

**BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA**

FILED
MAY 21 2015

COURT CLERK'S OFFICE - OKC
CORPORATION COMMISSION
OF OKLAHOMA

APPLICANT: MID-CON ENERGY III, LLC AND)
MID-CON ENERGY OPERATING,)
LLC)
)
RELIEF SOUGHT: UNITIZATION ENHANCED) CAUSE CD NO.
RECOVERY UNIT-DESCRIBED) 201400869-T
AS THE BOMBER HILL UNIT)
)
LEGAL DESCRIPTION: THE WEST HALF (W/2) OF)
SECTION 36 AND ALL OF)
SECTION 35 OF TOWNSHIP 21)
NORTH, RANGE 7 EAST, AND)
ALL OF SECTION 2, OF)
TOWNSHIP 20 NORTH, RANGE)
7 EAST, PAWNEE COUNTY,)
OKLAHOMA, CONTAINING 1600)
ACRES MORE OR LESS)

REPORT OF THE OIL AND GAS APPELLATE REFEREE

This Cause came on for hearing before **Curtis M. Johnson**, Deputy Administrative Law Judge ("ALJ") for the Corporation Commission of the State of Oklahoma, on the 16th day of May and the 2nd day of July, 2014, at 8:30 a.m. in the Commission's Courtroom, Kerr Building, Tulsa, Oklahoma, pursuant to notice given as required by law and the rules of the Commission for the purpose of taking testimony and reporting to the Commission.

APPEARANCES: **Ron M. Barnes**, attorney, appeared on behalf of applicant, Mid-Con Energy III, LLC and Mid-Con Energy Operating, LLC (collectively "Mid-Con"); **William H. Huffman**, attorney, appeared on behalf of Harter Energy, Inc., Natural Gas Compression Corp., Triple B. Oil Co., Triple B Resources, Pinnacle Operating Co., and Shorts Oil Co. (collectively "Protestants"); and **James L. Myles**, Deputy General Counsel for Deliberations, filed notice of appearance.

The ALJ filed his Report of the Administrative Law Judge on the 11th day of February, 2015, 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 27th day of March, 2015. After considering the arguments of counsel and the record contained within this Cause, the Referee finds as follows:

STATEMENT OF THE CASE

THE PROTESTANTS TAKE EXCEPTION to the ALJ's recommendation that the application of Mid-Con should be granted in part and denied in part.

The ALJ found that Mid-Con's application should be granted as to the Cleveland, Prue, Skinner, Red Fork and Bartlesville. However, the ALJ found that Mid-Con's application should be denied as it pertains to the Osage Layton, Layton, Big Lime, Oswego, Simpson, and Arbuckle common sources of supply.

Mid-Con seeks a unitization enhanced recovery unit described as the Bomber Hill Unit ("Unit") for the Osage Layton, Layton, Cleveland, Big Lime, Oswego, Prue, Skinner, Red Fork, Bartlesville, Simpson, and Arbuckle common sources of supply located in the W/2 of Section 36 and all of Section 35, T21N, R7E, and all of Section 2, T20N, R7E, Pawnee County, Oklahoma.

PROTESTANTS TAKE THE POSITION:

- 1) The Report of the ALJ is contrary to the law and to the evidence, and fails to protect the owners in the common sources of supply.
- 2) The ALJ Report fails to meet the statutory requirements set forth in 52 O.S. Section 281.1 et seq.
- 3) The ALJ recommends the unitization of the Bartlesville common source of supply, however, Mid-Con concedes in Exhibit 3, there are 1120+ acres that are nonproductive in the Bartlesville underlying the proposed Unit. The owners of the productive portion of the Bartlesville will not have their correlative rights protected. This recommendation violates the statutory requirements in 52 O.S. Section 287.4.
- 4) Mid-Con contends 127,337 BO will be recovered from the Bartlesville and based upon the plan of unitization, approximately 70% or 89,136 BO will be attributed to nonproductive acreage.
- 5) The method to allocate production does not comply with the statutory requirements. The order shall be upon terms and conditions, as may be shown by the evidence to be fair, reasonable, equitable and which are necessary or proper to protect, safeguard, and adjust the respective rights and obligations of

the several persons affected, including royalty owners. Owners of overriding royalties, oil and gas payments, carried interests, mortgagees, lien claimants and others, as well as lessees. The Plan of Unitization is designed to solely favor Mid-Con and does not protect Protestants.

6) Mid-Con in preparation of the Tract Participation Factors utilized formation volume in its calculations, however, the geological exhibits presented do not support the volume factors. The volume factors attribute reservoir to tracts that contain no producible reservoir. This formula violates the statutory mandate.

7) The ALJ denied the application as to the Arbuckle common source of supply. Mid-Con contended the Arbuckle was necessary in order to obtain make-up water, otherwise Mid-Con would be required to purchase the water and incur an additional expense. This additional cost has not been calculated with regard to the overall cost of operation to determine if the proposed operations will meet the statutory requirements on profitability.

8) Mid-Con proposed to inject 20,000 BWPD into the Unit. The economics presented reflected a total operating cost over 255 months of \$8 million or \$31,373 per month. Water injection of the proposed volumes cannot be accomplished at this cost with the addition of the operating expenses on the proposed injection and production wells. In addition the economics are premised on oil sales at \$90 per barrel. Price declines have occurred and revenue projections cannot be met in the current conditions. The economics of the proposed Unit do not meet the statutory requirement on economics.

9) See Legal Authority if OCC-OAC Rule 165:5-13-5 et. seq.

10) Protestants request that the Oklahoma Corporation Commission reverse the recommendations of the ALJ to grant the Mid-Con application as to the Cleveland, Prue, Skinner, Red Fork and Bartlesville common sources of supply and deny the Application.

THE ALJ FOUND:

1) After taking into consideration all of the facts, circumstances, evidence, and testimony presented in the Cause, it is the recommendation of the ALJ in Cause CD 201400869-T seeking a unitization enhanced recovery unit for Osage Layton, Layton, Cleveland, Big Lime, Oswego, Prue, Skinner, Red Fork, Bartlesville, Simpson, and Arbuckle formations located in the W/2 of Section 36 and all of Section 35, T21N, R7E, and all of Section 2, T20N, R7E, Pawnee County, Oklahoma, that the Mid-Con application should be granted in part and denied in part.

2) The ALJ recommends the Cleveland, Prue, Skinner, Red Fork and Bartlesville should be included in the subject unit. The evidence established that, as a result of commingling productive formations, pressure communication exists between the productive formations in the subject unit. Accordingly, the aforementioned formations represent one common source of supply for unitization purposes. In support of this conclusion, the ALJ offers *Jones v. Continental Oil Company*, 420 P.2d 905 (Okla. 1966) in which the Court held "...that all of the 21 producing sands were in communication with each other as a result of the completion and production practices used in the field. Evidence of a substantial nature was adduced that a common source of supply could be created, and was created in this instance, as to the particular sands involved, by opening them to the wellbore [sic] in several sands..." Thus, the ALJ concludes these formations represent one common source of supply for unitization purposes.

3) The ALJ contends the Unitization Enhancement Plan provides for the "further development of a common source of supply of oil and gas...is reasonably necessary in order to effectively...increase the ultimate recovery...; and...one or more of said unitized methods of operation...are feasible, will prevent waste and...result in the increased recovery of substantially more oil and gas...;and...additional costs,...of conducting such operation will not exceed the value of the additional oil and gas...and....unitization...is for the common good and will result in the general advantage of the owners of the oil and gas rights..." as required by 52 O.S. Section 287.3. The ALJ further finds the Unitization Enhancement Plan "...to be fair, reasonable, equitable and which are necessary or proper to protect, safeguard, and adjust the respective rights and obligations of the several persons affected, including royalty owners, owners of overriding royalties, oil and gas payments, carried interests, mortgagees, lien claimants, and others, as well as the lessees..." (See 52 O.S. Section 287.3).

4) The ALJ denies that part of the Mid-Con application which seeks to include the Osage Layton, Layton, Big Lime, Oswego, Simpson, and Arbuckle common sources of supply, because these formations are not part of the same common source of supply, and they are nonproductive in the unit area. Mid-Con argued all of the formations listed in the Application are one common source of supply because they are in pressure communication, which resulted from crossflow between commingled formations. No evidence was presented to establish these formations were productive in the subject area. Additionally, there was no evidence presented to show these formations were commingled with the productive formations in the subject unit area. There would also be no reason for an operator to commingle nonproductive formations with productive formations. Accordingly, if these formations were not commingled with the productive formations, then they would not be in pressure communication, and therefore, they would not be part of the same common

source of supply as alleged by Mid-Con. Thus, the ALJ contends these formations should be excluded from the unit.

5) In the event the Commission were to determine these formations are in pressure communication with the productive formations, and therefore part of the same common source of supply, as alleged by Mid-Con, the ALJ would contend they should still be excluded from the unit on the basis they are nonproductive. 52 O.S. Section 287.4 provides in pertinent part that "[o]nly so much of a common source of supply as has been defined and determined to be productive of oil and gas by actual drilling operations may be included within the unit area." Mid-Con's witness testified the prevailing reason to include the Arbuckle was for the purpose of utilizing water from this formation. All the drilling activity which has taken place in the subject unit area has failed to obtain production from the aforementioned formations. Therefore, the ALJ recommends the Osage Layton, Layton, Big Lime, Oswego, Simpson and Arbuckle common sources of supply should not be included in the unit.

6) Thus, in light of the aforementioned conclusions, it is the recommendation of the ALJ that CD 201400869-T seeking a unitization enhanced recovery unit for the Osage Layton, Layton, Cleveland, Big Lime, Oswego, Prue, Skinner, Red Fork, Bartlesville, Simpson, and Arbuckle formations located in the W/2 of Section 36 and all of Section 35, T21N, R7E, and all of Section 2, T20N, R7E, Pawnee County, Oklahoma, should be granted in part and denied in part.

POSITIONS OF THE PARTIES

PROTESTANTS

1) **William H. Huffman**, attorney, appearing on behalf of the Protestants, argues that under 52 O.S. Section 287.4 the Commission must define the area of unitization, and each formation in the unitization must be productive of oil and gas. 52 O.S. Section 287.4 says each unit and each unit area shall be limited to all or a portion of a single common source of supply and only so much of a common source of supply that has been defined and "determined to be productive of oil and gas by actual drilling operations may be so included within the unit area." Mid-Con's Exhibit 3, covering the Bartlesville formation, shows a substantial portion of acreage in the northwest that does not appear to be productive because it is not underlain with any net pay. Mid-Con's Exhibit 12A, covering the factors Mid-Con used to calculate participation, is contradictory to findings in Exhibit 3. Exhibit 12A shows that the volume factors for the Prue, Skinner, Red Fork, and Bartlesville formations are all

24.25%, which the Protestants believe is statistically and physically impossible. Moving to Exhibit 4, the Protestants point out that the Cleveland formation appears to be fairly thick, underlying substantially all of the proposed unit, but it is given the same volume factors as the Skinner formation in Exhibit 2, and the Red Fork formation in Exhibit 1. The Protestants argue that using a standard/identical volume factor for these different formations in the participation formula is incorrect because it treats each formation equally. The Protestants believe treating a thicker section of the Cleveland formation to be equal with a thin section of the Bartlesville will skew the factors and result in an untrue distribution of revenues. The Protestants turn to the testimonial evidence, stating that one of the Mid-Con's witnesses essentially said that even though the Bartlesville formation is not really productive, the area would in fact contribute some hydrocarbons, so it needed to be included in the unit. The Protestants point out that the map, however, was not adjusted to show that part of the reservoir as productive and Mid-Con therefore fails to account for any contribution to those particular owners. Exhibit 47 shows the Protestants' geological interpretation of the productive pay in the Bartlesville formation; it seems the Bartlesville formation is not substantially underlain in the unit and there are only a few places that have any production or productive capability. A witness for the Protestants claimed that the only real candidate for waterflood, in his opinion, is the Red Fork, and that the area covered by the Red Fork waterflood is substantially smaller. The Protestants reiterate that adding additional formations will distort the revenue distribution for the unit. The Bartlesville formation has roughly 1,120 acres not underlain, representing about 70% of the unit. According to Exhibit 11, this acreage being included will result in 89,136 BO being attributed to people and property that does not have production. The Protestants argue that this is a violation of correlative rights because 52 O.S. Section 287.4 requires that "{a} separately owned tract's fair, equitable, and reasonable share of unit production shall be measured by the value of each such tract for oil and gas purposes and its' contributing value to the unit in relation to like values in other tracts in the unit, taking into account acreage, the quantity of oil and gas recoverable therefrom, location on structure, its probable productivity of oil and gas in the absence of unit operations, the burden of the operation to which the tract will likely or is likely to be subjected, or so many of said factors, or other pertinent engineering, geological, or operating factors, as may be reasonably susceptible to determination..."

2) The Protestants note that Mid-Con was denied its request for the Arbuckle formation to be included in the plan, which Mid-Con wanted as a source of injection water. This, in turn, means Mid-Con will have to pay for water and which will also affect the economics of the project. The ALJ report incorrectly states there will be 200,000 BWPD; it is actually 20,000 BWPD. If the cost of water is \$.10 per barrel, it is roughly \$2,000 a day and \$60,000 a month, thereby decreasing expected profits. Section 10 of the ALJ's Report states that recovery of 908,803 barrels over 255 months has operating

expenses of \$8 million which works out to \$31,373 operating expenses per month with the Arbuckle formation included; now that Mid-Con must pay for water, the operating expenses will be around \$91,373 per month. Mid-Con objected to any further speculation, arguing that the record reflects the evidence available at the time, with the Referee sustaining the objection. The Protestants continue that the Commission should not issue an order that does not reflect the current economic situation. Mid-Con did not reflect additional water expenses in their report, and they only use a single price for a barrel of oil in their projection – not reflecting any fluctuation in the price of oil and gas.

3) In summation, the Protestants state that the unitization plan fails because the tract participation factors do not take into consideration the appropriate volume factors and it includes formations that do not substantially underlie the unit, as confirmed by Mid-Con's own exhibits. Additionally, the particular owners that do not have producible reservoir underlying their properties are going to be paid revenues based on production from the very formations that do not have any producible reservoirs. Furthermore, the Protestants believe the economics of the plan do not comport with the aforementioned statutes, especially given the additional expenses after the findings in the Report of the ALJ excluding the Arbuckle formation.

MIDCON

1) **Ron M. Barnes**, attorney, appeared on behalf of Mid-con, opens with some production numbers, stating that the current production of the unitized area is about 5 BOPD. After utilizing the secondary recovery methods, the area will produce about 30 BOPD by the end of the first year and about 240 BOPD 2.5 years into the project when the performance peaks. The area will produce a total of around 908,000 BO throughout the life of the project, whereas it would only produce around 14,000 BO, best-case scenario, without the proposed plan. Mid-Con notes that this area can be flooded because many wells have poor economics, but these wells are still usable for this project. Mid-Con wants to start this project before those wells are plugged to avoid drilling new, unnecessary wells.

2) Mid-Con notes that Mid-Con did not appeal the ALJ's decision to include the excluded formations. Mid-Con's testimony focused on stranded oil – there was not enough oil to develop those formations on a primary basis. The Commission was given the opportunity to prohibit oil from being stranded, but the ALJ did not find the legal authority to include it, and it will likely be left unproduced in the ground.

3) Turning to the topics on appeal, Mid-Con addresses the 1,120 acres that are not productive in the Bartlesville formation. Mid-Con states that this area did not have a conventional log analysis, and without logs the area had to be excluded. Mid-Con states that because there is a commingled source of supply in the wellbores, you cannot simply exclude the formation altogether. Looking at Exhibit 12A Bartlesville tract participation factors, Tract #9 has 72.52% of the tract participation factors of the reservoir volume attributable to that tract, not attributable to the whole area. Comparing that to Exhibit 3, this area shows the thickest portion of the reservoir and 72% of it is attributable to that area. This means that it is not outside the area where it is zero, and the argument by the Protestants, claiming 80% is attributable outside the area, is not correct. The correct potential reserve volume, as shown of Exhibit 11, is 127,000. Assuming that the tract participation factor is over the entire area is incorrect; it is not done that way, so there is nothing being given to unentitled parties.

4) Mid-Con then turns to the Protestants' fair and reasonable argument, stating that all the mineral owners come out ahead because the total production is leaping from 14,558 to 908,000 barrels. Mid-Con continues that all the mineral owners will get revenues from this production, and the State will get revenues from any taxes generated. In Phase One, Mid-Con notes there is no production being attributed outside of the units already producing. This shows that everyone is being treated fairly and being protected because the primary production will be gone before any of the additional production comes into play - where redistribution is based on what would be recoverable because of the secondary recovery. Mid-Con notes that the Protestants did not present an alternative plan, or any alternative tract participation factors. Mid-Con claims the Protestants just said no, without evidentiary support.

5) Mid-Con then turns to the Protestants' inadequate economics argument - which focuses largely on the increased operating cost for water. Mid-Con first points out that paragraph 11 in the Report of the ALJ mistakenly lists operating costs as \$8 million; it should be \$19,199,000. The \$8 million represents the developmental costs, capital expenditures, etc. As for the water issue, Mid-Con argues that Mid-Con will be able to reuse water as it is produced out of the Bartlesville formation, as it is a high water producer. This means that Mid-Con has wells that can be utilized for water producers and that there will not be a per barrel charge to incorporate. Mid-Con agrees with the Protestants that the number of barrels should be 20,000 per day, not 200,000. Mid-Con notes that the Protestants were mistaken that the project would take 20,000 BW; the actual flooding amount is 300 BW per well, totaling 4,500 BW for 15 wells. As aforementioned, re-using the water from the Bartlesville formation and additional completions will be utilized for this particular purpose.

6) Mid-Con notes that the unitization plan will obviously have a hundred fold increase in production, which the State, mineral owners, and working interest owners are entitled to. Based on the testimony given in the prior proceeding, Mid-Con believes that Mid-Con have shown that this is a fair allocation; by going through line by line and clarifying any mistakes that might lead to the wrong conclusion, indicating someone is paid money for something that is not underlain, or misconstruing participation factors. Mid-Con points out one such typographical error on Exhibit 12A, the tract participation factor for Tracts #13 and #14 are reversed, #13 should be labeled Tract #14, and #14 should be labeled Tract #13.

7) In summation, Mid-Con believes that the allocation factors are quite reasonable and that the purpose for the secondary recovery is most appropriate. The common sources of supply have been comingled within the wellbore, thereby becoming one common source of supply as set out in the Report of the ALJ. There is no argument against the benefit to the state, mineral owners, and working interest owners. Mid-Con believes the Report of the ALJ should be affirmed and the grant of secondary recovery authorized, thereby allowing Mid-Con to move forward and prosper for all parties involved.

8) Mid-Con notes that Exhibit 14 shows a decline curve for purposes of the production projections. The 240 barrels a day and the time it took to get there refers to a peak, one of many phases in the well performance. Mid-Con notes that Mid-Con understands ratifications will be required based upon the final plan of unitization the Commission issues. Mid-Con notes that tract participation was vetted in the hearing on the merits. There was geological testimony, testimony about total production and the production expectations for the parties involved.

RESPONSE OF THE PROTESTANTS

1) The Protestants respond to the numbers provided by Mid-Con, stating that production will be up to 240 barrels a day within 2.5 years. If Mid-Con is producing 240 barrels a day, they would have 908,000 barrels within 10 years, not the projected project lifespan of 255 months (roughly 21 years).

2) Next, the Protestants note that Mid-Con is required to provide an economical plan that reports how much money they will spend and how much oil will potentially be produced. The statute requires a tract participation factor for all the owners to allocate how much Mid-Con will spend. To prove the problem with tract participation factors, the Protestants point out Exhibits 3 and 12A show the Bartlesville formation covers Tract #7, yet Exhibit B attached to the unitization plan shows that Tract #7 gets zero. It is Mid-

Con's duty to show that the tract participation factors are fair, yet in their own unitization plan they are not giving any participation in Tract #7 when their exhibits show there should be participation.

3) The Protestants note that if Tracts #13 and #14 are reversed, that means that the owners represented in those tracts should get the opportunity to re-ratify the plan based on their correct participation factor. The owner of either tract may have ratified the plan thinking they have a good portion of the unit; by switching the numbers they will have the rug pulled out from under them. The Protestants believe this particular change would be a ratification that materially changes the unitization plan, especially for the owners of Tract #13 and #14. According to the Protestants, the result should be to deny the unit, or at a minimum the unit should be remanded for further determination as to the fairness of the tract participation factors, and for redetermination of the ratifications with regard to the owners in Tracts #13 and #14.

4) The tract participation factors have to comply with statute, and in this case Mid-Con has failed to do this because they have not allowed those particular owners to recover their fair share of the oil and gas that would be contributed from their particular tract to the unit.

CONCLUSIONS

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

1) The Referee finds that the ALJ's determination to grant in part and deny in part Mid-Con's application seeking an unitization and enhanced recovery unit for the Osage Layton, Layton, Cleveland, Big Lime, Oswego, Prue, Skinner, Red Fork, Bartlesville, Simpson, and Arbuckle formations located in the W/2 of Section 36 and all of Section 35, T21N, R7E, and all of Section 2, T20N, R7E, Pawnee County, Oklahoma, is supported by the weight of the evidence, free of reversible error and in accordance with law, hence, should be affirmed.

2) The Referee notes that the ALJ is the initial finder of fact. It is the ALJ's duty as a finder 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 (Okl. 1940); *Palmer Oil Corporation v. Phillips Petroleum Company*, 231 P.2d 997 (Okl. 1951).

3) The Referee notes that in making the determination the ALJ weighed the expert opinions presented before him and found the Mid-Con's opinion to be worth greater weight. The Commission must follow the procedures set forth

in *Haymaker v. Oklahoma Corporation Commission*, 731 P.2d 1008 (Okl.Civ.App. 1986) wherein the Court stated:

Proper appraisal of the expert testimony requires observance of the following benchmark principle approved in *Downs v. Longfellow Corp.*, 351 P.2d 999 (Okl. 1960):

"The reasons given in support of the opinions [of an expert witness] rather than the abstract opinions are of importance, and the opinion is of no greater value than the reasons given in its support. If no rational basis for the opinion appears, or if the facts from which the opinion was derived do not justify it, the opinion is of no probative force, and it does not constitute evidence sufficient to...sustain a finding or verdict."

The ALJ followed the above procedure in determining which expert opinion was worthy of greater weight. The ALJ found that the Mid-Con expert opinion was based upon a more rational basis than the expert opinion of the Protestants.

4) 52 O.S. Section 287.1 provides:

The Legislature finds and determines that it is desirable and necessary, under the circumstances and for the purposes hereinafter set out, to authorize and provide for unitized management, operation and further development of the oil and gas properties to which this act is applicable, to the end that a greater ultimate recovery of oil and gas may be had therefrom, waste prevented, and the correlative rights of the owners in a fuller and more beneficial enjoyment of the oil and gas rights, protected.

5) 52 O.S. Section 287.3 provides:

If upon the filing of a petition therefor and after notice and hearing, all in the form and manner and in accordance with the procedure and requirements hereinafter provided, the Corporation Commission shall find (a) that the unitized management, operation and further development of a common source of supply of oil and gas or portion thereof is reasonably necessary in order to effectively carry on pressure

maintenance or repressuring operations, cycling operations, water flooding operations, or any combination thereof, or any other nonprimary production form of joint effort calculated to substantially increase the ultimate recovery of oil and gas from the common source of supply; and (b) that one or more of the unitized methods of operation as applied to such common source of supply or portion thereof are feasible, will prevent waste and will with reasonable probability result in the increased recovery of substantially more oil and gas from the common source of supply than would otherwise be recovered; and (c) that the estimated additional cost, if any, of conducting such operations will not exceed the value of the additional oil and gas so recovered; and (d) that such unitization and adoption of one or more of such unitized methods of operation is for the common good and will result in the general advantage of the owners of the oil and gas rights within the common source of supply or portion thereof directly affected, it shall make a finding to that effect and make an order creating the unit and providing for the unitization and unitized operation of the common source of supply or portion thereof described in the order, all upon such terms and conditions, as may be shown by the evidence to be fair, reasonable, equitable and which are necessary or proper to protect, safeguard, and adjust the respective rights and obligations of the several persons affected, including royalty owners, owners of overriding royalties, oil and gas payments, carried interests, mortgagees, lien claimants and others, as well as the lessees.

6) The ALJ recommended that the Cleveland, Prue, Skinner, Red Fork and Bartlesville should be included in the subject unit. Substantial evidence was provided that, as a result of commingling productive formations, pressure communication exists between the productive formations in the subject unit. Since the formations are in pressure communication with one another they act like one common source of supply. When water is injected into one of these formations as a result of the pressure communication, it will have an affect on the other formations. If the plan is limited formationwise, waterflooding these intervals would result in crossflow and affect other formations which were excluded from the plan. If this happens, Mid-Con would be recovering hydrocarbons from those excluded formations as a result of crossflow. Therefore the Cleveland, Prue, Skinner, Red Fork and Bartlesville represent one

common source of supply for unitization purposes. The Court in *Jones v. Continental Oil Company*, 420 P.2d 905 (Okl. 1966) held:

...all of the 21 producing sands were in communication with each other as a result of the completion and production practices used in the field. Evidence of the subsequent nature was adduced that a common source of supply could be created, and was created in this instant, as to the particular sands involved, by opening them to the wellbore in several sands.

Thus, the Referee agrees with the ALJ that these formations represent one common source of supply for unitization purposes

7) The Referee also agrees with the ALJ's recommendation to deny that part of Mid-Con's application which sought to include the Osage Layton, Layton, Big Lime, Oswego, Simpson, and Arbuckle common sources of supply, as the evidence presented reflected that these formations are not part of the same common source of supply, and they are nonproductive in the unit area. There was no evidence presented to establish that these formations were productive in the subject area. There was no evidence to reflect that these formations were commingled with the productive formations in the subject unit area. Thus, if these formations were not commingled with the productive formations then there would not be any pressure communication and they would not be part of the same common source of supply. The Referee therefore agrees with the ALJ's contention that these formations should be excluded from the unit.

8) The Protestants are concerned about the Arbuckle common source of supply which has been excluded by the ALJ from Mid-Con's application. The Protestants state that Mid-Con asserted that the Arbuckle was necessary in order to obtain makeup water and that otherwise Mid-Con would be required to purchase the water and incur an additional expense. The Protestants are concerned that the overall cost of operation will not meet the statutory requirements on profitability. The Protestants are concerned that the water injection at the proposed volumes cannot be accomplished at the proposed costs by Mid-Con with the addition of the operating expenses on the proposed injection and production wells. Mid-Con pointed out that paragraph 11 in the Report of the ALJ mistakenly lists operating costs at \$8 million whereas it should be \$19,199,000. The \$8 million cost represents development costs, capital expenditures, etc. Mid-Con represents that they will be able to reuse water as it is produced out of the Bartlesville formation, as it is a high water producer. The Arbuckle was necessary in order to obtain makeup water, however Mid-Con has wells that can be utilized for water producers and that there will not be a per barrel charge to incorporate. The actual flooding

amount needed is 300 BW per well, totaling 4,500 BW for 15 wells. Reusing water from the Bartlesville formation and additional completions will be utilized for this particular purpose.

9) The evidence reflected that the unitized area production currently was about five BOPD. After utilizing the secondary recovery methods, the area's potential will be production of about 30 BOPD by the end of the first year and about 240 BOPD 2.5 years into the project when the performance peaks. Mid-Con asserts the area will produce a total of around 908,000 BO for the life of the project whereas it would only produce around 14,000 BO without the proposed plan. Many wells in the area are poor producers but these wells are still useable for this project and Mid-Con wants to start this project before those wells are plugged to avoid drilling new unnecessary wells.

10) Protestants also take exception to the method that Mid-Con uses to allocate production and states that it does not comply with the statutory requirements. Mid-Con prepared its tract participation factors utilizing formation volume in its calculations. Protestants assert that the geological exhibits presented do not support the volume factors and that the volume factors attribute reservoir to tracts that contain no producible reservoir which violates the statutory mandate.

11) In regard to the weight to be given opinion evidence, the Supreme Court stated in *Palmer Oil Corporation v. Phillips Petroleum Company*, 231 P.2d 997 (Okla. 1951):

...At the hearing herein the testimony adduced was chiefly that of petroleum engineers and geologists who testified on the basis of both personal surveys made and of an interpretation of the accumulated data in the hands of the Commission. The testimony of these experts was in direct conflict but that of each was positive upon the issue. Under the circumstances the objection is necessarily addressed to only the weight of the evidence. Under the holding of this Court and that of courts generally, *Chicago, R.I. & P. Ry. Co. v. Pruitt*, 67 Okl. 219, 170 P. 1143 ; 22 C.J. 728, sec. 823, 32 C.J.S., Evidence, § 567, p. 378, the weight to be given opinion evidence is, within the bounds of reason, entirely for the determination of the jury or of the court, when trying an issue of fact, it taking into consideration the intelligence and experience of the witness and the degree of attention he gave to the matter. The rule should have peculiar force herein where by the terms of the Act the Commission is recognized as having peculiar power in weighing the

evidence. Since the evidence before the Commission was competent and sufficient if believed, to sustain the order we must, and do, hold that the order is sustained by the evidence and that the contention is without merit. *Ft. Smith & W.Ry Co. v. State*, 25 Okl. 866, 108 P. 407; *Bromide Crushed Rock Company v. Dolese Brothers Company*, 121 Okl. 40, 247 P. 74.

12) Exhibit 12A states that the reservoir volume for the Bartlesville on Tract #7 is 0.00%, however, Tract #8 in the Bartlesville formation is given 10.49% volume and Tract #9, the participation factor of the reservoir, is 72.52%. The thickest portion of the Bartlesville net pay reservoir on Exhibit 3 shows that Tract #7 is zero to 10 feet net pay whereas Tract #9 is 10 to 30 feet net pay, while Tract #8 is 10 to 20 feet net pay. On Exhibit "A" of the Plan of Unitization Bomber Hill unit provided by Mid-Con, Tract #7 in the first unit participation Phase One is given unit participation of 0.0075000 while Phase Two of unit participation in Tract #7 is given 0.0827316. Tract #8 is given in Phase One unit participation of 0.07644270 and in Phase Two 0.08124303. Tract #9 is given in Phase One unit participation of 0.0400000 and in Phase Two unit participation of 0.20221368, the largest participation in this Bomber Hill unit.

13) What is important is that formula allocates to each tract its fair, equitable and reasonable share of unit production. *Jones Oil Company v. Corporation Commission*, 382 P.2d 751 (Okl. 1963). The Supreme Court in *Eason Oil Company v. Corporation Commission*, 535 P.2d 283 (Okl. 1975) states:

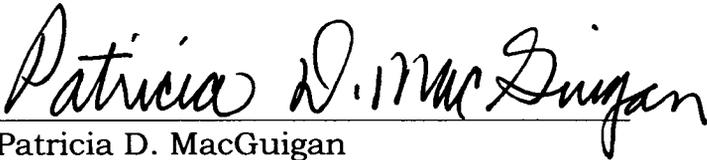
A separately owned tract's share of unit production must be measured by the value it contributes to the total value of the unit for oil and gas purposes. Such tract must be measured by the same set of values as must a unit as a whole.

The guidelines of 52 O.S. Section 287.4(b) include a consideration of the acreage of a tract, the quantity of oil and gas recoverable therefrom, its location on structure, its probable productivity of oil and gas in the absence of unit operations, and the burden of operation to which the tract well is likely to be subjected. The overriding consideration is: "...the value of each such tract for oil and gas purposes and its contributing value to the unit in relation to like values of other tracts in the unit." The ALJ finds Mid-Con's formula is the formula which most closely satisfies the guidelines set forth in Section 287.4(b) and is the formula which measures each separately owned tract share of unit production by the value it contributes to the total value of the unit for oil purposes. Protestants' Exhibit 47 which is the Bartlesville sand isopach reflects that Tract #7 is not significantly underlain by the Bartlesville

formation. The evidence reflected that the volume of potential reserves is 127,337 BO. Further Mid-Con's evidence and Exhibit 3 and Exhibit 12A although challenged by Protestants, does establish an approximate relationship between remaining oil and Mid-Con's proposed formula. Thus, there is substantial evidence to uphold the ALJ's decision regarding this matter. *Application of Choctaw Express Company*, 253 P.2d 822 (Okl. 1953).

14) Therefore, the Referee finds the Report of the ALJ to be reasonable and based on the evidence presented before him should be affirmed.

RESPECTFULLY SUBMITTED THIS 21st day of May, 2015.



Patricia D. MacGuigan
OIL & GAS APPELLATE REFEREE

PM:ac

xc: Commissioner Anthony
Commissioner Murphy
Commissioner Hiett
James L. Myles
ALJ Curtis M. Johnson
Ron M. Barnes
William H. Huffman
Michael L. Decker, OAP Director
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