



The Administrative Law Judge ("ALJ") filed her Report of the Administrative Law Judge on the 30<sup>th</sup> day of December, 2012, to which Exceptions were timely filed and proper notice given of the setting of the Exceptions.

The Appellate argument concerning the Oral Exceptions was referred to **Patricia D. MacGuigan**, Oil and Gas Appellate Referee ("Referee"), on the 6<sup>th</sup> day of February, 2012. After considering the arguments of counsel and the record contained within these Causes, the Referee finds as follows:

### **STATEMENT OF THE CASE**

**BARTON LAND CONSULTANTS, INC. ("BARTON") AND VITRUVIAN EXPLORATION, LLC ("VITRUVIAN")(COLLECTIVELY "BARTON") APPEAL** the ALJ's recommendation to deny Barton's spacing application and grant the Equilibria application for increased density in Section 20, T27N, R4E, Kay County, Oklahoma.

Barton seeks to vacate 640 acre vertical gas spacing for the Newkirk, Cottage Grove, True Layton, Cleveland, Big Lime, Oswego, Skinner, Red Fork, Bartlesville, Mississippian, Wilcox and Arbuckle common sources of supply established in February of 2003 by Order No. 472708, and establish 40 acre units for the same formations as they underlie the subject lands. The proposed units would comprise a governmental quarter quarter section with a permitted well location no closer than 330 feet to a unit boundary. Additionally, Barton also requests that an order issue granting the spacing application need be made effective on a date prior to the signing of the order.

Equilibria has recently drilled a Mississippian well on the captioned lands (Cales #1-20) and, in opposing the despadding, seeks increased density authority for the Mississippian. Equilibria requests an order amending Order No. 472708 to authorize an additional well to test the Mississippian common source of supply as it underlies the subject lands. Further Equilibria requests that it or some other party be named operator of said increased density well.

#### **BARTON TAKES THE POSITION:**

- (1) The Report of the ALJ is contrary to the evidence and the law and fails to protect the owners in the common sources of supply.
- (2) The ALJ in her recommendation ignores the unanimous conclusion of all the experts that a vertical well will not drain a 640 acre unit. In fact, the Equilibria expert opined that multiple horizontal wells will be necessary to drain 640 acres.

(3) There was evidence presented that wells drilled in the section to the south, were found nonproductive in the Mississippian formation and completed in the Skinner formation. The cumulative Skinner production was minimal and drained a few acres. The Cales #1-20 well drilled in this section and purportedly completed in the Mississippian is currently producing 300-400 barrels of water with a 2-3% oil cut and some associated gas. This equates to 6-12 BOPD. This production shows the reservoir is not gas productive, but oil productive. This evidence is a substantial change of conditions.

(4) The ALJ maintains a 640 acre vertical unit is appropriate because it will allow the drilling of "one horizontal well with, perhaps one to two additional horizontal wells...". This comment by the ALJ indicates that there was sufficient evidence presented that one well will not and cannot drain the unit.

(5) Arlin Cales, a mineral owner under which the Cales #1-20 well has been drilled will have to share the production or royalty from the well with other owners that will not contribute hydrocarbons. In addition, the Cales interest is in the E/2 of Section 20. The evidence presented indicates a substantial portion of the W/2 of Section 20 is underlain by Kaw Lake. This lake is an obstacle to development in that portion of the section. Considering one horizontal well will not drain the unit and 2-3 wells are necessary, Cales will be sharing production or royalty with owners whose property may never be developed and certainly will not contribute.

(6) The existing spacing is conventional vertical spacing and nothing was presented that appropriate horizontal spacing for the Mississippian cannot be established based upon the ability of a horizontal well to drain the reservoir. The evidence clearly showed that a horizontal well will drain less than 200 acres and the preferred configuration is north/south. This makes a square 640 acre unit inappropriate.

(7) The ALJ did not address the Newkirk, Cottage Grove, True Layton, Cleveland, Big Lime, Oswego, Skinner, Red Fork, Bartlesville, Wilcox and Arbuckle formations. The Cales #1-20 well was drilled through all of the formations and each was dry except the marginal production in the Mississippian. Substantial evidence has been presented that the spacing for the above formations should be vacated and re-spaced as 40 acre units.

(8) Barton cites the legal authority of OCC-OAP Rule 165:5-13-5 et. seq. and requests that the Oklahoma Corporation Commission reverse the recommendations of the ALJ and grant the Application of Barton and deny the Application of Equilibria.

**THE ALJ FOUND:**

(1) After taking into consideration all of the testimony and evidence it is the recommendation of the ALJ that the application of Barton in CD 201104592-T be denied and the application of Equilibria in CD 201105334-0/T be granted.

(2) Equilibria presented persuasive evidence that the 640-acre spacing should stay in place in Section 20 so that the Mississippian reserves can be recovered through the use of a horizontal well. The Cales #1-20 well, while not commenced until the final days of the lease, has resulted in determination that the Mississippian would be best developed on a horizontal basis as it underlies Section 20. This is particularly important given that a significant portion of the W/2 of Section 20 is underwater due to the presence of the Kaw Reservoir.

(3) The requirement for vacation of a Commission order is that there must be substantial evidence of a change in condition or change in knowledge of conditions. *Mustang Production Company v. Corporation Commission of the State of Oklahoma*, 771 P.2d 201, (Okl. 1989). Presentation of such substantial evidence was not made by Barton in their application. Rather, Barton's application seeking the spacing change appears to be motivated by the top lease it holds on the E/2 of the subject section. It is important to note that one of the Barton witnesses was the disgruntled surface/mineral owner who gave the top lease to Barton in large part due to his exasperation with Equilibria and the delayed drilling of the Cales #1-20. The only evidence of wells drilled since 2003 are Skinner wells in the region while only the Cales #1-20 has been drilled in Section 20. Thus, the evidence presented by Barton does not meet the requirement of substantial evidence of a change in condition or knowledge of conditions.

(4) While development by Equilibria did not occur until the end of the 3-year term, the Cales #1-20 was still commenced during the lease term and the information revealed by the drilling of the well has resulted in a proposed increased density horizontal well which should benefit all interest owners. This well information satisfies the ALJ that the interests of the owners in Section 20 are best served by granting authority for increased density instead of despacing the formations underlying the unit. *Winter v. Corporation Com'n of State of Oklahoma*, 660 P.2d 145 (Okl.App. 1983). The drilling of one horizontal well with, perhaps, one to two additional horizontal wells appears much more economic than requiring that 16 vertical wells be drilled in the section in order to recover all the reserves underlying Section 20. As previously noted, vertical wells are not an option where the reservoir is located and some type of directional well(s) would be required which would further unbalance the economics in the unit. The request of Equilibria that GNTL be named operator of the increased density well should also be granted.

(5) Thus, in light of the aforementioned conclusions, it is the recommendation of the ALJ that the application of Equilibria in CD 201105334 be granted and the application of Barton in CD 201104592-T be denied.

## **POSITIONS OF THE PARTIES**

### **BARTON**

1) **William H. Huffman**, attorney, appeared on behalf of Barton, stated the legal description of the land in question is Section 20, T27N, R4E, Kay County, Oklahoma. Barton states that it filed an Application to Vacate a 640-acre drilling and spacing unit and establish 40-acre drilling and spacing units covering Section 20. Barton states that Equilibria filed an application for increased density in response.

2) Barton states that at hearing on the application to Vacate, Equilibria argued that there had not been a change in condition since the spacing had been entered. Barton asserts that proof that a single well cannot effectively drain a 640-acre unit is evidence establishing a change in condition. Barton contends the ALJ concluded that there had been no change in condition justifying re-spacing. Barton asserts that if there has been no change in condition justifying the re-spacing, then the increased density exception sought by Barton is similarly inadequate.

3) Barton notes the Cales well in Section 20 is not Cales #1-22 well, but the correct name/description is the Cales #1-20 well. Barton asserts that the ALJ made a finding that the Cales #1-20 is incapable of draining a 640-acre unit. Barton quotes page 3, paragraph 5A of the Report of the ALJ in support.

4) Barton notes the shape of the drilling unit for the Cales #1-20 well, describing the unit as an "L" shape. Barton references the plat contained in Exhibit "A" of Order No. 472708.

5) Barton states that the Order at paragraph 6.3 finds there is significant regional and local faulting in that drilling and spacing unit, established by recent seismic data, that renders each well capable of effectively draining 640 acres. Barton states that an expert for Barton has evaluated the same seismic data and determined that there are no isolated structures in the unit and Barton contends that the expert presented by Equilibria also determined that the structure is flat and without variation. Barton cites page 91, paragraph 24 of the December 7, 2011 transcript of the hearing as reference. Barton asserts some of the information relied upon in Order No. 472708 was incorrect.

6) Barton contends that the only productive formation in Section 20 is the Skinner.

7) Barton contends that the expert for Barton, Mr. Clayton Davis, determined based on well logs that the Mississippian would be unproductive. Barton also asserts that from Exhibit 5, Mr. Davis showed that the Norma #2 and the Norman\_\_\_\_\_ #3 wells in Section 29 were unproductive in the Mississippian. Barton contends that Mr. Davis claimed that if the wells were unproductive in the N/2 of Section 29, then they would be similarly unproductive in Section 20.

8) Barton states that Barton's expert, Mr. Karl Knudson, testified that the G.E. Cales #5 well in Section 20 produced 53,000 BO from the Skinner and drained only 34 acres. Barton references Exhibit 4, which states that the average drainage for the wells is 6.7 acres. Barton asserts that Mr. Knudson testified that no gas well in the unit could drain more than 40 acres.

9) Barton contends that, by Equilibria's testimony, multiple horizontal wells will need to be drilled in the unit.

10) Barton asserts that the Page #1H-24 well, located six miles north, was noted by an expert for Equilibria, Mr. Fletcher Lewis, as comparable to the Cales #1-20 well. The Page #1H-24 well is an oil-producing well, with an initial production of 80 BOPD and a current production of 15 to 20 BO. The well produces 30 MCFG and 300 barrels of water per day. Barton contends that the Cales #1-20 is not a gas well as stated in Order No. 472708 establishing the current drilling and spacing unit.

11) Barton notes that the W/2 of Section 20 is covered by Kaw Lake, which inhibits development of the W/2 in the preferred method of direct drilling. Barton asserts that Mr. Cales is concerned that he will be forced to share royalty with those with interests in the western half of Section 20 if they are unable to adequately develop the W/2 of Section 20.

12) Barton asserts that the Page #1H-24 well is not comparable to Section 20 as there are not similar obstacles in that section and the interest holders agreed to a 640 acre drilling and spacing unit.

13) Barton contends that the witness Mr. Fletcher Lewis could not testify concerning the expected drainage for the Cales #1-20 well. Barton asserts that an increased density should not be granted if the drainage of a well is not calculated. Barton contends that the testimony of Mr. Fletcher Lewis shows that the Cales #1-20 is not a gas well and will not be able to drain a 640 acre unit.

14) Barton asserts the ALJ discussed multiple formations in her Order that have been determined to be unproductive. Barton contends that this displays a change in condition.

15) Barton asserts that production in the Cales #1-20 has been artificially induced through swabbing.

16) Barton contends that Equilibria has been unsuccessful in its attempts to recomplete wells near the southern boundary of Section 20, and that this displays a substantial change in condition and that 40-acre drilling units are proper.

17) Barton states that the expert for Equilibria neither prepared geological information, nor calculated the drainage for the Cales #1-20 well.

18) Barton contends that the application for horizontal spacing ought to include the reality that the W/2 of Section 20 cannot be effectively drilled. Barton asserts that the testimony given by Mr. Fletcher Lewis shows that a horizontal well in the E/2 of Section 20 will not receive contribution from the W/2.

19) Barton requests that Order No. 472708 be reversed and that 40-acre vertical units be established.

### **EQUILIBRIA**

1) **Richard Gore**, attorney, appeared on behalf of Equilibria, stated that the original reason Barton provided for 40-acre drilling and spacing units was that they possess a top lease on a 320 acre section of land for which Equilibria is the current lessee. Equilibria asserts that Barton's goal is the expiration of Equilibria's lease. Equilibria cites *Wood Oil Co. v. Corp. Comm'n*, 239 P.2d 1021 (Okl. 1950), which holds that ownership is an inappropriate rationale for spacing. Equilibria asserts that Mr. Cales testified that he would receive an additional \$63,000.00 if Equilibria's lease were to expire.

2) Equilibria contends that the assertion made by Mr. Cales that Equilibria waited until the last moment to commence drilling was rebutted by Mr. Fletcher Lewis.

3) Equilibria contends that the finding of the ALJ was correct as there has been no material change in the unit since Spacing Order No. 472708 in 2003.

- 4) Barton claims that the Cales #1-20 well will be able to produce oil from the Mississippian, but that evidence was not present because the well was in the first stages of completion. The well has yet to be stimulated and drainage is unknown. Equilibria contends that it is necessary to establish a decline curve to determine drainage.
- 5) Equilibria notes the testimony that the well produced a lot of gas which affected the cementing of the well.
- 6) Equilibria asserts that swabbing the well is a necessary result of testing various sections of the Mississippian.
- 7) Equilibria contends that the purpose of a vertical well is to test the formation prior to horizontal drilling. Equilibria asserts that Barton employs the same practice of drilling a vertical well first for log data.
- 8) Equilibria contends that the witness for Barton admits that a 640-acre unit is proper for horizontal drilling.
- 9) Equilibria reasserts that there has not been a change in condition justifying re-spacing the unit.
- 10) Equilibria asserts that Barton had notice in 2003 when it changed the spacing of Section 20 from 160-acre units to 640-acre units that most of the formations other than the Skinner were not productive.
- 11) Equilibria contends that the sole new information since the 2003 Order No. 472708 spacing is the information derived from the drilling of the Norma #2 and Norma #3 wells in Section 29, a dry hole and a one-barrel-a-day well, respectively.
- 12) Equilibria asserts that Mr. Fletcher testified that the information derived from the Norma #2-29 well and the Norma #3-29 well – that the Skinner only produced stripper wells – had been known for some 50 years prior and was therefore not new information amounting to a change in condition.
- 13) Equilibria contends that the ALJ did not address the other formations because no evidence was supplied for the other formations.
- 14) Equilibria asserts that the geologist supplied by Barton admitted to not having read the 2003 Order No. 472708. Equilibria refers to page 35 of the transcript where there had been evidence concerning a change of condition to warrant the change of spacing from 160-acre spacing to 640-acre sharing.
- 15) Equilibria contends that the witness for Barton admitted that Barton had no plans to drill in Section 20, which is relevant to the issue of ownership.

The reason Barton is contesting this case is to get their lease to vest, not to drill wells. Equilibria references page 45 of the transcript.

16) Equilibria asserts that Barton stated that it would likely not drill 8 direction wells, which is what spacing Section 20 at 40-acre units would require.

17) Equilibria contends that increased density was the proper remedy in this matter, and that the ALJ agreed with this notion in the order. Equilibria asserts that it would not be difficult to drill a horizontal well from E/2 of Section 20 to the W/2 of Section 20.

18) Equilibria contends that Mr. Cales would share in all production.

19) Equilibria reasserts that the vertical well is being drilled to collect information as a preface to a horizontal well.

20) Equilibria characterizes the testimony given by the witness for Barton supporting 40-acre units as inaccurate.

21) Equilibria asserts that there has been a change in condition supporting increased density. Equilibria contends that the increased density is necessary because the vertical well that was drilled for the purpose of obtaining modern logs is now producing from the Mississippian. Equilibria reasserts that Barton has followed this procedure in the past.

22) Equilibria asserts that the Norma wells in Section 29 did not test the Mississippian. Equilibria references Exhibits 8 and 9, the 1002A for the Norma #2-29 and the 1002A for the Norma #3-29 wells.

23) Equilibria references the testimony on pages 97 and 101 of the transcript addressing gas production by the Cales #1-20 well.

24) Equilibria asserts that the recommendation of the ALJ was proper. Equilibria contends that Barton is motivated in this matter by their top lease.

### **RESPONSE OF BARTON**

1) Barton asserts that the Norma #2-29 and Norma #3-29 drilled through the Mississippian, tested the formation, and did not complete it because the formation was not productive.

- 2) Barton contends that the Norma wells were oil wells and therefore provide a change in condition for respacing Section 20 from 640-acre spacing to 40-acre spacing.
- 3) Barton contends that the activity in Section 20 and the surrounding sections shows that the wells are oil-producing wells.
- 4) Barton asserts that the previously speculated isolated structures in the Mississippian formation do not exist.
- 5) Barton contends that directionally drilling the W/2 of Section 20 is prohibitively expensive. Barton asserts that maintaining the leasehold with an unproductive vertical well is violative of the lessor's correlative rights. Barton reasserts that the wells are incapable of producing gas. Barton reasserts that 40-acre drilling and spacing units are the appropriate size for Section 20.

## **CONCLUSIONS**

**The Referee finds the Report of the Administrative Law Judge should be affirmed.**

- 1) The Referee finds the ALJ's determination to recommend denial of the Barton spacing application to vacate the existing 640-acre spacing pursuant to Order No. 472708 and establish 40-acre units in Section 20 is supported by the weight of the evidence and free of reversible error. Additionally, the Referee finds the ALJ's determination to recommend granting the increased density application of Equilibria for the Mississippian common source of supply is supported by the weight of the evidence and free of reversible error. In order to modify the prior spacing of 640 acres in Section 20, it was incumbent upon Barton to establish a substantial change of conditions or change in knowledge of conditions since the issuance of the existing 640-acre spacing Order No. 472708 issued February 21, 2003. *Corporation Commission v. Phillips Petroleum*, 536 P.2d 1284, (Okl. 1975); *Marlin Oil Corporation v. Corporation Commission*, 569 P.2d 961, (Okl. 1977).
- 2) As the Court stated in *Wood Oil Company v. Corporation Commission*, 239 P.2d 1021, (Okl. 1950):

...The exercise of the authority to modify the previous order necessarily involves a changed factual situation from that which obtained at the time of making the order sought to be modified.

3) The ALJ is the trier of fact and it is the ALJ's duty as the trier of fact to observe the demeanor of the witnesses, assess their credibility, and assign the appropriate weight to their opinions. *Grison Oil Corporation v. Corporation Commission*, 99 P.2d 134 (Okla. 1940).

4) The only new information or evidence presented at the hearing which was new information since the 2003 spacing is the information derived from the drilling of the Norma #2-29 well and the Norma #3-29 well, a dry hole and a one-barrel-a-day well, respectively. The other new information concerned the Cales #1-20 well, a vertical well, drilled for the purpose to test the Mississippian formation prior to horizontal drilling by Equilibria. The Cales #1-20 well was being completed and tested at the time of the hearing and therefore Equilibria did not provide any data as to drainage calculations, as a decline curve is what you would normally need to do any accurate drainage calculations. There was testimony however that the Cales #1-20 well initially produced excessive quantities of gas, a strong gas show, that affected Equilibria's ability to cement the well.

5) In *Phillips Petroleum Company v. Corporation Commission*, 482 P.2d 607 (Okla. 1971) the Court stated:

...The phrase "change in knowledge of conditions" (as would warrant a change by order) does not encompass a mere change of interpretation on the part of the Commission. Rather, it encompasses an acquisition of additional or new data or the discovery of new scientific or technical knowledge since the date of the original order was entered which requires a reevaluation of the geological opinion concerning the reservoir...

The Supreme Court in *Marlin Oil Corporation v. Corporation Commission*, supra at 962, further addressed the required showing and stated:

The general rule requiring a change of conditions, or a change in knowledge of conditions as a requisite to modification of an unappealed Commission order has been espoused by a long line of cases. This rule has recently been reiterated by a decision of this court in a case similar to the case at bar, *Corporation Commission v. Phillips Petroleum*, 536 P.2d 1284 (Okla. 1975). In that case Terra Resources applied to Commission to delete the Upper Morrow underlying several sections from the purview of a prior order. It alleged new knowledge of existing conditions, not

available at time of prior order, determined the Morrow consisted of two common sources of supply. Commission refused to delete the Upper Morrow from its determination of one common source of supply. Terra appealed and this court affirmed. There was little conflict as to the geological facts, only a conflict as to their interpretation by experts. This court held the same geological facts, although established by different evidence, were known and recognized at the time the entire Morrow was spaced as a single source of supply, despite the fact geologically separate unconnected accumulations of hydrocarbons existed in the area. Evidence presented by Terra merely confirmed the opinion of the Commission established in the earlier order and did not establish the requisite "change of conditions."

6) In *Mustang Production Company v. Corporation Commission*, 771 P.2d 201, 203, (Okl. 1989) the Oklahoma Supreme Court held:

The standard to be applied by the Corporation Commission when hearing an application to modify or vacate a prior, valid order is well known in Oklahoma. A prior, valid order may only be modified or vacated upon a showing by an applicant that there has been a change in conditions or a change in knowledge of conditions. *Phillips Petroleum Co. v. Corporation Commission*, Okl., 461 P.2d 597, 599 (1969). The applicant must make this showing by substantial evidence. *Phillips*, supra; *Anderson-Prichard Oil Corp. v. Corporation Commission*, 205 Okl. 672, 241 P.2d 363 (1951); Okla. Const. Art. IX §20. Without this showing, any attempt to vacate or modify a prior, valid order constitutes a prohibited collateral attack on that earlier order. *Application of Bennett*, Okl., 353 P.2d 114, 120 (1960).

One author, commenting on the requirements of change of conditions or change in knowledge of conditions, writes:

What constitutes a change of condition sufficient to satisfy the requirement? As a logical proposition, three kinds of change of condition are theoretically possible. The first may be designated as an internal

change of condition. It is characterized by an actual change in the physical behavior of the reservoir occasioned by development and depletion. Such a change may or may not be predictable in the early states of development....The second kind may be called an external change of condition. In this instance, the physical behavior of the reservoir remains constant, but the information gained through development or depletion experience demonstrates that the conclusions reached originally were incorrect....The third possible kind of change of condition defies tagging with an appropriate label. It can only be described. In this case no actual change in the physical behavior of the reservoir is experienced, and subsequent development and depletion of the reservoir confirm the original predictions so that no external mistake exists. Nevertheless, new scientific knowledge and technology may add new dimensions to the basic legal concepts of waste and correlative rights, or the statutes may be superseded by others which re-define these terms.

Harris, *Modification of Corporation Commission Orders Pertaining to a Common Source of Supply*, 11 OKLA. L. Rev. 125 (1958).

7) The evidence reflected that 40-acre units in Section 20 as opposed to a 640-acre unit would require significantly more cost to access the same reserves and would double the risk of developing the same reserves. Of prime importance is that the Equilibria application and the Barton application present a choice of how the Commission will proceed with orderly development of this area and prevent waste. As stated in *Winter v. Corporation Commission of the State of Oklahoma*, 660 P.2d 145 (Okla.App. 1983):

Having been given a choice of remedies, it is incumbent upon the Commission to use the remedy which will best prevent waste and protect correlative rights.

\* \* \*

As the evidence reflects, there is a question as to what kind of reservoir underlies Section 13 and how many wells are needed to effectively drain said reservoir. The character and drainage capabilities of the

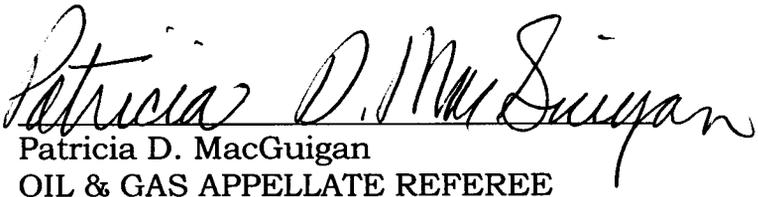
Mississippian (Mississippi Solid) common source of supply underlying Section 13 have not yet been completely defined by drilling and proof of its character is far from complete. Eighty-acre spacing would require an additional seven wells be drilled instead of three and based upon the evidence presented would most likely result in unnecessary wells being drilled resulting in economic waste.

Consistent with such evidence, we are of the opinion that the order appealed from in this case indicates an exercise by the Commission of its skill and technical experience in refusing to give its approval to spacing that might result in much economic waste by the drilling of unnecessary wells.

Thus, the Referee agrees with the ALJ's position that the interests of the owners in Section 20 are best served by granting authority for increased density instead of despadding the formations underlying the unit.

8) Therefore, for the above stated reasons, the Referee finds that the ALJ's Report should be affirmed.

**RESPECTFULLY SUBMITTED THIS 2<sup>nd</sup> day of March, 2012.**

  
Patricia D. MacGuigan  
OIL & GAS APPELLATE REFEREE

PM:ac

xc: Commissioner Murphy  
Commissioner Anthony  
Commissioner Douglas  
Jim Hamilton  
ALJ Kathleen M. McKeown  
Jim Hamilton  
William H. Huffman  
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