. This is not necessary, since these wells will be assigned a set maximum gas allowable as explained above.

• Modifying Flaring:

Staff is proposing to allow gas to be flared for 30 days, with an additional 30 day extension granted by Staff upon written request. Operators of horizontal wells in the Mississippi formation will need to flare gas for periods longer than allowed by K.A.R. 82-3-208 or K.A.R 82-3-314, to clean-up the well following fracture stimulation, or for the gas to clean-up to pipeline quality, or to get pipeline connections.

The operator will be required to notify the Commission by affidavit if natural gas will be flared. The appropriate district office must be notified to inspect the flaring site. It will be required all gas flared be measured. Also, no venting will be allowed.

• Eliminating High Volume Pump Application:

Staff is proposing to allow the use of high volume pumps without filing an application for approval under K.A.R. 82-3-131. It is likely horizontal wells in the Mississippi formation will produce more than 2,500 barrels of fluid per day. It is believed, allowing pumps to handle this fluid volume, will not harm the reservoirs or adversely affect other operator's correlative rights.

• Hole-Survey Required:

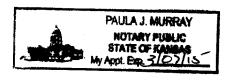
For horizontal wells in the Mississippi formation, Staff is proposing additional information be furnished with the completion report. This additional information, including a hole-survey of the actual path of the well, is currently required in Commission Orders approving applications for horizontal wells. Detailed well-location information is necessary to ensure the well "as-drilled" meets all setback requirements.

- Q. In your opinion, are these field rules appropriate for horizontal wells drilled in the Mississippi formation?
- A. Yes, the proposed field rules are appropriate. The proposed field rules also recognize the differences between horizontal and vertical wells. While allowing the Commission to collect pertinent well-information, the rule will allow the permitting process to be accelerated without adversely affecting correlative rights, causing waste, or jeopardizing public safety. For the most part, the proposed field rules were agreed on by Staff, industry, and other interested state agencies.
- Q. Do you have a final recommendation for the Commission?
- A. Staff recommends the Commission grant this application adopting the proposed rules as the field rules for horizontal wells drilled in the Mississippi formation.

VERIFICATION OF DOUGLAS C. LOUIS

STATE OF KANSAS) ss:
COUNTY OF SEDGWICK)
Douglas C. Louis, being first duly sworn, deposes and says that he is the Douglas C. Louis referred to in the foregoing document entitled "Prefiled Testimony of Douglas C. Louis" in Docket No.: 12-CONS-117-CEXC before the State Corporation Commission of the State of Kansas and the statements and attached exhibits therein were prepared by him or under his direction and are true and correct to the best of his information, knowledge and belief.
Douglas C. Louis
SUBSCRIBED AND SWORN to before me on thisday of
October, 2011.
Notary Public

My Commission expires:



THE STATE CORPORATION COMMISSION OF THE STATE OF KANSAS

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In the Matter of Establishing Ru Horizontal Wells Drilled in the Mis Formation in the State of Kansas.	ales for) Docket No. 12-CONS-117-CEXC ssissippi)) CONSERVATION DIVISION	
CERT	IFICATE OF SERVICE	
I, John McCannon, Litigation Counsel, with the Kansas Corporation Commission, certify that on, 2011, I did cause a true and correct copy of the Pre-Filed Testimony of Douglas C. Louis, to be served by United States mail, first class, postage prepaid to the following:		
	John McCannon Litigation Counsel Kansas Corporation Commission	

CERTIFICATE OF SERVICE

I hereby certify that on 10-20-201, I caused a true and correct copy of the foregoing "Prefiled Testimony of Douglas C. Louis" to be served by placing the same in the United States mail, postage prepaid, to the following parties:

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