OIL AND GAS DOCKET NO. 02-0278952

APPLICATION OF EOG RESOURCES, INC., KLOTZMAN LEASE (ALLOCATION), WELL NO. 1H, EAGLEVILLE (EAGLEFORD-2) FIELD DEWITT COUNTY, TEXAS STATUS NO. 744730	§ § § § § §	**BEFORE THE RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL**

CLOSING STATEMENT OF DEVON ENERGY PRODUCTION COMPANY, L.P.

TO THE HONORABLE RAILROAD COMMISSION OF TEXAS:

COMES NOW, Devon Energy Production Company, L.P. (hereinafter "Devon"), Intervenor herein, and submits this Closing Statement, and in support thereof would respectfully show the Commission as follows:

I.

INTRODUCTION

Devon intervened in this Docket because of the importance of the issues presented. The Klotzman/Reilly complaint asks the Commission to deny EOG a permit for its Klotzman (Allocation) Well No. 1H based upon an argument that EOG does not have a "good faith claim" to title. The Klotzman/Reilly complaint asks the Commission to exceed its jurisdiction by interpreting the Klotzman leases in a way that is contrary to existing oil and gas law and contrary to existing Commission practice. The Klotzman/Reilly complaint asks the Commission to determine that EOG, as the owner of the fee simple determinable interest in the Klotzman leases, does not have the authority to drill the proposed well on those leases. The Klotzmans/Reilly Complainants admit that EOG owns the leases, and this admission is determinative that EOG has a good faith claim to drill its well. The Commission may not inquire further because to do so is to make a title/contract determination that is beyond the Commission's jurisdiction. The

Examiners must recommend that the Klotzman/Reilly complaint be dismissed because the complaint requests an action that exceeds the Commission's jurisdiction.

II.

BACKGROUND

This hearing was called because of a complaint filed by two royalty interest owners alleging that their lessee, EOG Resources, Inc. (EOG), lacks a good faith claim to title to drill a horizontal well across two leases owned and operated by it. EOG owns a 100% determinable fee mineral estate in those leases. The complaining royalty interest owners, Katherine Larson Reilly and Melanie McCollum Klotzman (hereinafter "the Klotzman/Reilly Complainants"), are lessors under both leases. EOG applied for a drilling permit for the well in question, the Klotzman (Allocation) Lease Well No. 1H Well ["Klotzman (Allocation) Well"], as an "Allocation Well." "Allocation Well" is a term used to describe a well drilled across two or more leases and/or units with no pooling and no agreement among the royalty owners therein as to how production or the proceeds of production are to be allocated or shared. In such case, the operator of the well is responsible for allocating the share of production proceeds to the royalty owners. The Klotzman/Reilly Complainants generally take the position that an oil and gas lease does not provide the lessee the right to drill such a well and to allocate the proceeds to those royalty owners.

Discussion before the Commission of the permitting of Allocation Wells arose in conjunction with a 2009 hearing in Oil and Gas Docket No.06-0262000 addressing field rules for the Carthage (Haynesville Shale) Field. In that hearing, Devon presented evidence to show that many of its units formed for drilling vertical wells in the area were oddly shaped and thus not suitable for the drilling of horizontal wells of the length and orientation necessary to efficiently

develop the Carthage (Haynesville Shale) Field. (Haynesville Hearing, I Tr. 51-53).[1] Devon showed that it would be necessary to drill horizontal wells across lease and unit lines in order to efficiently develop the field, recover the hydrocarbons, and prevent waste. Devon requested that the Commission adopt an allocation rule in the field rules for the Carthage (Haynesville Shale) Field. At the hearing, Devon agreed to work with other parties to the hearing to come up with acceptable language for the allocation rule, and in an August 4, 2009 letter to the examiners (attached as Attachment 1), Devon proposed the adoption of a field rule providing a presumed method for allocating acreage and production in the absence of agreement to the contrary. Devon proposed the following field rule language for allocating acreage and production:[2]

> Operators shall be permitted to drill and complete horizontal wells that traverse one or more units and/or leases as long as that operator has a lease or other mineral ownership right to produce from each such unit or lease. If such a well is not already subject to an agreement regarding the allocation of production, the following allocation formula will be presumed to constitute a fair and reasonable allocation of production from a well in this field and shall be utilized by the Commission in assigning acreage attributable to the separate units/leases traversed by the horizontal drainhole: an allocation of acreage and production to each of the units and/or leases traversed by and completed in the horizontal well based on the percent of said horizontal well from first take point to last take point that lies under each unit or lease.

(Attachment 1). The Commission declined to adopt this field rule. In the Final Order in that docket, the Commission adopted Findings of Fact 14, 15 and 16 and Conclusion of Law 5, 6, and 7 to address that requested rule, essentially concluding that the Commission did not have the authority to extend or modify leases or to determine the ownership of oil and gas or how the proceeds from the sale of oil or gas should be apportioned. While Devon certainly concurs that

[1] The examiners in Oil and Gas Docket No. 02-0278952 have taken official notice of Docket No. 06-0262000, including the proposal for decision in that docket and the file in that docket. Tr. p. 13. Citations in this Closing Statement to the file in Docket No. 06-0262000 will be labeled "Haynesville Hearing." Transcript and exhibit citations without a label are to the record in Oil and Gas Docket No. 02-0278952.

[2] It should be noted that the language cited in the proposal for decision in Oil and Gas Docket No. 06-0262000 reflected an earlier version of the proposed Allocation Rule and not the language actually proposed by Devon.

the Commission does not have authority to extend or modify leases or to allocate the proceeds of production, Devon respectfully disagreed that its proposed allocation rule asked the Commission to do any of these things.

Devon (1) appealed the Commission's decision in Oil and Gas Docket No. 06-0263000 and (2) filed a well permit application for an Allocation Well, the Taylor-Abney-Obanion Allocation Well. Devon clearly disclosed in its permit application that the wellbore would cross lease lines. On April 21, 2010, the Commission's Director of the Hearing Section, Mr. Colin Lineberry, notified Devon that based on the representation by Devon that it holds the leases on each of the tracts crossed and that there are no unleased interests within 330 feet of any point on the wellbore, the Commission would process the permit application "with the notation that the applicant has made a sufficient showing of a good faith claim to the right to produce the minerals under the proposed unit such that the good faith claim issue does not bar issuance of a permit." (This letter is in the record as Exhibit B attached to EOG Exhibit 3).

When the Commission issued the April 21, 2010 letter from Colin Lineberry indicating that the Commission would grant the permit for the Taylor-Abney-Obanion well, thus recognizing the Commission's responsibility to issue such permits, Devon filed a notice of nonsuit withdrawing the appeal. Subsequently, as shown by EOG Exhibit 13, more than 70 Allocation Well drilling permit applications have been filed and the Commission has issued permits for these wells in the ordinary course of its business.

There appears to be no dispute in this case that EOG met the standard for good faith claim to title that was set forth in the April 21, 2010 Commission letter concerning the Taylor-Abney-Obanion Well. EOG showed in this hearing that EOG and its working interest owners

own leases covering 100 percent of each tract traversed by the proposed Klotzman (Allocation) Well and that there were no unleased interests within 330' of the proposed well bore. (Tr. p. 39).

A. EOG Has Established a Good Faith Claim to Title and Is Thus Entitled to a Permit

The relationship between lessors and lessees under an oil and gas lease is a private contractual relationship. The duties in that relationship are properly the province of the courts, not the Commission. Consequently, the relationship is not one that is properly considered by the Commission in permitting a well. The Commission's interests are satisfied by assurances that the applicant for a drilling permit has a good faith claim to the authority to explore for and produce the minerals

The Texas Supreme Court has made clear that the Commission may not deny a permit on the basis of lack of title where the applicant makes a reasonably satisfactory showing of a good faith claim to title. The Court has held that the function of the Commission in permitting wells "is to administer the conservation laws. It does not undertake to adjudicate questions of title or rights of possession. These questions must be settled in the courts." *Magnolia Petroleum Co. v. Railroad Comm'n,* 170 S.W.2d 189, 191 (Tex. 1943). In *Magnolia,* the Court points out that that the Commission's drilling permit does not grant title, but instead merely removes the regulatory bar to drilling. *Id.* The court explains that someone challenging the permittee's title can go to the courts for a determination of the title dispute and seek an injunction, if appropriate. *Id.* Finally, the Court sets forth the standard for the Commission when title is challenged:

> The Commission should deny the permit if it does not reasonably appear to it that the applicant has a good-faith claim of ownership in the property. If the applicant makes a reasonably satisfactory showing of a good-faith claim of ownership in the property, the mere fact that another in good faith disputes his title is not alone sufficient to defeat his right to the permit . . .

Id.

The Klotzman/Reilly Complainants in this case challenge EOG's good faith claim to title. As previously mentioned, EOG's ownership interest is similar in all relevant aspects to that claimed by Devon where the Commission legal staff determined in Mr. Lineberry's letter of April 21, 2010 that Devon held a good faith claim to title by virtue of its oil and gas leases.

Devon submitted in evidence in Oil and Gas Docket No. 06-0262000 the legal opinion prepared by Ernest E. Smith ("Dean Smith") addressing the question of whether Devon's oil and gas leases in that matter provide the authority to drill across multiple leases and/or units without pooling and without a Production Sharing Agreement. Dean Smith is a professor and former dean of the University of Texas Law School and is co-author of the leading casebook and of the leading treatise on Texas oil and gas law. In a twelve-page letter opinion attached as Attachment 2 to this Closing Statement, Dean Smith expresses his legal opinion, based upon a detailed analysis of the existing case law, that horizontal wells may be drilled across lease and unit lines under the authority of the existing leases. (Haynesville Hearing, Devon Ex. 34). Dean Smith points out that "exceptionally strong support for the proposed horizontal well is provided by the repeated emphasis by Texas courts on the policies of avoiding rulings that would hamper or discourage the use of new technology." (Attachment 2, p. 6). Dean Smith discusses the Texas Supreme Court decision in *Coastal Oil & Gas Corp. v. Garza Energy Trust,* 268 S.W.3d 1, 13 (Tex. 2008), noting the court's emphasis on "the policy of facilitating production by new technologies and of not hindering their use through actions in trespass." Dean Smith also points to the decision in *Browning Oil Co., Inc. v. Luecke,* 38 S.W. 3d 625 (Tex.App. – Austin 2000, pet denied) as another example of cases supporting operators' authority under their leases to drill across lease and unit lines. In *Browning,* the operator purported to pool and then drilled across leases within the pooled unit, but the court determined that the pooling failed because the lessee

failed to comply with the pooling provisions in the leases. The royalty interest owner plaintiffs argued that they were entitled to royalties on the total production from the horizontal wells, not just the portion attributable to their leases. The court held that plaintiffs were limited to royalties based only on the share of production attributable to their leases. *Id.* The court analyzed the horizontal wells crossing the various leases as "multiple drillsites on multiple tracts." *Browning at 646.* The court indicated that it considered each of the tracts traversed by the horizontal drainhole as a drillsite tract. *Id.* The court explained its ruling as follows:

> We decline to apply legal principles appropriate to vertical wells that are so blatantly inappropriate to horizontal wells and would discourage the use of this promising technology. The better remedy is to allow the offended lessors to recover royalties as specified in the lease, compelling a determination of what production can be attributed to their tracts with reasonable probability.

Browning at 647.

Dean Smith in his legal opinion also addresses whether a Production Sharing Agreement is necessary in order to drill wells across lease and unit lines. He notes that such an agreement is highly desirable in avoiding disputes over the allocation of royalties, but that the absence of a production sharing agreement does not preclude the right to drill, concluding that "uncertainty over how production should be allocated does not override a lessee's right to drill." (Attachment 2) In further support of this opinion, Dean Smith notes that a lessee "can unquestionably drill" in a situation where there are multiple claimants or disputed undivided shares. (Attachment 2, p. 8) He states: "The failure of the parties to reach any agreement on ownership, much less how royalty is to be divided once production is obtained does not override the lessee's right to drill." (Attachment 2, p. 8).

Ironically, a situation requiring allocation of proceeds exists within one of the two leases crossed by the Klotzman (Allocation) Well. The Klotzman (Allocation) Well crosses a lease

with an existing horizontal well, the Reilly 1H Well. That lease will be referred to in this Closing Statement as the Reilly Lease. Allocation of proceeds from the Reilly 1H, a lease well, must be allocated among the three tracts within the Reilly Lease because the lessors made conveyances of interests within the lease after they granted the lease in 1959. (Tr., pp. 51-53, 132-137) According to Mr. Spencer Klotzman, a witness for the Klotzman/Reilly Complainants, these conveyances result in the Klotzman/Reilly family interest being 7.85 percent within two tracts in the Reilly Lease and 10.9 percent within a third tract within the Reilly Lease. Thus, even though the Reilly Well No. 1H is located entirely on a single lease and is thus not an "Allocation Well," the production proceeds from the Reilly 1H must be allocated to the differing royalty interests owned in separate tracts created by conveyances made after leasing. In fact, according to Mr. Klotzman's testimony, the Klotzman/Reilly family interest in the other lease crossed by the Klotzman (Allocation) Well is 7.85%, which is identical to the interest which he testified that the Klotzman/Reilly family owns in two of the three tracts in the Reilly Lease. (Tr. p. 132-133). Mr. Klotzman admitted that the same allocation will need to be made on the Reilly lease well as for the Klotzman (Allocation) Well. (Tr. p. 137)

Texas case law, as well as the opinion of Texas Legal Scholar Dean Smith, demonstrates that EOG and other lessees have under their oil and gas leases a good faith claim to title to drill horizontal wells across lease and unit lines. The need to allocate the proceeds of production does not negate that right.

B. The Railroad Commission is Responsible for Implementing the Conservation Laws, Not Determining the Allocation of Production Proceeds

The Commission is charged with the statutory duty to prevent waste and promote conservation. As part of its conservation responsibilities, the Commission is responsible for issuing permits for the drilling of oil and gas wells. If an operator shows that the application for

a drilling permit meets the requirements of the Commission's rules, the Commission is required to issue the permit. To import extraneous considerations into the permitting process is arbitrary. *Harrington v. Railroad Commission*, 375 S.W.2d 892, 898 (Tex. 1964) (holding that refusal to grant an application for a permit was arbitrary, where the Commission inappropriately considered past compliance with its rules as a basis for denial). The relationship between lessors and lessees is a private contractual relationship. The duties in that relationship are properly the province of the courts, not the Commission. Consequently, the relationship is not one that is properly considered by the Commission in permitting a well. As discussed in Section II. A. of this Closing Statement, the Commission's interests are satisfied by assurances that the applicant for a drilling permit has a good faith claim to the authority to explore for and produce the minerals.

The Legal Examiner in this hearing asked how the Commission can be assured that it is protecting correlative rights if production allocation is left to the operator. (Tr., p. 114). Under applicable law, the purpose of the Commission in taking into account correlative rights in the permitting of wells is not to police the relationship between operators and their royalty owners that is otherwise governed by the common law. The Commission is not responsible for determining the proper accounting of production or production proceeds. The purpose of the Commission's authority to consider the correlative rights of mineral owners is to ensure that mineral owners are provided a fair and equal opportunity to capture or produce their fair share of the recoverable hydrocarbons beneath their land. Allocation Wells provide lessors and lessees that opportunity. In the drilling of a horizontal well across two adjacent tracts, both tracts are drillsite tracts and thus protected from drainage by the offset drillsite tract. In *Browning Oil Co. v. Luecke*, the court states: "Each tract traversed by the horizontal wellbore is a drillsite tract, and

each production point on the wellbore is a drillsite." 38 S.W.2d 625, 634 (Tex. App.–Austin 2000, writ denied). The *Browning* court explains that the horizontal drainhole crossing lease lines protects the correlative rights of the owners in the leases crossed by the well:

> Each person still owns the oil and gas in place under his land, and each still has the right to possession, use, enjoyment, and ownership of the oil and gas produced through wells located on his land, regardless of its origin. The primary rule of ownership is still operative.

Id. Accordingly, when horizontal wells cross lease lines, each adjacent tract automatically obtains a "protection well," that is, one that is designed to protect against drainage by the part of the wellbore on the adjacent tract. In this situation, the royalty owners' correlative rights are automatically protected by the presence of a wellbore on their tract. The following examples show that the lessor is better protected by a well crossing lease or unit lines than by a separate well.

An operator who is the lessee on adjacent tracts can waive notice and hearing under Statewide Rule 37 in order to drill a vertical well that is bottomed one foot off the common lease line. (Figure 1) The circumstances under which a well drilled one foot from a lease line would not drain the offset tract are few and far between. In this instance, the Commission does not inquire whether the operator is discharging its duty to protect the royalty owners in the offset tract from drainage. That is because this duty is part of the private, contractual relationship between the lessee and its lessors. This duty is properly policed in the courthouse, not at the Commission.

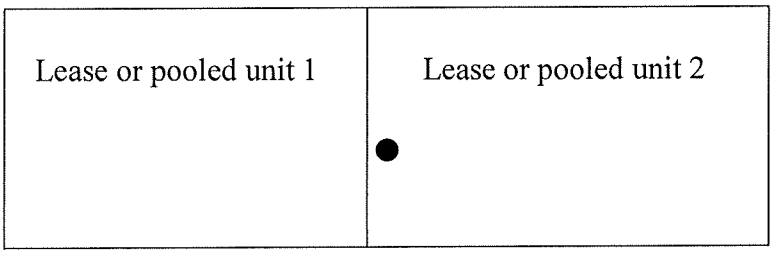

Figure 1 - Operator may waive Rule 37 notice and hearing

To take this example to its next logical step, consider an operator who desires to drill a horizontal well one foot off the lease line but parallel to it, as shown in Figure 2.

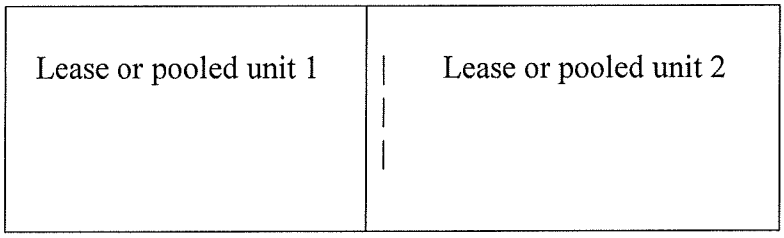

Figure 2 - Operator may waive Rule 37 notice and hearing

This operator is also permitted to waive Rule 37 notice and hearing under Rule 37(h)(2)(B). The drainage of the offset tract in this instance is likely significantly more than in the case of a vertical wellbore. But still, the Commission does not inquire into the relationship between the operator and its lessors on the offset tract. Nor does it ask whether those lessors are being protected from drainage. That is because the Commission does not have the authority to make this inquiry. More importantly, it is because there are adequate remedies in another forum for the lessors. If an operator does not discharge its common law duty to protect its lessors from drainage, their remedy is at the courthouse, not in stopping the drilling of wells that prevent the waste of hydrocarbons.

Figure 3 shows a horizontal drainhole similar to the Klotzman (Allocation) Well. In this instance, both lessors have the advantage of participating in a wellbore that goes right to their lease line and that serves as a protection well against drainage from the adjacent wellbore.

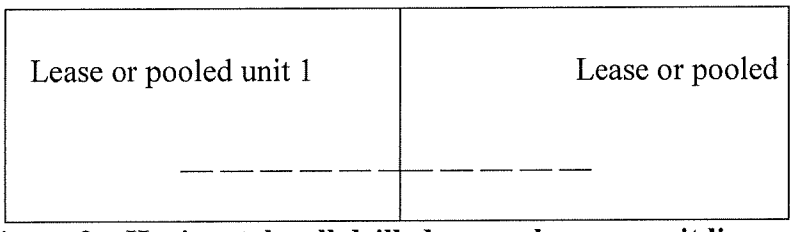

Figure 3 – Horizontal well drilled across lease or unit lines

III.
CONCLUSION

In summary, a lessee has the right under an oil and gas lease to drill a horizontal well that crosses lease or unit lines when the lessee owns the leases on the tracts traversed by the well. The lessee is responsible to account to the royalty owners for the production that can be attributed to their tracts with reasonable probability, as decided in *Browning Oil Co, Inc. v. Luecke.*38 S.W.3d 625, 647 (Tex. App. – Austin 2000, pet denied). The allocation of royalties is outside the Commission's jurisdiction. The Klotzman/Reilly complainants have not raised any issue that is within the Commission's jurisdiction. As such, the complaint should be dismissed, and EOG's permit application should be processed.

Respectfully submitted,

Sandra B. Buch

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CERTIFICATE OF SERVICE

I hereby certify that on the 4th day of January, 2013, a true and correct copy of the foregoing Closing Statement was provided to the following parties of record e-mail and/or by depositing same in the United States Mail, first class postage prepaid, to the addresses listed below:

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Sandra B. Buch

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ATTACHMENT 1

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August 4, 2009

Richard Atkins, Technical Examiner
Marshall Enquist, Hearings Examiner
Office of General Counsel
Railroad Commission of Texas
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Re: Oil and Gas Docket No. 06-0262000; Application of Devon Energy Production Co., L.P. for a New Field Discovery and Adoption of Field Rules for the (proposed) Carthage (Haynesville) Field, Panola County, Texas

Dear Examiners Atkins and Enquist:

As you know, the above-referenced proceeding was held open for one week to allow the parties more time to finalize language for the requested Allocation Rule. Attached is the language proposed by the Devon Energy Production Co., L.P., along with language that Anadarko has requested be added to Rule 2 to address notice for allocation wells. The notice provision is similar, although somewhat broader than, the Rule 37 notice requirement. This notice provision would require notice to all persons entitled to notice under Rule 37 and to all working interest owners who have not authorized the drilling of the well. This notice provision ensures that any unleased mineral owner or lessee not agreeing to drilling across lease lines can protest the Rule 37 application.

As discussed in the hearing, the allocation rule requires that operators assign acreage for allocation purposes to each tract the well traverses in the proportion that distance from first take point to last take point that underlies a tract bears to total distance from first take point to last take point.

If you have any questions, please feel free to contact me.

Sincerely,

Sandra B. Buch

Sandra B. Buch

/gs
Enclosures

Attachment 1

cc: George C. Neale
David B. Gross
Ana Maria Marsland-Griffith
Bill Spencer
Mickey Olmstead
James M. Clark
W. Timothy George
Carroll Martin
Devon Energy Production Co., LP

ALLOCATION RULE

Operators shall be permitted to drill and complete horizontal wells that traverse one or more units and/or leases as long as that operator has a lease or other mineral ownership right to produce from each such unit or lease. If such a well is not already subject to an agreement regarding the allocation of production, the following allocation formula will be presumed to constitute a fair and reasonable allocation of production from a well in this field and shall be utilized by the Commission in assigning acreage attributable to the separate units/leases traversed by the horizontal drainhole: an allocation of acreage and production to each of the units and/or leases traversed by and completed in the horizontal well based on the percent of said horizontal well from first take point to last take point that lies under each unit or lease.

LANGUAGE TO BE ADDED TO RULE 2 TO ADDRESS RULE 37 NOTICE REQUIREMENTS FOR ALLOCATION WELLS

An operator may apply for a permit to drill a horizontal well that traverses one or more units and/or leases, so long as the applicant has a lease and/or other mineral interest ownership right to drill the horizontal well proposed, for each unit and/or lease to be traversed. Where less than 100% of the mineral ownership in a lease or tract within a pooled unit or lease has agreed to the drilling of the well, the boundary around such tract shall be treated as a property line subject to the applicable Rule 37 spacing requirement. The allocation formula for the proposed well may be addressed as a part of any hearing on the Rule 37 exception application. For notice purposes, the applicant for a permit to drill a well that traverses one or more units and/or leases shall file a list of the mailing addresses of all affected persons. The following persons are presumed to be affected: (1) the designated operator(s) of each unit and/or lease to be traversed; (2) all lessees and/or working interest owners of record for tracts in each such unit and/or lease who have not authorized the drilling and production of the well; and (3) all unleased mineral interest owners in each such unit and/or lease to be traversed. The operator shall note in the Remarks on the Form W-1 whether all working interest owners have authorized the drilling and production of the well. In the event the applicant is unable, after due diligence, to locate the whereabouts of any person to whom notice is required by this rule, the applicant must publish notice of this application pursuant to the Commission's Rules of Practice and Procedure.

ATTACHMENT 2

Ernest E. Smith, Attorney at Law
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July 22, 2009

Brian R. Sullivan
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Dear Mr. Sullivan:

You have asked my opinion on four questions, based on upon the following statement of facts and the attached plat:

> Since at least the late 1950s, pooled units for vertical gas well production have been established throughout East Texas. Many of these units are pooled "for all depths" as to gas and the predominant unit size has been 640 acre units plus 10% tolerance resulting in many 704-acre units. These units were often created around a single vertical gas well, and over time infill drilling has resulted in some units now having a gas well density of 20 acres per well. Because these units were formed at a time before the development of horizontal drilling and completion techniques, the unit sizes and shapes were not created to accommodate modern horizontal wells. The size and shape of existing units creates problems in drilling horizontal wells in both existing producing zones and in new producing zones like the Haynesville Shale.
>
> In order to economically develop the Haynesville Shale, horizontal wells will be required. One proposed optimum spacing pattern for development is shown on the attached plat. The plat shows three hypothetical units, A, B and C, with a proposed horizontal Well No. 1 in red. The proposed well is at the best location to maximize ultimate recovery and it is oriented consistent with the known geology. If successful, it is possible that additional wells may be drilled every 500' parallel to Well No. 1.

In answering the questions, I have been asked to make the following assumptions:

> For the purposes of the following questions, please assume that the units in question are validly formed and pool gas rights to all depths from "grass roots to the center of the earth." Assume that the lessee/operator of the three units is the same entity, but that the royalty interest owners and some of the working interest owners in each of the units are different from unit to unit. Further assume that (i) the leases pooled grant a fee simple determinable to the lessee/operator with the right to pool but not necessarily the right to amend the resulting pooled units, (ii) there are no window tracts or non-joining interests within each unit, and (iii) the units and underlying leases have been maintained by production from existing vertical wells. [Further, it is not necessary to consider the need

for regulatory approvals such as Rule 37 exceptions in responding to the questions presented.]

The questions and my opinions on them are set out in the order in which they were presented to me.

1. Under Texas oil and gas law, may Devon, as the operator of units A, B, and C, drill the horizontal well shown as Well No. 1?

For analytical purposes, I have divided this question into two subparts:

Is Devon authorized to drill a horizontal well?

Will extending the well across the southern portion of Unit A in order to produce hydrocarbons from Units B and C and then across the southern portion of Unit B to produce hydrocarbons from Unit C constitute an actionable trespass?

Is Devon authorized to drill a horizontal well?

My conclusion is that the answer to clearly Yes. Devon is not only authorized to drill a horizontal well, but is probably obligated to do so under the implied covenant to use new and appropriate technology. Because the leases on the tracts within the three units were executed in the 1950's, I assume that they contain standard language common in that era. Granting clauses then (and now) typically provide that the lessor "does hereby grant, lease and let" the described land "unto Lessee for the purpose of exploring, prospecting, drilling and mining for and producing oil and gas and all other hydrocarbons. . . . " Although the parties to leases executed over a half century ago were almost certainly thinking of "drilling" in terms of vertical drilling, the specific type of drilling, like the type of exploration and prospecting, is not specified. The word "drilling" is broad and general enough to include any type of drilling, such as sidetracking, horizontal drilling, and so forth, that is or has become standard industry practice.

Judicial construction of the word "drilling" in oil and gas leases has occurred primarily in the context of complaints by a lessor that the lessee has failed to commence drilling operations or engage in drilling operations within the time required to maintain the lease in effect. These cases have focused almost entirely on construing "commencement," and "operations" rather than "drilling" and are relevant only in that they give a broad construction to these phrases. Stronger judicial support for construing "drilling" to include new techniques and technologies is found in Texas cases involving the rule of capture and the implied duty to protect against drainage.

In the rule of capture cases, the issue has often been whether the rule of capture protects a lessee from liability if it engages in new types of operations that result in greater drainage from a neighboring tract than older, "traditional" operations would have caused. These cases have almost invariably concluded that any standard industry technology that that increases the over-all amount of hydrocarbons that can be produced from a reservoir or that makes available hitherto unavailable reserves constitutes proper and acceptable drilling. There can be little question that horizontal drilling is now a standard industry practice, *see, e.g.*, Valence Operating Co. Texas Genco, LP v. Valence Operating Co., 187 S.W.3d 118 (Tex. App. – Waco 2006, pet. denied); Texas Genco, LP v. Valence Operating Co., 255 S.W.3d 210 (Tex.App. – Waco 2008), and that

it significantly increases production from formations that cannot be produced as efficiently or economically by utilizing standard technology.

In this regard Coastal Oil & Gas Corp. v. Garza Energy Trust, 268 S.W.3d 1, 13 (Tex. 2008). is a particularly significant rule of capture case. Although it involves hydraulic fracturing rather than horizontal drilling, its conclusion that the former is a proper method of production is equally applicable to the latter. Both the tract in which plaintiff owned royalty interests and the adjacent tract, whose minerals were owned in their entirety by defendant, overlay the Vicksburg T. This is a tight sand formation somewhat similar to the Haynesville Shale in that it is characterized by lack of permeability and porosity but contains substantial amounts of natural gas. The gas can be profitably produced from the Vicksburg T only by hydraulic fracturing. Defendant conducted hydraulic fracturing operations on its own, wholly owned tract. The resulting subsurface fractures crossed the lease line, along with the hydraulic fluid that had been injected under pressure to cause the fractures and the "proppant" that kept the fractures open after the fluid was pumped out. Plaintiffs filed suit, alleging among other causes of action, subsurface trespass.

In reversing the lower courts' award of damages to plaintiffs the Texas Supreme Court held that defendant was protected from liability by the rule of capture, which applies to drainage caused by fractures that cross into a landowner's property as well as to drainage caused by a traditional vertical well with a bore hole entirely on the operator's property. The court's reasoning was predicated on the assumption that a hitherto "non-traditional" method of production was proper because it was a standard industry technique essential for producing much needed oil and gas from tight sands or shales such as the Vicksburg T and the Barnett Shale.

The court further pointed out that the justification for the rule of capture was the plaintiff's ability to protect himself by engaging in the same drilling or other operations as the defendant. Since the plaintiffs land was leased, they could therefore protect themselves by invoking the implied covenant to protect against drainage, which would require similar operations by their lessee and which their lessee had breached.[1]

The decision in *Coastal Oil & Gas* is consistent with a long line of cases recognizing, either explicitly or implicitly, that the oil and gas industry is technology-driven and exhibiting extreme reluctance to reach conclusions that might in any way hinder or discourage the use of new, production-enhancing techniques, even though they cause greater drainage from neighboring land. This judicial history strongly supports a construction of the term "drilling" that is not limited to the types of techniques known at the time the leases were executed. Given the extraordinary longevity of many Texas oil and gas leases, a contrary interpretation of "drilling" in oil and gas leases would stifle the use of innovative and technological advances even more effectively than rejecting the rule of capture in situations where new techniques cause increased drainage. Indeed, such an interpretation would presumably have precluded the use of drilling mud in the first well at Spindletop. Drilling mud was "invented" after drilling was commenced and the well had reached a depth where water alone was insufficient to flush out the cuttings made by the rotary drill bit as it went deeper into the ground. W. Rundell, Jr., EARLY TEXAS OIL: A PHOTOGRAPHIC HISTORY, 1966-1936 35-36 (Texas A & M University Press 1977).

[1] The defendant in *Coastal* was also the lessee of plaintiffs' land.

To best of my knowledge, there are no cases in which a lessor has challenged the use of new technology that makes available hitherto unavailable reserves. Indeed, a lessor has grounds for suit if a lessee fails to use such technology. Although the terminology and categorization differ from commentator to commentator, every major treatise on oil and gas law lists the duty to conduct operations with reasonable care and due diligence as a universally recognized implied covenant. The duty to use new, standard and appropriate technology is a part of this covenant. See 5 WILLIAMS & MEYERS OIL AND GAS LAW § 861.3 (Patrick Martin & Bruce Kramer ed. 2008 update); Owen L. Anderson, John S. Dzienkowski, John S. Lowe, Robert J. Peroni, David E. Pierce & Ernest E. Smith, HEMINGWAY OIL AND GAS LAW AND TAXATION § 8.5(A) (4th ed. 2004); Eugene Kuntz, OIL AND GAS LAW § 59.1 (Anderson, Smith, Pierce & Lowe 2009 Supp.) In Texas it has been categorized as one of the sub-covenants under the covenant to manage and administer the lease. See Ernest E. Smith & Jacqueline L. Weaver, TEXAS OIL AND GAS LAW section 5.4(C)(2) (2nd ed. 2009 update).

One of the leading cases for this proposition is Waseco Chem. & Supply Co. v. Bayou State Corp., 271 So. 2d 305 La. C.t App. 1979), where a lessee was held liable for breach of its covenant of reasonable development by failing to conduct technical studies of an old, barely productive reservoir and institute "fire flooding." At the time of the case the field, which had been discovered in 1921 and fully developed by conventional means, contained only heavy, asphaltic, highly viscous residue oil and had essentially no pressure or susceptibility to a water drive. "Fire flooding," which was almost certainly unknown when the field was discovered or in 1934 when the lease in question was executed, involves drilling a well that is used for injecting compressed air into the reservoir. The underlying highly viscous oil is then ignited and kept burning by the injected air. The intense heat that is generated vaporizes the oil, ahead of the fire, and it flows to wells where it is pumped from the reservoir. This technology, which was used by other operators in the field, resulted in a recovery of approximately 60% of the remaining reserves, as compared with the 5 percent obtained by the old stripper method being used by the defendant. The court not only upheld the lessor's complaint, but pointed out that the defendant lessee's current operations were obsolete and inefficient, even when judged by 1950 standards. See also Wadkins v. Wilson Oil Co., 6 So. 2d 720 (La. 0942)(failure to dill and acidize wells in a chalk formation, a process unknown when the lease was executed).

It is not necessary to go outside of Texas for the proposition that a lessee is obligated to use new, appropriate technology in a field. The Texas Supreme Court stated almost three-quarters of a century ago that "A lessee's obligations in the performance of the implied covenants as to development, operation, equipping, and marketing are measured by the same rule, reasonable diligence, or what an ordinarily prudent and diligent operator would do." Rhoads Drilling Co. v. Allred, 123 Tex. 229. 70 S.W.2d 576, 585 (1935) This standard was applied far more recently in two almost identical cases involving an electric generating company and Valence Operating Co. Texas Genco, LP v. Valence Operating Co., 187 S.W.3d 118 (Tex. App. – Waco 2006, pet. denied); Texas Genco, LP v. Valence Operating Co., 255 S.W.3d 210 (Tex.App. – Waco 2008). In holding that the accommodation doctrine required Valence to drill its wells off Texas Genco's carefully constructed and molded landfills rather than directly above its target bottom hole location, the court pointed to evidence that deviated drilling is now a standard, widely used industry practice.

Based on the above cases, it is my considered opinion that Devon, as lessee, not only has the right under its leases to engaged is horizontal drilling, but is obligated to do so.

Will extending the well across the southern portion of Unit A in order to produce hydrocarbons from Units B and C and then across the southern portion of Unit B to produce hydrocarbons from Unit C constitute an actionable trespass?

The answer to this subpart of the initial question is susceptible to reasonable disagreement, but my considered response to it is No, i.e., that Devon will not commit an actionable trespass by drilling horizontal extensions across the southern portion of Unit A in order to produce hydrocarbons from the two other units and to continue the horizontal extension across the southern portion of Units B to produce hydrocarbons from Unit C.

Texas courts have uniformly refused to find a trespass or, indeed, any other viable cause of action based on an invasion of a mineral estate except where a producing well is bottomed in a reservoir in which the well operator has no lease or other interest. Today this situation is encountered almost solely where an oil and gas company mistakenly believes that its lease has not terminated. *E.g.*, Moore v. Jet Stream Investments, Ltd. 261 S.W.3d 412 (Tex.App.-Texarkana 2008). Other types of cases involving claims of trespass to a mineral estate fall into two basic categories.

The first category encompasses suits by mineral owners arising from a deviated well that passes through their tracts in order to be bottomed on adjacent land. This type of litigation has arisen where the lessee of a tract that is unsuitable for drilling because of size, shape, topography or other factors either purchases the surface or obtains a surface lease of an adjacent tract and then drills a deviated well that is bottomed on the tract on which it has an oil and gas lease. There have been three reported cases in which the owner or lessee of the mineral estate underlying the drill site tract has brought suit, and the plaintiffs have been uniformly unsuccessful. Trespass was rejected in Humble Oil & Refining Co. v. L. & G. Oil Co., 259 S.W. 933 (Tex. Civ. App. – Austin 1953, writ ref'd n.r.e.). Other theories that were advanced in Grubstake Investment Ass'n v. Coyle, 269 S.W.2d 854 (Tex. Civ. App. – San Antonio 1925, writ dism'd) and Atlantic Refining Co. v. Bright & Schiff, 321 S.W.2d 167 (Tex. Civ. App. – San Antonio , writ ref'd n.r.e.) were equally unsuccessful.

The second category involves the subsurface injection of substances that enable or enhance production. Such operations have been treated as non-trespassory even though the injected substances cross lease lines and the operations are carried out solely for the benefit of the tract where the substances are injected. *See, e.g.*, Railroad Comm'n v. Manziel, 361 S.W.2d 560 (Tex. 1962) (water flooding).

Coastal, which involved injected hydraulic fluid and proppant that crossed beneath plaintiffs' land, is again of special importance. The trespass action was brought by royalty owners, and the same would necessarily be the case here, for the horizontal extension would be limited to Haynesville Shale, i.e., the productive formation that is part of the mineral rather than

surface estate. There is no question that the royalty owners under Units A and B have standing to bring an action in trespass. See HECI Exploration Co. v. Neel, 982 S.W.2d 622 (Tex, 1988); Coastal Oil & Gas Corp. v. Garza Energy Trust, 268 S.W.3d 1, 13 (Tex. 2008). But like the plaintiffs in *Coastal*, they have only "a royalty interest and the possibility of reverter" should the leases terminate, but "no right to possess, explore for, or produce the minerals." Natural Gas Pipeline Co. of Am. v. Pool, 124 S.W.3d 188, 194 (Tex.2003). Their interests are non-possessory, and in the absence of a possessory interest, their cause of action would necessarily be based on trespass on the case. Trespass on the case provides an action for injury to a non-possessory interests, but requires a showing of actual permanent harm that would affect the value of their interest. W. Page Keeton, Dan B. Dobbs, Robert E. Keeton & David G. Owen, PROSSER AND KEETON ON THE LAW OF TORTS § 13, at 78 (5th ed.1984); RESTATEMENT (FIRST) OF PROPERTY §§ 211.

In *Coastal* the Texas Supreme Court rejected plaintiffs' trespass action because they had failed to establish damages, i.e., the rule of capture protected the defendant from liability, even though the hydraulic fluid and proppant that defendant had injected crossed into their property. Under the current facts as presented to me, it is difficult to imagine any "actual, permanent harm" that could result from the horizontal extension through the southern portion of Unit A to Unit B or the southern portion of Unit B to Unit C. If anything, the royalty owners of Units A and B may affirmatively benefit from such extensions. The facts as presented to me state that horizontal wells are required in order to economically develop the Haynesville Shale. If the expense, risk and probable level of production would preclude or dissuade a reasonable prudent operator from horizontal drilling limited to a single unit, the royalty owners in the units will receive income from the underlying gas only by the well as currently proposed.

As a final note on the trespass issue, the following statement by the *Coastal* court is highly relevant:

> But that maxim- *cujus est solum ejus est usque ad coelum et ad inferos*-"has no place in the modern world." Wheeling an airplane across the surface of one's property without permission is a trespass; flying the plane through the airspace two miles above the property is not. Lord Coke, who pronounced the maxim, did not consider the possibility of airplanes. But neither did he imagine oil wells. The law of trespass need no more be the same two miles below the surface than two miles above. (footnotes omitted) 268 S.W.3d at 11.

In addition to the cases rejecting trespass claims, exceptionally strong support for the proposed horizontal well is provided by the repeated emphasis by Texas courts on the policies of avoiding rulings that would hamper or discourage the use of new technology. *Coastal*, once more, is especially important. The majority more generally and Justice Willett in his concurring opinion in particular emphasize the policy of facilitating production by new technologies and of not hindering their use through actions in trespass.

An identical policy was articulated by the Austin Court of Appeals in Browning Oil Co., Inc. v. Luecke, 38 S.W.3d 625 (Tex.App. – Austin 2000, pet denied), where the operated drilled two horizontal wells that crossed tracts belonging to the plaintiffs as well as several other tracts.

In order to do so defendant purported to create a pooled unit in violation of express anti-dilution provisions in plaintiffs leases. These clauses required a specified percentage of their tracts to be included within pooled units and defendant's pooling did not include those percentages. The court held that the defendant could not ignore the express pooling limitations contained in the plaintiff's leases, but rejected plaintiffs' claims to recovery based on the same doctrine used for vertical wells that are drilled on invalidly formed pooled unit. This doctrine entitles the lessors of the well site to royalties on the full production from the well, rather than a share of production proportionate to the amount of acreage that site has contributed to the invalid unit. Plaintiffs argued that since the pooled unit was invalid as to them, this doctrine entitled them to royalties based on the total production from the horizontal wells, regardless of the location of the various bore holes. In holding that plaintiffs were limited to royalties based solely on production from bore holes beneath to their leases the court stated

> . . . we recognize the immense benefits that have accompanied the advent of horizontal drilling, including the reduction of waste and the more efficient recovery of hydrocarbons. Draconian punitive damages for a lessee's failure to comply with applicable pooling provisions could result in the curtailment of horizontal drilling. We decline to apply legal principles appropriate to vertical wells that are so blatantly inappropriate to horizontal wells and would discourage the use of this promising technology. 38 S.W.3d at 647

These and other decisions rejecting traditional doctrines as inapplicable and inappropriate to new technology that enables or enhances production support a conclusion that trespass would be held inapplicable to the situation described in the statement of facts presented to me.

2. In the Barnett Shale, operators often obtain a Production Sharing Agreement from all interest owners prior to drilling a well like Well No. 1. The Production Sharing Agreement specifies how production from the well(s) will be allocated to the existing unit(s) and/or leases. Other than providing protection against an *ARCO v. Marshall* [2] commingling lawsuit, is a Production Sharing Agreement necessary under Texas law to drill Well No. 1?

Obviously a Production Sharing Agreement would be highly desirable, and the operator should seek to enter into one with the royalty owners. *Cf.* Browning Oil Co., Inc. v. Luecke, 38 S.W.3d 625, 641, ftn.22 (Tex.App. – Austin 2000, pet denied) (discussing advisability of lessees seeking to amend existing leases to permit pooling for horizontal wells). However the probable multiplicity of royalty owners, many of whose location and address may be unknown, probably makes it impossible to enter into such an agreement with everyone. The absence of such an agreement will not preclude drilling.

Without a production sharing agreement a lessee that drills a horizontal well such as the one proposed unquestionably exposes itself to litigation by the royalty owners in the various units; however uncertainty over how production should be allocated does not override a lessee's

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[2] Arco Oil & gas Co. v. Marshall, 30 S.W.3d 469 (Tex.App.-San Antonio 2000), was published in the advance sheets at 30 S.W.3d 469-486, but was withdrawn from the bound volume because the decision was vacated by the court. It is also no longer available on Westlaw

right to drill. The proportionate reduction clause is almost universally used in oil and gas leases because of possible uncertainties over the size of a lessor's mineral interest. Even where there are known multiple claimants to the same land or to disputed undivided shares of the land, if one or all execute leases, the lessee can unquestionably drill. The failure of the parties to reach any agreement on ownership, much less how royalty is to be divided once production is obtained, does not override the lessee's right to drill. See generally Ernest E. Smith & Jacqueline L. Weaver, TEXAS OIL AND GAS LAW section 2.3(A) (2nd ed. 2009 update).

It is highly improbable that a different result would be reached because of the accounting issues that may arise when gas from each of the three units is commingled within the wellbore and as it is produced. In this situation the accounting to the royalty owners in the three units will be based on the equivalent amount of producible gas beneath each Unit, rather than on the actual gas produced by the bore holes beneath the Unit. The fact that the gas attributable to each royalty owner is not the specific gas originally in place beneath the Unit is not a solid ground for objection. Although the owner of mineral rights unquestionably has a real property interest in the oil and gas in place, Brown v. Humble Oil & Ref. Co., 126 Tex. 296, 83 S.W.2d 935, 940 (1935), that right "does not extend to specific oil and gas beneath the property." Seagull Energy E & P, Inc. v. R.R. Comm'n., 226 S.W.3d 383, 388-389 (Tex.2007). The owner is not entitled to the specific molecules of the oil and gas below the surface, but to "a fair chance to recover the oil and gas in or under his land, or their equivalents in kind." Gulf Land Co. v. Atl. Ref. Co., 134 Tex. 59, 131 S.W.2d 73, 80 (1939).

The likelihood or even certainty of commingling does not preclude drilling. In Humble Oil & Ref. Co. v. West, 508 S.W.2d 812 (Tex. 1974, cert. denied, 434 U.S. 877 (1977) royalty owners sought to enjoin defendant from injecting extraneous gas for storage into an underground reservoir that was not yet entirely depleted. Plaintiffs argued that they had absolute rights in the native gas in place and that this right precluded the defendant from commingling non-native gas in the reservoir. Defendant's subsequent production of native gas along with the injected gas would be an intentional appropriation of their property. The Texas Supreme Court ruled against plaintiffs. While recognizing the defendant's duty to account for the amount of native gas that would be commingled with the injected "foreign" gas, the court rejected plaintiffs' suit for an injunction, even though there could be no *a priori* determination of how much native gas could or would be produced, much less any agreement on the correct division between native gas and the injected gas as they were produced. In the present situation and unlike that in *Humble v. West* the commingled gas will be from the same reservoir with an identical composition.

In its decision the court also made reference to the doctrine of correlative rights and stated that plaintiffs' rights must be balanced against those of the defendant, which owned all rights in the reservoir other than the royalty interests and would be unable to use the reservoir for gas storage unless some otherwise native "producible" native gas was left in the reservoir to prevent water encroachment. The court also advanced a policy rationale in support of its decision:

> [O]ur ruling will determine the continued existence of an important natural resource. The record reveals two significant features of the reservoir which vitally affect the public interest. First, the reservoir is well-suited as a 'peaking' facility which can handle the seasonal fluctuations and rapidly increasing energy demands for the greater Houston area;

secondly, it is a strategically located 'emergency' facility, capable of providing a readily deliverable supply of gas at times when accidents, natural disasters or mechanical failures make continued delivery through normal channels impossible. 508 S.W.2d at 816.

The policy of promoting the full, efficient and effective use of our state's natural resources is equally applicable to the present situation. As the facts presented to me indicate, development of the Haynesville Shale requires the use of horizontal wells and possibly those that extend the length of those shown on the attached plat.

3. Assuming Devon does not have a Production Sharing Agreement or similar agreement with the interest owners in the three units which allocates production from Well No. 1 to each of the units, what is Devon's obligation to allocate production to the individual owners in each of the three units?

A similar question was involved in Browning Oil Co., Inc. v. Luecke, 38 S.W.3d 625 (Tex.App. – Austin 2000, pet denied). As discussed previously, the operator, which had drilled two horizontal wells that crossed tracts belonging to the plaintiffs as well as several other tracts, purported to pool plaintiffs' land into units that failed to comply with lease anti-dilution clauses. In determining the lessee's accounting obligation the court rejected both the lessee's argument that the prudent operator rule excused its compliance with the express pooling limitations and plaintiffs' contention that they were entitled to royalties based on the entire production from each of the two horizontal wells. The court discussed the highly fractured nature of the Austin Chalk where the wells had been drilled, and which, like the Haynesville Shale, has relatively low porosity and very low permeability. It concluded that each drain hole was essentially the equivalent of a vertical well, but one that caused little or no drainage beyond the fracture where the drain hole was located. Absent drainage from neighboring tracts and the invalidity of the lessee's attempted pooling, plaintiffs were only entitled to royalties attributable to production from the drain holes beneath their tracts.

In the current situation Devon obviously has no more right to form a new pooled unit that includes all three existing unit but exceeds the 640 (or 704) acre limit imposed by the leases than the defendant in *Browning v. Luecke* had to form a unit in violation of the anti-dilution clause in plaintiffs' leases. Unlike the *Browning* situation, however, the assumption, as stated in the request for my opinion, is that each of the existing units here was validly formed. In addition, gas rights have been pooled to all depths and all leases within each of the three units have been maintained by production from the original vertical well and/or by infill drilling of vertical wells. Hence the allocation of production among the tracts within each unit depends upon the provisions of the pooling clause or clauses governing each of the three units.

If the leases are typical leases of the mid-years of the last century, they contain language similar to the following, which is taken from para. 4 of the A.A.P.L. Form Oil and Gas Lease:

> For the purpose of computing the royalties to which owners of production and payments out of production and each of them shall be entitled upon production of oil and gas, or either of them from the pooled unit, there shall be allocated to the land covered by this Lease and included in said unit a pro rata portion of the oil and gas, or either of them, produced from the pooled unit after deducting that used for operation on the pooled unit.

Such allocation shall be on an acreage basis, that is to say, there shall be allocated to the acreage covered by this Lease and included in the pooled unit that pro rata portion of the oil and gas, or either of them, produced from the pooled unit which the number of surface acres covered by this lease and included in the pooled unit bears to the total number of surface acres included in the poled unit. Royalties hereunder shall be computed on the portion of such production, whether it be oil or gas or either of them, so allocated to the land covered by this Lease and included in the unit just as though such production were from such land.

The facts mention that some infill drilling has been done -- in some instances on units as small as 20 acres, as authorized by the Railroad Commission. If the pooling provisions have not been modified or amended as a result of such drilling, the original pooling provision governs and production from these existing wells is presumably being allocated on the basis of each tract's proportionate acreage contribution to the original 640 or 704 acre unit. Absent such an amendment, from a contractual standpoint it is irrelevant whether production comes from a single vertical well bottomed on one tract, several vertical wells bottomed on different tracts with the unit, from a variety of bore holes in a horizontal well that extends across many tracts within the unit, or from gas from those bore holes that has been commingled with gas from bore holes on other units. In each instance, the allocation to each tract with a unit should be the same. If all tracts within each unit are still subject to the original pooling clause, then any production attributable to the unit should be allocated on the basis of each tract's contribution of acreage to the unit, regardless of the source of production attributable to the unit.

4. Assume that Well No. 1 is completed in a reservoir that is reasonably homogeneous and isotropic along each horizontal wellbore such that every foot of reservoir completed along the horizontal well would be expected to yield as much gas as any other foot of reservoir along the horizontal wellbore. Would it be reasonable for Devon to allocate production to each of the units on the basis of that unit's percent of completed reservoir along the horizontal wellbore? Stated another way, would an allocation based on the percent of the wellbore within each tract between the first and last take points represent a fair and reasonable allocation to each tract? (Well No. 1 is completed over a horizontal interval of 5000' from first take point to last – 30% of the completed wellbore is under Unit A, 40% under Unit B, and 30% under Unit C. *See* attached horizontal schematic for details.)

The method of allocation described above would appear to be both fair and reasonable if supported by appropriate geologic studies. On remand in Humble Oil & Ref. Co. v. West, 508 S.W.2d 812 (Tex. 1974, cert. denied, 434 U.S. 877 (1977), where Humble was injecting gas for storage into a reservoir still capable of production, its successor Exxon presented two witnesses, a geologist and a petroleum engineer, who provided expert opinions on the total amount of native gas that remained in place in the reservoir on the date when Humble/Exxon began storage operations. Their testimony was from reserve studies that were based on electric well logs, core samples, well test information, and similar data obtained from 32 wells in the 1500 acre area field at issue. The court of appeals rejected plaintiffs' contention that the evidence was inadequate because it covered only a small percentage of the reservoir. Exxon Corp. v. West, 543 S.W.2d 667 (Tex. Civ. App. – Houston [1st Dist.] 1976, writ ref'd n.r.e.), cert. denied, 434 U.S. 875 (1977).

If there is evidence that the proposed method of accounting is widely used in the Haynesville Shale, Barnett Shale and similar reservoirs, some additional support for payments on this basis can be derived from industry custom and practice.

It should be noted, however, that even though it is fair and reasonable, this method of accounting can be attacked on the ground that it fails to comply with the ruling in *Browning v. Luecke*. Each of the three units is the equivalent of each of plaintiffs' tracts in *Browning*. It can thus be argued that the case requires Devon to establish the amount of gas that is actually produced from each specific Unit and allocate that amount to each unit in making payments to the royalty owners within that unit.

This argument is limited to royalty owners within a unit who can establish that they have been undercompensated by the proposed method of accounting. In *Exxon v. West* Exxon had stipulated that it would base royalty payments on the total amount of native gas in place in the reservoir when it commenced storage operations, rather than on the amount of that gas that could actually be recovered. Because this method of accounting would entitle plaintiffs to more than they would have received had production from the field continued without reinjected gas, the court of appeals rejected plaintiffs' argument that Exxon's evidence was inadequate because it failed to establish with reasonable certainty the volume of gas that was recoverable.

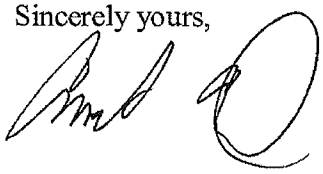
In any event, if Devon allocates production to each unit on the basis of that unit's percent of completed reservoir along the horizontal wellbore and tenders royalties on that basis, the burden shifts to the royalty owners of any claimed disadvantaged Unit to establish actual damages.

CONCLUSION

If I may briefly summarize, it is my carefully considered opinion that Devon, as the operator of units A, B, and C, may drill the horizontal well shown as Well No. 1 on the attached plat and that obtaining a Production Sharing Agreement from all interest owners prior to drilling a well like Well No. 1, although highly desirable, is not necessary in order for Devon to drill such a well. I have further concluded that in the absence of such an agreement, Devon is obligated to allocate production to the individual owners in each of the three units on the same basis as production from the initial well was allocated. This conclusion has assumed a traditional pooling clause that has not been amended or modified in any way. Finally, Devon's proposed method of allocating production to each Units on the basis of that Unit's percent of completed reservoir along the horizontal wellbore appears to be fair and reasonable, but is subject to

attack on the ground that allocation must be done on the basis of actual production from each Unit. I hope that this opinion and the analysis provided are of some help to you.

Sincerely yours,



Ernest E. Smith