

BEFORE THE CORPORATION COMMISSION
OF THE STATE OF OKLAHOMA

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CORPORATION COMMISSION
OF OKLAHOMA

<u>APPLICANT:</u>	GULF EXPLORATION, LLC)	
)	
<u>RELIEF SOUGHT:</u>	DRILLING AND SPACING UNITS)	CAUSE CD NO.
)	201500908
)	
<u>LAND COVERED:</u>	SECTION 21, TOWNSHIP 5 NORTH, RANGE 7 WEST, GRADY COUNTY, OKLAHOMA)	
)	
)	

REPORT OF THE OIL AND GAS APPELLATE REFEREE

This Cause came on for hearing before **Keith T. Thomas**, Administrative Law Judge ("ALJ") for the Corporation Commission of the State of Oklahoma, on the 26th day of August, 2015, at 8:30 a.m. in the Commission's Courtroom, Jim Thorpe Building, Oklahoma City, 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: **J. Fred Gist**, attorney, appeared on behalf of applicant, Gulf Exploration, LLC ("Gulf"); **Charles L. Helm**, attorney, appeared on behalf of Pfanensteil Company, LLC ("Pfanensteil") and Trek Energy, LLC (collectively "Trek"); **Robert D. Gray**, attorney, appeared on behalf of Oil Valley Petroleum, LLC; 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 14th day of December, 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 5th day of February, 2016. After considering the arguments of counsel and the record contained within this Cause, the Referee finds as follows:

STATEMENT OF THE CASE

PFANENSTEIL AND TREK (COLLECTIVELY "TREK") TAKE EXCEPTION to the recommendation of the Administrative law Judge ("ALJ") that the application of Gulf Exploration, LLC ("Gulf") be granted.

Gulf has filed an application seeking to vacate existing 640 acre spacing for the Marchand and the Deese common sources of supply, and establish 160-acre drilling and spacing units for the Marchand and the Deese in Section 21, T5N, R7W, Grady County, Oklahoma. Further, each unit well within the 160-acre drilling and spacing unit will be located no closer than 660 feet from the outer boundaries of the quarter section. Additionally, Gulf believes there has been a change in knowledge of conditions since the Commission spaced Section 21 on 640 acre spacing. The 1978 spacing of Section 21 was for gas wells and Gulf intends to produce oil from the 160 acre spacing units it is seeking. Gulf contends that the small drainage areas for oil in the proposed 160 acre spacing units constitute a significant change in knowledge of conditions. Trek contests the change of conditions as to the formations sought to be spaced. It is the contention of Trek that any change to the 640 acre spacing in Section 21 will adversely impact their interests.

TREK TAKES THE POSITION:

- 1) The ALJ Report is contrary to the law and contrary to the evidence.
- 2) The ALJ erred in his discussion and determination regarding a change of conditions sufficient to modify the existing 640-acre spacing to a smaller size.
- 3) The ALJ erred in failing to consider or address the fact that owners in the existing 640 acre units contributed to the development of Section 21, T5N, R7W, Grady County, Oklahoma, and would be deprived of future development by the proposed spacing change.
- 4) The ALJ erred in failing to consider or address the fact that owners in the Marshall-Craddock #1-21 well contributed to the potential for unit development when the well was drilled on a 640 acre basis, but for the bankruptcy of the operator, the well was capable of producing on the 640 acre unit when it was drilled in 1998.
- 5) The ALJ erred in failing to address the fact that the proposed development in Section 21 can be done on the existing 640 acre spacing.

- 6) The ALJ erred in failing to consider and protect the correlative rights of all of the owners in the existing 640 acre units sought to be deleted.
- 7) Trek requests that the Commission not adopt the recommendations of the ALJ Report, but rather, find the application to change the spacing size be denied.

THE ALJ FOUND:

- 1) It is the recommendation of the Administrative Law Judge that the application of Gulf to vacate Order No. 138591, as confirmed by Order No. 261483, which established 640-acre spacing units for the production of gas and gas condensate from, among others, the Marchand and Deese common sources of supply underlying Section 21, T5N, R7W, Grady County, Oklahoma be granted; and further that the application to establish 160-acre spacing units for the Marchand and Deese common sources of supply, with each unit well within the 160-acre drilling and spacing unit to be located no closer than 660 feet from the outer boundaries of the quarter section, also be granted.
- 2) After taking into consideration all of the testimony, facts, circumstances, and evidence presented in this cause, it is the recommendation of the ALJ that the application of Gulf be granted.
- 3) The Oklahoma Supreme Court is very clear on the issue of the Commission's authority to modify spacing units. In *Application of Peppers Refining Co.*, 272 P.2d 416 (Okl. 1954), the Court states that it is the statutory duty of the Commission to modify spacing upon a showing of characteristics of a common source of supply that were not known or anticipated at the time the original order issued. The *Peppers* Court goes on to state that failure to alter the size of the spacing unit after acquiring additional information about the reservoir would not be protective of correlative rights and would not be preventive of waste.
- 4) The Oklahoma Court of Civil Appeals addressed the issue of despacing affirming that Oklahoma statute vested in the Commission the power to alter the size of spacing units to prevent waste and to protect correlative rights. *El Paso v. Oklahoma Corporation Commission*, 868 P.2d 1320 (Okl.Civ.App. 1994).
- 5) The dominant issue in the instant cause was whether Gulf had proven there had been a change of conditions or a change in knowledge of conditions that would warrant the despacing of the unit in question. This issue, once addressed, allowed for a decision to be made in the cause.
- 6) In *Phillips Petroleum Co. v. Corporation Commission*, 461 P.2d 597 (Okl. 1969), the Oklahoma Supreme Court held that a Commission order could not

be modified or vacated unless there was a showing of a change of conditions or a change in knowledge of conditions. Additionally, the *Phillips* Court cited one of its previous holdings in *Anderson-Prichard Oil Corp. v. Corporation Commission*, 241 P.2d 363 (Okl. 1951), by saying that this showing is made by presenting substantial evidence. Further, the *Phillips* Court relied upon another Oklahoma Supreme Court case, *Application of Bennett*, 353 P.2d 114 (Okl. 1960), which states that without said showing the attempt to modify or vacate an order is an impermissible collateral attack on a valid Commission order.

7) In an effort to define "substantial evidence" the Oklahoma Supreme Court in *Union Texas Petroleum v. Corporation Commission*, 651 P.2d 652 (Okl. 1981), states that substantial evidence possesses substance and is of relevant consequence; and that while it is convincing it still allows others to differ on its proving of the case.

8) Gulf presented three expert witnesses to give testimony. Gulf's geologic and engineering witnesses gave their opinion and offered maps of the area to establish the assertion that the Marchand and the Deese should be spaced on 160 acre spacing instead of the existing 640 acre spacing. This Court takes notice of the fact that while Trek had witnesses sworn in, and said witnesses were present during the testimony of Gulf's witnesses, Trek chose not to present any expert testimony to refute the evidence presented by Gulf. Gulf's witnesses gave credible testimony on why the 640 acre spacing should be vacated and why 160 acre spacing should be established.

9) It is the opinion of this Court that Gulf provided substantial evidence as defined by the *Union Texas Petroleum* Court, in that it possessed substance and was of relevant consequence. Based upon the evidence presented, this Court believes that Gulf established that there has been a change in conditions or change in knowledge of conditions since Section 21 was spaced as a 640 acre unit.

10) Further, this Court believes that the holding in the *Peppers* case is of relevance to the instant case in that a failure by Gulf to alter the size of the spacing unit following its acquisition of additional information about the reservoir would not be protective of correlative rights and would not be preventive of waste.

11) Finally, Trek contends that the mineral interests held by the owners of the entire 640 acre unit contributed to the information generated by the drilling of the Marshall-Craddock #1-21. This fact was not challenged by Gulf. However, the lease held by Marshall Oil Corporation ("Marshall") expired due to failure to perform in the secondary term of said lease. Gulf's land witness provided testimony showing that Gulf acquired leases through arms-length

transactions giving it the right to drill in the NE/4 of Section 21. Additionally, Gulf also acquired the rights to the Marshall-Craddock #1-21 well bore. No evidence was presented showing the existence of a contractual or ethical duty between Gulf, Trek, or the other mineral interest owners outside the NE/4 of Section 21. Any ruling on a breach of contract or breach of duty is outside the jurisdiction of this Court. Finally, any claims Trek may have on the equipment left on the Marshall-Craddock #1-21 well site are clearly outside the jurisdiction of this Court.

12) It is, therefore, the recommendation of the ALJ that the application seeking to vacate existing spacing and to establish new drilling and spacing units by Gulf, be granted.

POSITIONS OF THE PARTIES

TREK

1) **Charles L. Helm**, attorney, appearing on behalf of Trek, states the dominant issue in the cause was whether Gulf had proven there had been a change of conditions or a change in knowledge of conditions that would warrant the despadding of the unit in question. Trek argued that the ALJ ignored the law in his Findings.

2) Trek takes the position that the 640-acre spacing should be maintained in order to protect the correlative rights of the owners of the NE/4 within Section 21, T5N, R7W, Grady County, Oklahoma. Trek contends that the Marshall-Craddock #1-21 well drilled by Marshall in 1998 and located in the NE/4 of Section 21 penetrated the Marchand and Deese formations and that the owners of that well knew of the production capability of the Marchand and Deese formations at the time these formations were penetrated. Therefore, Trek argues that they have an ownership interest in the wellbore of the Marshall-Craddock #1-21 well and that a deletion of the 640-acre spacing would fail to protect their correlative rights in the wellbore interest. Trek takes the position that the ALJ failed to adequately weigh these correlative rights in granting the Gulf's request to vacate the 640-acre spacing for the Marchand and Deese common sources of supply.

3) Trek takes the position that they are the rightful working interest owners in the wellbore of the Marshall-Craddock 1#-21 well and that the leasehold interest is invalid by virtue of the Marshall-Craddock #1-21 well. Trek denies the validity of Gulf's purported wellbore interest acquired from the surface owner of the Marshall-Craddock #1-21 well. The parties stipulated and agreed that the result of the de-spacing would cut out the Trek interest from

any production realized in the SE/4. Trek takes the position that the despadding should be denied in order to allow Trek to share in production and protect their correlative rights outside the NE/4. Trek believes these correlative rights, were established initially in 1978, when the commission created the spacing for the Marchand and Deese formations and confirmed the 640-acre spacing in their respective zones in 1984.

4) When the well was drilled in 1998 in the NE/4 on a 640-acre basis the Marchand and the Deese were perspective formations. The Marshall-Craddock #1-21 well was completed in the Bromide in 1998. However, the Bromide is deeper than the Marchand and the Deese. Therefore, Trek takes the position, that the operator of the Marshall-Craddock #1-21 well was aware of the production capability of the Marchand and Deese and followed industry practice of the reasonable and prudent operator by completing the deepest formation first. Trek claims that the owners of the well intended to go up hole and produce the Marchand and Deese formations at a later date. However, the Marshall-Craddock #1-21 well ceased production in 2009 due to status of the operator's financial situation that eventually resulted in bankruptcy. Trek argues that Gulf was aware of this production capability and sought the despadding in order to receive 100% of production for itself.

5) Trek takes the position that the spacing should not be changed to accommodate Gulf's ownership claim. Moreover, Trek maintains that the production that would be obtained today could be obtained from the same 640-acre basis as when it was discovered in 1998. Trek asserts that there is no obligation to change the spacing of the well when it can be produced on the 640-acre basis that it was established on.

6) Additionally, Trek takes the position that the ALJ failed to follow the established law that requires a change of conditions or knowledge of conditions to allow the spacing change. Trek maintains that there has not been a change of condition that would warrant despadding. The 640-acre spacing is still used for all 32 common sources of supply initially penetrated in the Marshall-Craddock #1-21 well.

7) Trek also refutes the evidence presented by Gulf's witness that suggested that the Marchand and Deese might be mostly oil in the wellbore and not predominately gas as it was thought in 1978 when the formation was spaced. Trek denies Gulf's contention that this would constitute a sufficient change of condition, and cites the Marshall Duke #1-22 well drilled by Marshall in Section 22, T5N, R7W, Grady County, Oklahoma. Said well was drilled to test the Marchand for gas, but never produced due to the bankruptcy of the operator. Trek additionally cited the Norge field which has produced gas from Deese since 1950's. As well as the Ferral Unit #1 well, located on the same fault block as the Marshall-Craddock #1-21 well, and was completed in the Deese in 1974. Consequently, Trek opined that since the Deese has produced

mostly gas at the time of the original spacing and continues to produce gas from the Deese that no change of condition has occurred that would warrant the de-spacing.

GULF

1) **J. Fred Gist**, attorney appeared on behalf of Gulf, requesting that the recommendations of the ALJ granting the termination of the 640-acre spacing be affirmed. Gulf seeks to develop the Marchand and Deese formations and would like the 640-acre spacing for these formations terminated and respaced on an 160-acre basis. Gulf argues that the ALJ's findings were based on the overwhelming evidence produced at the hearing. Gulf cites that Trek's arguments were not evidence, and that Trek failed to produce any evidence in the case in support of their arguments at the hearing. Gulf takes the position that there are no grounds for reversing the ALJ, and would recommend the Referee to affirm the ALJ's Conclusions and Recommendations that the applications be granted.

2) Gulf claims that Pfanensteil does not own a record interest in the unit and that Trek's interest is 8.75 acres acquired through assignment of mineral interest in 2014. Gulf purports to own a record interest of 327-acres of leasehold in Section 21, and the Marshall-Craddock #1-21 wellbore. Gulf states that the Marshall-Craddock #1-21 well ceased production in 2009, at which time ownership of the wellbore reverted to the surface owners. After the ownership reverted to the surface owners Gulf subsequently purchased the wellbore interest. Gulf also stated that original leases taken by Marshall are no longer valid due to the lapse in production in 2009. Gulf takes the position that the Marchand and Deese formations are at depths greater than 10,000 feet and will be predominately oil. Therefore, Gulf argues that the spacing should be in accordance with 52 O.S. Section 87.1(d) concerning Oil Reservoirs Below 9,900 feet, and consequently a 160-acre spacing is appropriate according to statute. Moreover, Gulf also contends, any ownership rights acquired by the original operator with regard to the Deese or Marchand were not vested in their 2014 acquisition because these rights were lost with the cessation of production in 2009 and the expiration of the respective oil and gas leases.

3) Gulf takes the position that had the original operator wanted to complete a well in the Marchand or Deese formation they would have done so, and that the fact the operator merely could have completed a well in the Marchand or Deese is irrelevant. Gulf cites the fact that the wellbore had not been cemented over the Marchand and the Deese and therefore there was

nothing to stop the original operator from going up hole in the eleven years the well was in production. Gulf suggests that the original operator failed to go up-hole because the operator's intent was to drill a Bromide well, a well that the operator ultimately abandoned.

4) Gulf also contends that the evidence shows that the geology beneath the SE/4 does not support a 640-acre spacing. The geological expert witness produced by Gulf at the initial hearing testified that the Deese and Marchand do not underlie all of the Section 21 640-acre spacing. Moreover, the geologist's isopach maps reveal a vast difference in thickness and quality across the section. These maps indicate a fault which separates the SE/4 from the rest of the section insofar as the Deese and Marchand are concerned. The maps suggest that the thickness and quality of the Deese and Marchand outside the E/2 of the section reveal that the Marchand and Deese are not prospective. Therefore, the evidence refutes the argument put forth by Trek claiming that the Marchand and Deese should be produced as a 640-acre spacing.

5) Moreover, Gulf claims that the wells referred to by Trek in the Norge field were not in fact drilled in the 1970's, but have been recently drilled. Gulf also cites that many of these wells have been drilled on a much denser spacing than 640-acre spacing. Additionally, evidence also suggested that the mud logs from the "Craddock well" had oil shows that suggest that the well would be predominately oil. From this Gulf argues two points. First, Gulf argues this evidence reveals that even the Marshall-Craddock #1-21 well is inappropriately spaced. Secondly, Gulf states that since this data was obtained in 1998, after the initial spacing in 1978, it is sufficient to show the requisite change in condition required by law to change the spacing.

6) In addition, Gulf also presented a significant engineering study, performed by a qualified engineer. The engineer testified at the hearing and stated that in his opinion, that spacing on smaller units was not only warranted, but that it was basically imperative that it be done to protect the rights of the owners in the NE/4. The engineer testified that if the well was produced on a 640-acre basis the owners in the NE/4 would be required to share their production with owners who won't be contributing anything to the wellbore. The expert believed that the oil gravity within the reservoir was consistent with other oil reservoirs and contained a very low gas-oil ratio. Therefore, Gulf concluded this evidence was sufficient to demonstrate not only the need for a 160-acre spacing, but also a change in condition since the original spacing in 1978.

7) Gulf agrees with the position taken by ALJ Thomas that the evidence produced at the hearing with regard to the change in condition of the Marchand and Deese formations must be considered. The Oklahoma Supreme Court has decided on the role of the Commission in determining whether to

modify a spacing order in *Application of Peppers Refining Co.*, 272 P.2d 416 (Okla. 1954). The ALJ on page 9 stated "it is the statutory duty of the Commission to modify spacing upon a showing of characteristics of a common source of supply that were not known or anticipated at the time the original order [was] issued...that failure to alter the size of the spacing unit after acquiring additional information about the reservoir would not be protective of correlative rights and would not be preventative of waste."

8) The case law requires that spacing "order[s] could not be modified or vacated unless there was a showing of a change of conditions or a change in knowledge of conditions." *Phillips Petroleum Co. v. Corporation Commission*, 461 P.2d 597 (Okla. 1969). The change must be shown by presenting substantial evidence. *Anderson-Prichard Oil Corp. v. Corporation Commission*, 241 P.2d 363 (Okla. 1951). Gulf takes the position that their evidence in support of the respacing was not only sufficient to support a termination of the 640-acre spacing, but that the evidence was the only evidence presented at all, and Trek failed to produce any evidence refuting Gulf's position. Gulf agrees with the ALJ's decision that Gulf's witnesses gave credible testimony on why the 640-acre spacing should be vacated and why 160-acre spacing should be established.

9) Gulf states that there was no effort to test or produce the Marchand or Deese formations from 1998, when the Marshall-Craddock #1-21 well was drilled, until 2009 when it was abandoned. Gulf takes the position that Trek's argument contending that but-for the bankruptcy of the original operator the Marchand and Deese would have been drilled and completed is without merit because there is no evidence, or other means of possibly verifying the validity of that statement.

10) Gulf denies Trek's contention that the ALJ failed to consider the correlative rights of all the owners. Gulf takes the position that the ALJ's decision did protect the correlative rights of the owners by not requiring the owners to share in production when others were unable to contribute. Gulf also maintains that these findings were based on evidence presented to demonstrate similar wells typically drain about 50 acres, and the presence of a fault which separates the E/2 of Section 21 from the rest of Section 21.

RESPONSE OF TREK

1) Trek states that the reason they failed to produce any evidence was that they were under no obligation to produce an expert witness or evidence because "the burden was on [Gulf] to provide evidence to support the requested

change." Trek maintains that its position was "that the commission found the proper size" when the initial spacing was established in 1978.

2) Trek states that with regard to Gulf's argument concerning the Norge field and the existence of the fault running along the SE/4 was known in 1950. Therefore, the mere existence of the fault does not warrant a change in condition that would justify a termination of the existing 640-acre spacing because the spacing was established on a 640-acre basis despite the existence of the fault.

3) Trek also denies Gulf's contention that Trek failed to mention the bankruptcy in the initial hearing. Trek states that there is adequate record of the bankruptcy in the transcript and throughout the proceedings. Trek also maintains that said bankruptcy led to the cessation of production in the Marshall-Craddock #1-21 well.

4) Trek maintains its claim of ownership of the Marshall-Craddock #1-21 well and states that there has been no adjudication determining the ownership in the wellbore. Moreover, Trek contends that Gulf's ownership of said wellbore is not a marketable record title interest merely because Gulf decided the wellbore reverted back to the surface owner.

5) Trek states that Gulf attempts to argue that the Marchand and Deese formations were not production capable in 1998, while simultaneously citing the logs as evidence to "establish the opportunity to re-enter the well to produce." Therefore, Trek maintains that the data developed in 1998 on a 640-acre basis and consequently should remain spaced on a 640-acre basis.

6) Trek states that even if the production will be predominately oil, a 160-acre spacing would still be inappropriate because the expert witness presented by Gulf testified that the well would drain no more than 40-50 acres.

CONCLUSIONS

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

1) The Referee finds that the ALJ's determination to vacate Order No. 138591, as confirmed by Order No. 261483, insofar as said order established 640-acre drilling and spacing units for the Marchand and Deese common sources of supply underlying Section 21, T5N, R7W, Grady County, Oklahoma; and establishing 160-acre drilling and spacing units for the Marchand and Deese common sources of supply underlying said Section 21, to be supported

by the weight of the evidence, by law and free of reversible error. The ALJ wrote a well-reasoned report setting forth his conclusions and recommendations based on the evidence presented before him. The ALJ is the trier of fact and observes the demeanor of the witnesses, assesses their credibility, and assigns the appropriate weight to their opinions. *Grison Oil Corporation v. Corporation Commission*, 99 P.2d 134 (Okl. 1940). The ALJ also weighed the expert opinion espoused before him and found the Gulf opinion had considerable weight. *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. "

2) The Referee is also in agreement with the ALJ's recommendations and conclusions in his Report on page 8 through 10 where he cites case law concerning the issue of despacing and modifying of spacing units, and cases determining what constitutes substantial evidence, and lastly cases concerning the fact that a Commission order can only be modified or vacated when there is a showing of change of conditions or a change in knowledge of conditions. The Referee would incorporate by reference the findings, conclusions and case law stated by the ALJ in his Report under the topic of RECOMMENDATIONS AND CONCLUSIONS on page 8 through 10 of the ALJ Report.

3) 52 O.S. Section 87.1(d) states:

The Commission shall have jurisdiction upon the filing of a proper application therefor, and upon notice given as provided in subsection (a) of this section, to decrease the size of the well spacing units or to permit additional wells to be drilled within the established units, or to increase the size or modify the shape of the well spacing units, upon proper proof at such hearing

that such modification or extension of the order establishing drilling or spacing units will prevent or assist in preventing the various types of wastes prohibited by statute, or any of the wastes, or will protect or assist in protecting the correlative rights of persons interested in the common source of supply, or upon the filing of a proper application therefor to enlarge the area covered by the spacing order, if such proof discloses that the development or the trend of development indicates that such common source of supply underlies an area not covered by the spacing order and such proof discloses that the applicant is an owner within the area or within a drilling and spacing unit contiguous to the area covered by the application. Except in the instance of reservoir dewatering as described herein, the Commission shall not establish well spacing units of more than forty (40) acres in size covering common sources of supply of oil, the top of which lies less than four thousand (4,000) feet below the surface as determined by the original or discovery well in the common source of supply, and the Commission shall not establish well spacing units of more than eighty (80) acres in size covering common sources of supply of oil, the top of which lies less than nine thousand nine hundred ninety (9,990) feet and more than four thousand (4,000) feet below the surface as determined by the original or discovery well in the common source of supply. In the instance of reservoir dewatering to extract oil from reservoirs having initial water saturations at or above fifty percent (50%), the Commission may establish drilling and spacing units not to exceed six hundred forty (640) acres in size.

- 4) The Referee also agrees with the ALJ's conclusion that to grant Gulf's application for 160-acre spacing prevents waste. The Supreme Court in *Denver Producing & Refining Co. v. State*, 184 P.2d 961 (Okl. 1947) found:

In striking a balance between conservation of natural resources and protection of correlative rights, the latter is secondary and must yield to a reasonable exercise of the former.

It is the Referee's opinion that the facts in the instant cause require the spacing to be on a 160-acre basis as it conforms to the principles of preventing

waste. Gulf owns 327 acres of leasehold in Section 21. Gulf owns all of the NE/4 of Section 21 and they own interests in other parts of Section 21. They purchased these interests over 40 leases in 2014 and they purchased the existing wellbore, the Marshall-Craddock #1-21, from the surface owners of the well. The Marshall-Craddock #1-21 ceased to produce in 2009. Gulf wants to re-enter that wellbore and establish production hopefully in the Deese and the Marchand which are both more than 10,000 feet deep and both produce predominantly oil. Trek owns 8.75% net mineral acres in the SE/4 of Section 21 which they acquired in 2014. They did not own any interest in the Marshall-Craddock #1-21 well when it was drilled or ceased to produce in 2009. Pfanensteil owns no interest of record in Section 21. The geologic expert that Gulf presented (Trek presented no witnesses at the hearing), presented persuasive evidence that underlying geology clearly supports respacing the section from 640-acre unit to a 160-acre unit. Thus, there was a significant change in knowledge of conditions since 1978. The Marshall-Craddock #1-21 well was drilled through approximately 32 different formations and it was completed in the Bromide, a much deeper formation. It only produced from the Bromide and apparently the wellbore was even cemented over the Marchand and the Deese. Therefore Gulf is going to have recomplete the well for the Deese and Marchand. The isopach maps presented by Gulf show that the deposition of the Deese and the Marchand in Section 21 is not consistent with 640-acre spacing. It is not a blanket type deposition. It's very heterogeneous and shows differences in thickness that vary across the section. There is also a fault that shows that a portion of the SE/4 is separated from the rest of the section as far as the Deese is concerned and the Marchand. As far as the Deese is concerned there has been no production from the Deese on the east side of the fault as it gets thinner and is not prospective.

5) The Marshall-Craddock #-1-21 well, however, is in a great location. It has a good thickness of the Second and Third Deese and the Marchand. It would not be appropriate, however, geologically to have a 640-acre unit because all of the section won't be contributing to this well. The Marshall-Craddock #1-21 well was drilled in 1998 and the mud log showed that the production would be predominantly oil from the NE/4.

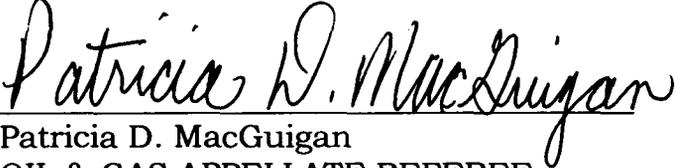
6) Gulf presented a significant engineering study by its witness who testified and presented two exhibits, Exhibits 6 and 7, that spacing on a smaller unit basis is not only warranted, it's basically imperative that it be done to protect the correlative rights of the owners primarily in the NE/4 so that they won't be producing reserves from the NE/4 and having to share on a 640-acre basis with owners who won't be contributing anything to that wellbore. The exhibits of the Gulf engineer showed that the oil gravity was 38.3 which is consistent with an oil reservoir. Ten of the wells on Exhibit 6 were drilled after 1978 which provides information that was not available when the

spacing 640-acre unit was created for Section 21, and shows a substantial change in knowledge of conditions.

7) If you recompleted the Marshall-Craddock #1-21 well on a 640-acre basis it is contrary to all of the facts presented by the geology and the engineering presented by Gulf. It is contrary to the geology because of fault separation and thinning of the zones; it is contrary to the engineering because the Deese wells may drain only 50 acres and would violate the correlative rights of the owners in the NE/4 having to share with other owners who will not be contributing any hydrocarbons from the unit.

8) Therefore, for the above stated reasons the Referee finds there is substantial evidence showing that the prevention of waste will be better accomplished by the granting of the Gulf relief requested in its application. Thus, the Referee finds the Report of the ALJ should be affirmed.

RESPECTFULLY SUBMITTED THIS 24th day of March, 2016.


Patricia D. MacGuigan
OIL & GAS APPELLATE REFEREE

PM:ac

xc: Commissioner Anthony
Commissioner Murphy
Commissioner Hiett
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ALJ Keith T. Thomas
J. Fred Gist
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