HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7C-0283443

THE APPLICATION OF PIONEER NATURAL RES. USA, INC. TO AMEND FIELD RULES FOR THE SPRABERRY (TREND AREA) FIELD, VARIOUS COUNTIES, TEXAS

HEARD BY:

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DATE OF HEARING:

August 7, 2013

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EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Pioneer Natural Resources USA, Inc. (Pioneer) is requesting to amend field rules for the Spraberry (Trend Area) Field in Commission Districts 7C and 8 to enable full field development by allowing the duplicate assignment of acreage in situations where mineral rights are horizontally severed. Generally speaking, in these cases one operator holds the shallow rights in the field and below some point of demarcation another operator owns the deep rights in the same field. Statewide Rule 40(d) prohibits the duplicate assignment of acreage—the same acreage from being applied to more than one well (e.g., a shallow well and a deep well) in the same field. The field covers about 4 million acres and includes four geologic formations with a total correlative interval of 3,740 feet. Pioneer estimates 50 billion barrels of recoverable oil are present in the field. The number or extent of horizontal severances in the field is not known but believed to be widespread. Large portions of the field are unitized, and these areas are often highly developed, leaving little or no unassigned acreage for the development of other horizons within the field.

Pioneer is the largest operator in the Spraberry (Trend Area) Field and finds itself on both sides of the issue: in some cases it holds the shallow rights but not the deep, in other cases the deep rights but not the shallow, and in many cases it owns full rights. The examiners note that this application has received broad support from operators and mineral owners in the field area; no protests were filed.

On Friday, August 23, 2013, the examiners sent to Pioneer and the parties a set of questions seeking additional information and explanation about the proposed amendment to the field rules. Pioneer asked for additional time to respond, which the examiners granted. Pioneer's response was received on Friday, September 20, 2013.

APPLICABLE LAW

Commission Statewide Rule 40(d) [16 Tex. Admin. Code §3.40(d)] states "acreage assigned to a well for drilling and development, or for allocation of allowable, shall not be assigned to any other well or wells projected to or completed in the same reservoir; such duplicate assignment of acreage is not acceptable, provided, however, that this limitation shall not prevent the reformation of development or proration units so long as no duplicate assignment of acreage occurs, and further, that such reformation does not violate other conservation regulations."

MATTERS OFFICIALLY NOTICED

The examiners have taken Official Notice of letters written in support of Pioneer's proposal from the following parties: Endeavor Energy Resources, L.P.; JM Cox Resources, L.P; Mr. Terry S. Fields; Tema Oil and Gas Company; Diamondback E&P LLC; Chevron USA, Inc.; Laredo Petroleum, Inc.; and Tall City Operations, LLC.

The examiners have taken Official Notice of the completion reports and well records of the JM Cox Resources, L.P. White "D" Well No. 1 (API No. 317-36799).

The examiners have taken Official Notice of the letter from Brian R. Sullivan, Attorney for Pioneer Natural Resources USA, Inc., dated September 20, 2013, in response to questions submitted by the examiners on August 23, 2013.

DISCUSSION OF EVIDENCE

Pioneer presented testimony from two witnesses and offered 40 descriptive exhibits followed by one late-filed exhibit at the examiners' request, which was an anthology of field-related Commission Orders and supporting material. In addition, on September 20, 2013, Pioneer provided a response to 18 questions asked by the examiners in a letter dated August 23, 2013. This information, along with the matters officially noticed, provides a description of the history and current situation of the Spraberry (Trend Area) Field, and also describes the evolution of the issue for which Pioneer now seeks relief.

I. Field Description and History

Discovered in the 1940's, the Spraberry (Trend Area) Field now covers approximately 4 million acres throughout many counties in Commission Districts 7C and 8. Development is concentrated in Dawson, Borden, Martin, Howard, Midland, Glasscock, Upton, Reagan and Irion Counties, and extends into the counties surrounding this core area.

Commission Final Order No. 7C & 8-25,174, effective December 22, 1952, established field rules for the Spraberry (Trend Area) Field. The Commission has amended the field rules many times at the request of operators as the field has grown by development and consolidation with adjacent fields. At Pioneer's request the Commission adopted the most recent field rule amendments on June 12, 2012, by Final Order No. 7C-0274561. The Spraberry (Trend Area) Field currently has a correlative interval of 3,740 feet and includes all of the Clear Fork, Spraberry, Dean and Wolfcamp Formations. These four formations are mapable and continuous across the Midland Basin. The type well for the field is Pioneer's Houpt No.1 well, located about 3 miles south of Midland. In this well the field is encountered in the depth interval from 6,865 feet to 10,605 feet.

In April 2013, the field produced 292,062 BOPD and 867,398 MCFGPD from 18,437 oil and gas wells. Cumulative production through April 2013 was more than 1.2 billion BO and 3.4 trillion CFG. Production is tracked by the field as a whole, and not by the individual geologic formations (e.g., Spraberry, Wolfcamp, etc.) that comprise the field.

A. Spraberry Formation

From the 1940's until about 2010, development of the field was almost entirely by vertical wells, and the Spraberry Formation was the primary focus for completion. The Spraberry Formation contains a large volume of oil in place, but poor porosity, permeability and other adverse factors keep recovery rates low. The vast majority of oil wells completed in the Spraberry (Trend Area) Field produce less than 10 BOPD on initial potential testing. Early vertical developments in the 1940s and 1950s were in many cases unitized by the operators for waterflooding in following years. During this time the field grew by continued development and by consolidation with other fields. Consolidation was oriented horizontally (e.g., adjacent Spraberry Formation fields were combined) as development caused multiple fields to grow together and operators sought uniformity in field rules and development patterns. Consolidation was also oriented vertically, but for different rea ons. Vertical consolidation allowed operators to economically produce less productive horizons (e.g., Clear Fork, Dean and Wolfcamp Formations) jointly with more productive horizons

(typically the Spraberry Formation).

B. In-fill Drilling

The focus of development shifted in the 1980's to in-fill drilling on smaller units. At the request of field operators, the Commission amended the field rules in 1997 to allow for special Statewide Rule 38 exceptions for 40-acre units, which yielded to 20-acre units in 2008. These special Statewide Rule 38 exceptions allow an operator to drill a well on the smaller acreage without presenting reservoir engineering data, provided affected parties are properly notified and do not protest the proposed well density. The in-fill drilling to increase well density is a significant contributing factor to increased field production in the last decade, from about 60,000 BOPD in 2003 to 292,062 BOPD in April 2013.

C. Commingling Exceptions

A statewide trend emerged in the early 2000's as operators applied for an increasing number of Statewide Rule 10 exceptions. These exceptions allow for multiple fields to be downhole commingled (i.e., produced simultaneously through one string of tubulars.) Multiple marginally-productive fields could be economically produced. Operators soon applied for—and received—blanket commingling authority for the Spraberry (Trend Area) Field and many underlying fields in the Strawn Formation and below. Downhole commingling has also resulted in increased production from the Spraberry (Trend Area) Field as the production from all commingled fields is typically reported to this field.

D. Horizontal Wells

Most recently, the Spraberry (Trend Area) Field has seen a surge in the number of drilling permits being issued for horizontal wells. Technological innovations developed in other shale plays are now being applied to the extensive shale—and otherwise tight—formations located in the Permian Basin in general and in the Spaberry (Trend Area) Field in particular. Operators submitted fewer than 10 drilling permit applications for horizontal wells in 2010; nearly 250 permit applications have been filed for horizontal wells in the first seven months of 2013.

The Wolfcamp Formation is the focus of most of the current horizontal activity in the Spraberry (Trend Area) Field. The Wolfcamp was broadly but marginally productive in the area before the application of contemporary horizontal drilling and fracture stimulation techniques. Initial potential tests from 20 recently-completed Wolfcamp wells operated by Pioneer, Laredo and Apache, indicate average well production of 760 BOPD and 950

BOEPD, with oil production ranging from 399 to 1,195 BOPD. However, Pioneer indicated that much of the correlative interval of the Spraberry (Trend Area) Field may become a potential target for horizontal development. Pioneer is currently exploring six targets in the field. Pioneer estimates four of the target zones—the Wolfcamp A, B, D and Jo Mill (a zone within the Spraberry Formation)—contain recoverable reserves of 50 billion barrels of oil equivalent. This estimate is based on 140-acre spacing for stacked lateral horizontal wells in the four zones over the 4 million acre areal extent of the field. Not all of this area is subject to horizontal severance situations. In fact, the number and areal extent of horizontal severances in the field is not known.

II. Current Field Rules

The Commission established the current field rules on June 12, 2012, by Final Order No. 7C-0274561. The field rule amendments were requested by Pioneer and are summarized below:

- A 3,740-foot correlative interval from 6,865 feet to 10,605 feet as shown on the log of the Pioneer Natural Res. USA, Inc. - Houpt Lease, Well No. 1 (API No. 42-329-31029), shall be designated as a single reservoir for proration purposes. This interval is intended to include all reservoirs between the top of the Clear Fork and the top of the Strawn formations.
- 80-acre standard proration unit with 80-acre tolerance per well, and a 20-acre special Statewide Rule 38 exception;
- 515 BOPD allowable with a gas-to-oil ratio of 4,000 SCF/B, and an allocation formula based on 75% acreage and 25% allowable;
- 467-foot lease line spacing distance and 0-foot between well spacing; and
- Horizontal provisions for 100-foot lease line spacing for first and last take points, 467-foot perpendicular drainhole to lease line spacing, 50-foot box rule, off lease penetration points, no perforation zones, and stacked lateral wells.

The field rules now include all provisions that are generally considered beneficial or necessary for full field development with horizontal wells. In this sense, the field rules are comparable to other fields in the State experiencing active development by horizontal wells.

III. Acreage Deficiencies

The presenting issue in this matter is the frequent occurrence of horizontally severed mineral rights in the Spraberry (Trend Area) Field in which, typically, one operator holds mineral rights above some depth point of demarcation and another operator holds the mineral rights below that same point; hence, there are two mineral owners within the same field for two depth intervals. The number or extent of such horizontal severances was not established at the hearing, but it is believed to be widespread throughout the field. Statewide Rule 40(d) prohibits the same acre from being assigned to more than one well. Therefore, acting independently, the parties cannot both fully develop their mineral rights (which do not overlap vertically); they may each partially develop their rights, or one may develop its rights to the total exclusion of the other. Pioneer indicated that it is on both sides of the issue: In some cases it holds the shallow rights only, in other cases the deep rights only, and in many cases it holds full rights.

This situation arises through the regular and routine operation of specific lease clauses. Not all oil and gas leases contain these clauses. In fact, in some parts of the state they are very unusual. In others, like the Spraberry (Trend Area) Field these clauses are fairly common. When present, this contract provision operates to release a lessee's rights to produce resources below a prescribed depth based on actual production. For example, an operator with full rights completes a well in the Spraberry Formation. At some future time as prescribed by the lease terms, the operator loses or releases its rights to minerals below the depth of current production. Once released, the mineral owner may grant the deeper rights to another operator, but acreage available for development in the same field would be limited based on existing acreage assignments. This is the basic mechanism causing all instances of horizontally severed mineral ownership. The depth point of severance often varies from lease to lease and may or may not correspond or be relative to a geologic contact. Pioneer provided several examples. In one case the ownership division occurred at a specified depth below ground surface, in another case it occurred at a depth below a specific geologic contact. Virtually any permutation the parties to the lease contractually agree to is possible.

Unitization for waterflooding (common in the 1960's and 1970's) resulted in fully or near fully assigned acreage for development of the unitized interval, typically all or part of the Spraberry Formation. Subsequently, mineral rights below the unitized interval may have been released and acquired by others. Pioneer holds 236,000 acres in the field that have been unitized for certain depths. In many leases the mineral ownership is severed horizontally. Unitization was, at the time, a best engineering practice for resource recovery

based on the understanding of the potential productivity of the field and technology at the time. However, the contractual phrasing of lease clauses caused the severance, independent of field assignment, identification or definition.

Several operators have attempted to resolve the issue by assigning wells completed in the Wolfcamp Formation to Wolfcamp fields other than the Spraberry (Trend Area) Field. For example, one operator applied for a drilling permit to complete a well in the DAI (Wolfcamp) Field. The well was located within an area of Spraberry (Trend Area) Field wells, and the acreage in this area was already assigned to shallow wells in the Spraberry formation. Commission staff has rejected these applications, advising the operators to pursue an exception to Statewide Rule 40(d) or other remedy, such as negotiating operating agreements with vertically adjacent mineral owners.

Pioneer asserts the operation of Statewide Rule 40(d) in these situations is resulting in a regulatory confiscation of property by preventing development of the field.

Pioneer also asserts the operation of Statewide Rule 40(d) in these situations is resulting in waste of hydrocarbon resources in the Spraberry (Trend Area) Field.

IV. Proposed Relief

To resolve the matter, Pioneer held discussions with many interested parties including other operators, mineral owners, and Commission staff. The proposed amendment to the field rules—actually, an addition to the field rules, as none of the existing text is being changed or removed—affirms the rights of operators to develop their individual ownership in situations where the ownership of oil and gas within the designated interval for Spraberry (Trend Area) Field has been divided horizontally.

The Spraberry (Trend Area) Field currently has two Field ID Nos., one for District 7C (Field ID No. 85279 200) and one for District 8 (Field ID No. 85280 300), by which the Commission's electronic drilling permit and well compliance information systems keep track of well and field development. Under Pioneer's proposal, for each District, Commission staff will create a separate Field ID that corresponds to the Spraberry (Trend Area) Field 'Deep Rights'. There will then be two field ID Nos. for each District, one which corresponds to operations in both the 'shallow' and 'full field' rights regimes, and one which applies to 'deep' rights. It will be understood collectively as a single regulatory field.

When ownership is horizontally severed, the Deep Rights operator will file drilling permit applications under the Deep Rights Field ID No., and by doing so the operator

certifies that the ownership it holds is so divided, thus making a good faith claim of title to the minerals. The proposal will not require notice to vertical offset operators, or impose a vertical spacing requirement within the field. Under the proposal the Commission will consider this a Spraberry (Trend Area) Field completion; that is, there will only be one field. The separate 'Deep Rights' Field ID No. will allow Commission staff to verify acreage assignment requirements for shallow rights operators independently of deep rights operators.

The Spraberry (Trend Area) Field rules will apply equally to shallow, deep and full rights cases. That is, a shallow rights operator may have an 80 acre well with a field rule maximum 515 BOPD MER allowable, and a deep rights operator for that same 80 acres may also have an allowable of 515 BOPD. Similarly, the various Final Orders that authorized blanket exceptions to Statewide Rule 10 for the Spraberry (Trend Area) Field and deeper formations will apply equally to both shallow and deep rights field ID Nos. All future amendments to the Spraberry (Trend Area) Field will apply separately and equally to the shallow and deep rights operators of the field in Districts 7C and 8.

The proposed remedy is made by way of field rule amendments because of the unique situation of the Spraberry (Trend Area) Field—specifically, the history of the field (unitization, marginal productivity of many zones, consolidation, and downhole commingling), the large correlative interval, and that the depths of ownership severance are inconsistent across the field. Pioneer believes this remedy offers the best relief for the situation, a field rule amendment is within the intended purpose and authority of field rules, and is preferable to other potential remedies (e.g., field deconsolidation or exploring rulemaking options for Statewide Rule 40).

Pioneer and others who have responded in support of the application believe this remedy will suffice in the vast majority of situations where development is constrained by horizontal severances within the Spraberry (Trend Area) Field. It was acknowledged at hearing that there will likely be 'one off' instances in which additional relief might be sought. Pioneer believes these situations are best addressed through individual hearings.

EXAMINERS' OPINION

The examiners' opinion is organized to explore first the background issues pertinent to our analysis. These include exploration of primary regulatory interests to answer the question not addressed by the applicant at the hearing: Why are we concerned about acreage and prohibiting its duplicate assignment? Then, we will examine the cause of—and factors contributing to—the presenting issue. Finally, we will examine issues pertaining to

the relief itself-both the specific remedy sought and potential alternatives.

I. Primary Regulatory Interests

The Railroad Commission shall "make and enforce rules and orders for the conservation of oil and gas and prevention of waste of oil and gas" (Tex. Nat. Res. Code, § 85.201). Further, "the Commission shall do all things necessary for the conservation of oil and gas and prevention of waste of oil and gas and may adopt other rules and orders as may be necessary for those purposes" (Tex. Nat. Res. Code, § 85.202). Conserving oil and gas, and preventing waste of oil and gas, are the primary regulatory interests of the Commission applicable to this matter.

In <u>Browning Oil Co. v. Luecke¹</u>, The Third Court helped articulate relevant oil and gas law background, which is helpful in prefacing matters of this case, also. Relevant content is and paraphrased below:

- Mineral owners may develop their resources based on the rule of capture. That is, for oil and gas, which migrate without regard to property lines, the rule provides that a landowner owns all the oil and gas produced by a well drilled on his or her land, even though the well may be draining minerals from nearby properties.
- The only recourse available to offset property owners is to drill wells to capture as much oil and gas as possible before it is drained by another.
- The natural consequence of the rule of capture is over-drilling resulting in physical waste (production practices that reduce the total ultimate recovery of oil and gas from any pool) and economic waste (drilling of unnecessary wells and production in excess of reasonable market demand.)
- By regulating well location and production, the State and the Commission have diminished the role of the rule of capture, thus promoting conservation, preventing waste, and protecting correlative rights.
- Correlative rights afford each landowner the reasonable opportunity to produce his or her fair share of the recoverable oil and gas beneath his land.

¹Browning Oil Co., Inc. v. Luecke, 38 S.W.3d 632 (Tex. App. - Austin, 2000, pet. denied)

- Correlative rights are qualified; however, in exercising their right to a fair share, landowners must submit to limitations that provide each owner the opportunity to recover his or her fair share. That is, a mineral owner has a duty to refrain from exercising his or her privilege of taking so as to prevent injury to the common source of supply.
- These limitations take the form of Statewide Rules (in particular, for well spacing and well density), production allowables, and field rules.
- Well spacing rules prescribe minimum distances between wells and between wells and property or lease lines, for the purpose of limiting the number of wells and locating the wells in particular positions to maximize recovery of a field.
- Well density rules establish the surface area (in acres) wells in a field can efficiently drain; the density (in acres) is assigned to an individual well as its proration unit.
- Production allowables are the maximum amount of oil or gas that a well may recover (in barrels of oil or thousand cubic feet of gas); allowables are designed to limit production from a well in order to control the rate of production from the field. Allowables depend, in part, on the acreage assigned to a well as its proration unit size.
- Field rules are special rules that modify the Commission's Statewide Rules for well spacing, density, prorationing and casing requirements to deal with unique reservoir conditions of an individual field.

Finally, the court provides a treatment of horizontal wells at issue in that case. The examiners point out that in <u>Browning v. Luecke</u>, the horizontal wells in question were productive because they penetrated naturally occurring hydrocarbon bearing fractures in the Giddings (Austin Chalk) Field. The examiners believe, for the most part, the applicant in this case is intending to develop the Spraberry (Trend Area) Field with horizontal wells in tight formations that are stimulated to create artificial fractures through which hydrocarbons may be produced. That is, they are functionally different types of reservoirs or fields.

The issue of confiscation is related to the concept of correlative rights. When a mineral owner is denied his or her correlative rights to a resource, regulatory confiscation

may occur. However, the concept of correlative rights itself is self-limited, bearing the restraint that mineral owners have a duty not to exercise their privileges of taking so as to injure the common source of supply. Inherent within the question of confiscation are issues of correlative rights and injury to others. The Statewide Rules presuppose some regulation is necessary to balance resource recovery and injury prevention.

A brief treatment of the regulatory concept of 'field' is now explored as a complement to the background summary by the court paraphrased above. A field is a three-dimensional regulatory construct in the subsurface within which hydrocarbons exist and may be producible. The term 'field' may be synonymous with 'reservoir', 'pool' or 'common pool'. Fields are defined in different ways, sometimes arbitrarily, sometimes precisely. A field may be defined in terms of particular geological formations. A field definition may include a correlative depth interval describing the thickness of the field. Sometimes the areal boundaries of a field are defined by political divisions such as county lines or Commission district boundaries. A field may contain one hydrocarbon-bearing interval or many. Regardless, one set of field rules applies to the whole field.²

Ideally, each hydrocarbon-bearing point in the subsurface belongs to one field. In practice, however, it has not been so neat. Fields have 'grown' together through continued development, so that there are many instances in which multiple wells completed in different fields (but the same geologic stratum) are interspersed in a given area. Sometimes, the Commission consolidates such fields at the request of operators. Additionally, new technology enables 'discovery' of previously unproductive intervals. This has been the story of the Spraberry (Trend Area) Field.

Nonetheless, the general premise of the foundation and operation of the Commission's regulatory scheme (as it exists) is that hydrocarbons are mobile within a field, and a field has a finite amount of energy available to drive production. The primary regulatory interests (conservation, prevention of waste) thus have a concern with hydrocarbon mobility and reservoir energy. The density, spacing, and proration rules work with these concerns in at least two ways. First, one intent of these rules is to prevent confiscation and promote correlative rights by putting all operators in a field on an proportionally equal footing for production opportunity by mitigating the potentially negative effects to offset operators of one's right of capture. Wells cannot be too close to another's

²Tex. Nat. Res. Code, § 86.095, states: "The Commission shall zone a common reservoir if, on consideration of the evidence introduced at a hearing, it finds that either the prevention of waste or adjustment of correlative rights and opportunities, or both... may be accomplished more adequately by zoning the common reservoir." There is not a comparable provision in the Code for oil reservoirs.

property, nor can they be too densely packed to disproportionally draw down or otherwise influence intra-reservoir flow to the advantage of one operator over a neighbor. Second, these rules work to conserve oil and gas by regulating—and, ideally, conserving—reservoir energy for efficient production so that minimal resources are left ultimately unrecoverable, and thus physically wasted. In this way, acreage is used by the Commission to efficiently allocate allowable oil and/or gas production to a well, providing all operators the opportunity to recover their fair share of the minerals.

The State's regulatory framework was built around the historical model of a typical vertical well (c. 1930). In this model the reservoir energy drives hydrocarbons through the permeable formation matrix towards and into the well. Such reservoirs are referred to as water-drive, gas-drive, etc., based on the reservoir drive mechanism (i.e., the force that pushes the well to production).

However, this is not necessarily the case with many shale, 'tight', or 'unconventional' resource plays such as what is forecast by Pioneer for the future of the Spraberry (Trend Area) Field. In this current context, such 'tight' formation hydrocarbons are not produced by the drilling of a well, but by the fracture stimulation that unlocks driving energy from pore spaces and creates permeability where it did not exist before. Without fracture stimulation, there is little or no production; drainage occurs only to the extent of artificial fracturing (often referred to as the fracture half-length, a radial distance from a fracture treatment, which is a parameter relevant to well spacing and density). That is, a well does not draw down such reservoirs or create a 'cone of depression' beyond the radius of artificially stimulated fracture treatments; each well is an island. This is a fundamentally different reservoir mechanism than that for which the Commission's regulatory scheme was designed.

The Commission has always determined the permissible density for tracts based on geologic and engineering evidence regarding the volume of recoverable hydrocarbons in the reservoir and its drainage characteristics. Now, with unconventional reservoirs where drainage area and recovery depend much more on the size, number and effectiveness of fracture stimulation treatments than on surface acreage or a theoretical calculation of what an unstimulated vertical well will produce, clearly the method for determining appropriate density needs to be reconsidered.

These fundamental differences have produced—and will surely continue to produce—challenges to the Commission's regulatory scheme as it endeavors to keep pace with technological advancement and resource development.

What, then, is the State's regulatory interest in assigned acreage, and why is the duplicate assignment of acreage prohibited? Pioneer did not address these questions in the hearing. Statewide Rule 40(d) prevents the specific surface area acreage assigned to one well from also being assigned to another well in the same field. Further, Statewide Rule 40(d) does not provide the Commission with any guidance on the issue of how and when it is appropriate to make an exception. To do so without due consideration to primary interests would fundamentally undermine the State's long-standing regulatory framework built around spacing, density, production allowables, and fields.

This regulatory interest—that assigned acreage matters and is intrinsic to the construction and functioning of the Commission's regulatory system for the promotion of conservation and prevention of waste—is the superior concern. An application for exception to Statewide Rule 40(d) should include evidence for why the exception is consistent with the Commission's regulatory interests. Pioneer failed to provide this evidence.

Traditionally, mineral owners and operators depend on the Commission to accurately determine the most efficient spacing and density based on science and to revise those rules as additional information becomes available. Mineral owners and operators have tied their contract obligations to the Commission rules in such areas as continuous development clauses and restrictions on leased acreage held by a single well (both typically tied to what is authorized or required by Commission rules). The applicants in this case are demanding the very opposite—that the Commission change its rules to accommodate their contracts rather than revise the rules to better match the fair share of hydrocarbons in unconventional reservoirs.

II. Pioneer's Case

Pioneer's case focused on two issues: (1) the history, productivity and productive potential of the Spraberry (Trend Area) Field, and (2) the common occurrence of horizontally severed mineral ownership in the field as an impediment to resource development. Pioneer's argument was simple and straightforward. In situations where horizontally severed mineral ownership exists, each mineral owner should be allowed to assign acreage to its own wells in the field to enable full field development. This would result in double assignment of acreage in undefined shallow and deep rights intervals—and only allow half as many wells on leases that are not contractually depth-severed. An administrative process was proposed to enable this outcome.

The examiners take note of a point of difference with the applicant, Pioneer: This is not a 'waste' case. Pioneer is asking the Commission to exercise its responsibility and

authority to prevent waste, but natural resources are not being wasted as the term is defined in Texas Natural Resources Code, Title 3, Chapter 85, Sec. 85.046(a). The operation of Statewide Rule 40(d) in this context is not resulting in hydrocarbon resources being lost or wasted physically (by reducing ultimate recovery) or economically (by drilling unnecessary wells in excess of market demand)(*Browning Oil Co., Inc. v. Luecke*, 38 S.W.3d at 633). Resource development may be delayed by the situation, but the resources are not going anywhere and will not be unrecoverable in the future, at least to the degree that the matter concerns 'tight' formations, which appears to be the dominant case. Further, Pioneer and other operators have the liberty to pursue joint operating agreements or renegotiated leases with other operators and mineral owners for private development of the field as it is currently defined. Acreage configuration would have to be agreed upon by the various interest owners. Of course, there is no guarantee that an accommodation may be reached, nor is it the Commission's place to ensure such an outcome.

Pioneer's argument that this is a 'confiscation' or a 'correlative rights' case is reasonable, and one to which the examiners are sympathetic, although the acute cause of the confiscation, as will be seen, is more directly associated with the operation of fairly routine lease terms than with Commission rules. An operator may lose a lease without the ability to legally develop the resource, but the resource itself will not be lost; someone else may obtain the right to ownership, although the ability to then develop it would be dependent upon available acreage. However, the Statewide Rules are only designed to provide equal opportunity—one's correlative rights are not infringed when it is one's own contract that prevents development rather than the Commission.

III. Primary Cause: Routine Operation of Common Lease Clauses

The Commission is interested in the orderly development of hydrocarbon resources in the State, and the examiners understand that the current situation impedes that desire. But the examiners conclude and Pioneer's evidence shows—that the horizontal severances are caused by the action of private contracts, transfers and agreements that are outside of Commission jurisdiction; horizontally severed rights are not caused by Commission action.

These contracts specify the depth point of a severance in different ways, typically based on some depth relative to a formation contact (e.g., "250 feet below the top of the Dean Formation,") or a depth below ground surface (e.g., "below a depth of 9,800 ft."). The depth point of a severance may be, but often is not, coincident with a formation contact within the field. Particularly troublesome to Pioneer and other operators is that the depth of severance is inconsistent across the field, as it was typically created on a lease-by-lease basis through agreements with individual, multiple, corporate, and

institutional mineral interests. Again, by the action of private contracts, not Commission action.

In the hearing Pioneer did not explore the possibility of resolving this issue privately as a matter between various interest owners. Pioneer did provide evidence indicating that the problem was widespread and significant, especially in areas of the field that have been unitized for secondary recovery projects. Operators often freely pursue joint operating agreements; can these tools be employed to mitigate severance situations? Certainly. Apart from the obvious magnitude of the number of horizontally severed ownership in the Spraberry (Trend Area) Field, it would seem that Pioneer's projected estimates of recoverable resources in the field would provide sufficient incentive and motivation for the parties to reach an accommodation outside of Commission involvement.

Pioneer provided three exhibits (a term assignment and two leases) to exemplify various horizontal severance situations it has encountered in the Spraberry (Trend Area) Field (Exhibits 30, 31 and 32). Each case illustrated the inconsistent assignment of the point of demarcation for depth severance in the field. But, more importantly, each case also illustrated that, at the time Pioneer entered into the agreements, a significant proportion of developable acreage was already held by other operators in other vertical zones within the same field. That is, when Pioneer became owner of these hydrocarbon assets, its ability to develop the assets were already limited by existing development in the field. Surely Pioneer performed-or should have performed-the due diligence required to understand the remaining legal development value of the leases prior to making an offer or bid on the leases. Was adequate due diligence performed prior to ownership? Or was this a land-rush situation to secure acreage and mineral rights, anticipating that a favorable resolution would be obtained down the road? Regardless, the Commission has no regulatory responsibility, obligation, duty or interest to provide general relief at all, or specific relief through the proposed field rule amendments-or any means that directly contradicts numerous other aspects of the Commission's regulatory system.

IV. Contributing Factor: Field History, Definition and Rules

The Spraberry (Trend Area) Field now includes all reservoirs from the Clear Fork Formation (top) marker to the top of the Strawn Formation (including the Clear Fork, Spraberry, Dean and Wolfcamp), with a correlative interval of 3,740 feet. There are sound reasons in the field's history for why it is defined in this manner. The field interval has been expanded over time, on the application of operators in the field, because most of the formations were thought to be (or historically were shown to be) marginally productive. Consolidating multiple geologic strata into one large formation and granting numerous

blanket Statewide Rule 10 exceptions for shallower and deeper fields, enabled otherwise marginally productive zones to be developed economically. Yet, the field definition is also somewhat arbitrary. It could easily be re-defined (or de-consolidated) into two or four (or more) fields based on the geologic formation descriptions. Indeed, the extensive unitization of the Spraberry formation—as well as Pioneer's acknowledgment that certain zones are best developed with vertical technology and others with horizontal technology—speaks to a degree of independence of the reserves contained therein. There is no dispute that the field contains multiple producing zones, some with significantly different reservoir sizes and characteristics.

Additionally, the field definition changed over time at the request and application of operators to consolidate various fields and formations into one large Spraberry (Trend Area) Field (see Pioneer's late-filed exhibit no. 41, an anthology of Commission Orders and supporting documents describing the history of the field). This made sense given the best available information at the time that the field resources could be efficiently developed within the reasonable constraints of regulatory interests.

The examiners note that the various field rules changes, field consolidations and blanket Statewide Rule 10 exceptions granted by Commission Final Order, have all come about at the request of operators in the field—in many instances Pioneer and its predecessor firm, Parker and Parsley. The common motivation for these actions has been the operator's justification that field consolidation, interval expansion or commingling authority were beneficial to produce marginal zones alongside more productive zones. This arc of field history is not unreasonable.

But now, afforded the benefits of contemporary technology yielding access to tremendous resource potential, the field looks dramatically different from a reservoir point of view. It is the reservoir point of view that matters to the Commission's regulatory interests (not the perspective of mineral ownership). Contemporary technology brings into question all of the underlying assumptions of what the field is and should be. Pioneer's approach—effectively, a field-wide patch-work of exceptions to Statewide Rule 40(d) based on mineral ownership status—does not take into consideration the primary regulatory interests regarding conservation and waste, nor any of the specific and multiple reservoir conditions and characteristics of the field.

Indeed, Pioneer's remedy as an amendment to the field rules is improper. The 3rd Court of Appeals defines field rules as "special rules that modify the Railroad Commission's well spacing, density, prorationing, and casing requirements <u>for designated</u> fields to deal with differences in reservoir conditions" (*Browning Oil Co., Inc. v. Luecke*, 38

S.W.3d at 633. Emphasis added). There are cases in which field rules contain provisions applicable to only certain wells in a field (e.g., provisions for take points on horizontal wells) and to certain types of wells (e.g., provisions specific to gas or oil wells). However, these provisions are based on technical considerations not mineral ownership criteria.

Any attempt to inject mineral ownership status into a field rule must, therefore, be denied. Such a consideration may be attempted on a Statewide Rule level, which may be appropriate as mineral ownership is an issue that must be held as generally applicable to all fields in the State. The Texas Supreme Court has held that "a presumption favors adopting rules of general applicability through the formal rulemaking procedures" as provided for in the Texas Administrative Procedures Act. Rodriguez v. Service Lloyds Insurance Company, 997 S.W.2d 248, 255 (Tex. 1999). A rule introducing a benefit or privilege of mineral ownership must be generally applicable throughout the State.

IV. Acreage Accommodation

But, the Commission has acted, in fact and indirectly, to limit the application of Statewide Rule 40(d) through various means involving statewide and field rules on numerous occasions when the matter was technical in nature. This is particularly true for multi-lateral and stacked lateral wells.

Statewide Rule 86 governs the drilling and completion of horizontal wells and allows for multiple laterals to be completed in a field. In these situations, one well may have two laterals, one overlying the other and separated by some vertical distance. These laterals share the same 'footprint' on a surface map, and so they share the same proration acreage, too, as if the well only had one lateral. Some wells in various Austin Chalk Fields support a dozen or more laterals, but in each of these cases the well has one surface location and one vertical well section from which all of the laterals depart.

Technical constraints prohibit such complex multi-laterals from a single surface location in formations such as the Wolfcamp. Industry developed the 'Stacked Lateral Well' concept, which the Commission approved in the Newark, East (Barnett Shale) Field in 2005. The boreholes of a stacked lateral well each have their own surface location; mechanically they are independent wells. But the producing laterals, again, overlie one another separated by some vertical distance thus sharing the same footprint on a surface map. Effectively, stacked laterals provide a means to bypass Statewide Rule 40(d)'s prohibition of the double assignment of acreage, as well as density provisions of Statewide Rule 38 or field rules. The technical rationale for stacked lateral wells is that a thick productive interval whose reservoir potential is best developed by horizontal wells requires

multiple laterals for full development. Thus stacked lateral well provisions are now common in field rules for fields with thick correlative intervals of reservoir material best developed by horizontal wells, including the Spraberry (Trend Area) Field (incorporated at Pioneers request in April 2012, Docket No. 7C-0274561).

In the absence of horizontally severed ownership, stacked lateral wells enable the opportunity for the full development of the field as its potential is currently understood. Pioneer acknowledges this. Stated differently, stacked lateral wells provided an opportunity for the full development of the field, but operators are left to make the choices in their own best interests as to whether their minerals are best produced by vertical or horizontal wells, in cooperative agreement with other operators or alone, and subject to acreage limitations of existing rules. Stacked lateral wells may not be optimal for all zones within the Spraberry (Trend Area) Field. Certain zones may be more efficiently produced through vertical wells. Even when one operator holds full field rights, the ability to develop the full field is limited based on the acreage assignment for, say, a shallow zone subject to unitization.

The Commission has fulfilled its obligation to provided the opportunity for a fair and equitable means for full field development. Further, stacked lateral wells enable full development by an implicit exception to Statewide Rule 40(d). One operator with full (non-severed) rights can fully develop the 3,740-foot correlative interval with stacked lateral wells. Two operators sharing surface acreage but with severed rights cannot fully develop their respective and independent intervals on their own; they must cooperate for mutual gain, or compete for acreage.

V. Proposed Remedy

Statewide Rule 40(d) prohibits the duplicate assignment of acreage among wells completed "in the same reservoir." Field Rule 1 for the Spraberry (Trend Area) Field states the 3,740-foot correlative interval "shall be designated as a single reservoir for proration purposes. This interval is intended to include all reservoirs between the top of the Clear Fork and the top of the Strawn formations." Rule 40(d) acts to prevent the double assignment of acreage regardless of the mineral ownership status in a field. An operator who owns full field rights may not double assign acreage; neither may two operators with divided rights. Rule 40(d) applies to all fields in the State. Many field rules, including those for the Spraberry (Trend Area) Field, also contain the statement "No double assignment of acreage will be accepted." A similar statement is contained in Commission Final Orders granting blanket authority for downhole commingling as exceptions to Statewide Rule 10 (Docket Nos. 7C-0266343, 7C-0272342 and 7C-0274132). These rules apply equally to

all, regardless of mineral ownership status. Clearly the Commission has long held the prohibition against double assignment of acreage in a field for the purposes of preventing confiscation and protecting correlative rights. The applicant has provided no field-specific technological or geological information to justify turning away from this requirement.

The proposed remedy provides an 'administrative' solution to the matter by allowing acreage to be double assigned as long as the assignment is split between deep and shallow rights. By providing a second field number for deep rights, Commission staff is able to evaluate acreage assignment on a tract for deep rights operators independently of those for shallow rights operators, and vice versa. The proposed remedy is 'administrative' in that it provides an exception to Statewide Rule 40(d) within the Commission's regulatory system (i.e., the acreage is double assigned, but the Commission allows this to not be an impediment to administrative compliance). This 'administrative' solution presupposes that there is no 'physical' harm associated with the exception (with regard to the regulatory interests the Rule seeks to protect) and no 'collateral' effects on the functioning of the Commission's regulatory system as a whole.

The proposal will codify within the field rules a distinction of 'rights' within the field, whether they are 'shallow' or 'deep,' and will provide an exception to Statewide Rule 40(d) when a division exists. As acreage is a part of the allowable allocation formula for the field, this will provide for a production advantage when the mineral rights are divided. Consider the following scenario:

- An operator with rights to produce from the entire 3,740 foot correlative interval drills a well on standard 80-acre spacing and is assigned the current top allowable of 515 BOPD.
- An operator with rights to produce from the Clear Fork and Spraberry Formations in the field drills a well on standard 80-acre spacing and is assigned the current top allowable of 515 BOPD.
- An operator with rights to produce from the Dean and Wolfcamp Formations in the field drills a well on standard 80-acre spacing and is assigned the current top allowable of 515 BOPD.
- This creates a situation where the full-rights operator is penalized relative to the divided rights operators; or, the divided rights operators are granted additional total allowable (1,030 BOPD) expressly because their ownership is so divided.

• This also creates a situation in which allowable production for the Spraberry (Trend Area) Field is favored over other fields in the State, as allowables may be doubled simply based on the ownership division.

Thus the proposal creates two classes of mineral owners: (1) those with full rights, and (2) those with severed rights. Additionally, there is every reason to believe that there will be instances in which there are more than two mineral owners in the field. For example, one person may own the rights in the Clear Fork Formation, another person owns the minerals in the unitized Spraberry Formation, and a third owner holds the rights to the deeper Wolfcamp intervals. This scenario was mentioned in the hearing as an actuality. The proposal does not provide guidance to the Commission on how to adjudicate such situations; the proposal only offers the precedent that mineral ownership trumps other aspects of a longstanding regulatory system.

When horizontally severed mineral rights occur within a regulatory field, the plane of demarcation dividing ownership constitutes a lease line subject to the spacing provisions of Statewide Rule 37. Current field rules for the Spraberry (Trend Area) Field specify a minimum spacing of 467 feet between a well and a lease line. Exceptions to Rule 37 would be available by established process, and operators could also seek waivers from offset operators.

The specific question for Rule 37 application is, "How close to a horizontal plane of ownership division can two operators drill a horizontal well (one above the plane, one below)?" Should there be a prudent distance requirement? Should the offset operator be notified of one's intent to drill? The examiners foresee situations where the vertical distance between horizontal drainholes will inspire charges of confiscation from vertically offset operators.

Well spacing, density and allowable provisions are routinely established in field rules, as they currently exist for the Spraberry (Trend Area) Field. However, the examiners know of no instance of a field rule being established based on mineral ownership rights. Field rule hearings typically include the presentation of evidence of specific and observed reservoir characteristics justifying proposed well spacing, density or production allowables. Pioneer's proposed amendment is not based on differences in reservoir conditions; it is based on legal ownership status, which is outside of Commission jurisdiction.

While the proposed relief, in this instance, would operate through field rules and apply to only to the Spraberry (Trend Area) Field, the examiners—and surely many who

follow Commission activity—recognize that, if approved, the Commission will likely be asked to apply the exception to other fields throughout the State, possibly in any situation with horizontally severed mineral ownership. As the proposal is based on mineral ownership status and not reservoir conditions, the matter would easily propagate to other fields via field rule amendments. In addition, operators could "create" the right to additional wells by simply creating the depth severences after the field rules go into effect by assignment to subsidiaries or operating partners. This precedent invites the Commission to be an arbiter of mineral rights, contrary to State law. It may also effectively create two classes of fields: (1) those in which divided rights are given production allowable incentives, and (2) those fields in which undivided rights limited to unitary field allowables. Such a situation would be in violation of Tex. Nat. Res. Code Section 85.054, which prevents unreasonable discrimination in favor of one pool against another.

Pioneer does not intend or desire to create a new field through the proposed field rule amendments. Indeed, the proposed remedy tries to avoid the appearance of creating a new field; except that it very much appears to do so, and effectively does so: the same rules will apply to a new field ID No. with a slightly different field name. Effectively operators will have the option, when a division of mineral ownership exists or when they create one in the future, to place wells in the 'deep' field by selecting the appropriate field ID no. when the well is permitted. The boundary between the two fields will 'float' based on claimed ownership status, not reservoir conditions.

VI. Alternative Remedies

The examiners see three parallel historical trajectories that have worked to form the present situation:

- 1. The normal and routine operation of lease clauses, which are private contracts outside of Commission jurisdiction, have horizontally divided ownership interests in the Spraberry (Trend Area) Field;
- The evolving development and definition of the Spraberry (Trend Area) Field, at the request of operators, has included field expansion and consolidation to improve recovery of multiple marginal reservoirs and reservoir types within the field; and
- 3. Advancements in technology have improved the identification, access and recovery of hydrocarbon resources in the field.

These three trajectories are constrained by one constant, causing friction within the regulatory system: an outdated regulatory scheme based on vertical wells draining conventional reservoirs. While this paradigm still exists and is still valid in many situations, current development attention is focusing on the new paradigm: tight formations, horizontal wells and fracture stimulation.

Pioneer is asking the Commission to consider the divided mineral ownership status below a tract when making allowances for the assignment of acreage to a well. For reasons described above, the examiners believe that the Commission should not take on such a role adjudicating relief of matters caused by private contracts and commingling them with field rules that should only be concerned with reservoir conditions. What is more, the various mineral owners are at complete liberty to attempt to renegotiate their agreements or to form joint operating agreements to develop the field, given the economic incentives contained therein.

Apart from mineral owners working out the issue on a well-by-well or lease-by-lease basis in the private sphere, then, there are three possible avenues for action by the Commission in the public sphere:

- 1. Do nothing, requiring field operators and technological innovators to negotiate and reach agreements with vertically adjacent mineral owners and conform to existing regulatory realities;
- 2. Ambitiously undertake the reconfiguration of the regulatory framework, wholly reconsidering the current proration system—including surface acreage and allowables—and its relationship to the primary regulatory interests of the Commission; or
- 3. Redefine the Spraberry (Trend Area) Field within the current regulatory framework, based appropriately on reservoir conditions.

That is, this problem developed step-wise over time. We get out of it by either reconfiguring the regulatory framework, or by stepping backwards within the existing framework, redefining the field as a regulatory entity within the bounds of rule, tradition and practice.

The question is now asked: Is the Spraberry (Trend Area) Field best explored, understood, developed, produced and protected as one field comprised of multiple and diverse productive intervals, or have means and technology advanced such that it can be

better explored, understood, developed, produced and protected as multiple fields? The examiners believe the latter is the case and is more consistent with (1) geology, (2) reservoir characteristics, (3) contemporary technology, (4) regulatory interests, and (5) the separation and independence of private contract operations and public regulatory concerns.

Such a de-consolidation is a reasonable option and provides certain benefits, most notably it is a 'clean' fit within the existing regulatory structure and framework of Statewide and field rules. Dividing the field into four fields corresponding to the four geologic formations, for example, would effectively solve a significant part of the development currently constrained by divided mineral interest and the operation of Statewide Rule 40(d).

Pioneer objects to the idea of deconsolidation (or any remedy by which the Spraberry [Trend Area] Field is broken down into component fields based on stratigraphy, reservoir characteristics or depth). Pioneer objects because this does not solve the issue of depth severances in circumstances where the contractual depth severance is in the middle of a geologic formation. For example, creating two fields by deconsolidating the Wolfcamp from the rest of the field would free up additional acreage, but some of the depth severances would survive; they would just exist in the new field. A depth severance defined by, say, "250 feet below the base of the Dean Formation" would imply that the upper 250 feet of the new Wolfcamp field would belong to the shallow rights owner and the lower Wolfcamp below this point would belong to the deep rights owner.

The examiners agree such a scenario is a possibility. But, the Commission's responsibility cannot be to resolve every instance of horizontal severance in the State, let alone any instance. Further, Pioneer's proposed solution would create additional problems. In those cases where the contractual depth severance falls in the middle of a reservoir, the Pioneer proposal would authorize the issuance of permits to both the upper and lower operator in close proximity in the same reservoir. Under the proposal, upper and lower lessees would be entitled to permits to drill competing horizontal wells a few feet apart (but on opposite sides of the contractual depth-severance line) in the same reservoir. This would violate the Commission's statutory mandates and long-standing precedent by authorizing the drilling of unnecessary wells and potentially causing waste and violations of correlative rights due to interference between the two adjacent, fracture-stimulated horizontal wells within the same reservoir.

There are, however, reasonable actions that can be taken within the existing regulatory framework to ameliorate the adverse impacts of the situation. For example, there may be other optimal configurations for deconsolidation:

- Pioneer provided exhibits showing four continuous intervals that are targets for current exploration: The Wolfcamp A, B, and D, and the Jo Mill. Pioneer's exhibits indicate these horizons are continuous, mapable, and interpretable across the Spraberry (Trend Area) Field area (exhibits 9, 10 and 11). Deconsolidating the Wolfcamp into three (or more) horizons would reduce the negative impact on operators of the scenario described above when field rights are divided at, say, 250 feet below the base of the Dean Formation. This might allow the shallow operator to develop the Wolfcamp A, and the deeper rights operator to develop the Wolfcamp B and D.
- Pioneer indicated in testimony that it was currently exploring six target zones in the field, and it expected to discover more. Each target zone could be a field, increasing the available acreage with each new field.
- Any deconsolidation could be accompanied by an exception to Statewide Rule 10 allowing for the surviving fields to be downhole commingled.
- We could take the notion of deconsolidation to its irrational and absurd extreme: Deconsolidating the Spraberry (Trend Area) Field into 3,740 individual fields, each 1-foot thick, and providing for Statewide Rule 10 exceptions for the entire interval would also resolve the issue and leave no residual horizontal severances impacting full field development.

The examiners also acknowledge one other benefit and one drawback to deconsolidation. Deconsolidation would allow the Commission to track drilling permit and production activity at more discrete intervals (e.g., the Wolfcamp Formation), which cannot currently be done in this field. This would allow the Commission—and other parties that depend on data maintained by the Commission—to better understand and plan for the development of the reservoirs and resources in the field(s). The examiners also recognize that de-consolidating the Spraberry (Trend Area) Field into several regulatory fields would require a substantial administrative effort by operators and Commission staff to reassign the 18,437 existing wells to the appropriate surviving field. Providing for Statewide Rule 10 exceptions for the surviving fields is appropriate, makes complete technical sense and may mitigate some of this effort.

EXAMINERS' RECOMMENDATION

By its application, Pioneer seeks to make the Spraberry (Trend Area) Field the only field in the State where the number of wells for a given tract is determined not by the

number of productive acres in the tract and the producing characteristics of the field but by whether the lessor and lessees have decided to contractually depth-sever the minerals. Under the proposal, the vertical permitting boundary on each lease in the field would be determined by the contractual agreements of the lessor and lessees and that vertical boundary could be different for each lease in the field. Based on the findings of fact and conclusions of law set out below, the examiners recommend that the Commission not adopt the proposed field rule amendments for the Spraberry (Trend Area) Field requested by Pioneer Natural Res. USA, Inc.

Instead, understanding that this matter is of great importance to many people and interests in the State of Texas-indeed, it is important to the State of Texas-and calls for fair resolution, after due consideration of all of the evidence provided, the examiners recommend the following resolution:

- The Spraberry (Trend Area) Field will be deconsolidated into four surviving fields: the Trend Area (Clear Fork) Field, the Spraberry (Trend Area) Field, the Trend Area (Dean) Field, and the Trend Area (Wolfcamp) Field. This is reasonable considering all four intervals are productive, the Spraberry Formation is extensively unitized, and the Wolfcamp contains tremendous reserve potential.
- The existing field rules for the Spraberry (Trend Area) Field (as amended on April 12, 2013, Docket No. 7C-0274561) will be adopted for each of the surviving four fields.
- The correlative intervals for these four fields will be correspond to the upper and lower geologic contacts of the Clear Fork, Spraberry, Dean and Wolfcamp Formations, as shown on the log of the Pioneer Natural Res. USA, Inc. Houpt Lease, Well No. 1 (API No. 42-329-31029), Section 24, Block 39, T-2-S, T&P RR Co. Survey, Midland County, Texas.
- Blanket exceptions to Statewide Rule 10 will be authorized for these four fields, and existing blanket exceptions for the Spraberry (Trend Area) Field will be applicable to the other surviving fields, also.
- Available acreage in the field will increase three-fold, some of which is already held by production in the various fields.

The examiners believe this resolution fits within the existing regulatory framework

and will create considerable acreage for continued development of the field(s); it will go a long way towards resolving many of the limitations created by horizontal severances. The examiners' recommend adoption of the attached proposed Final Order.

FINDINGS OF FACT

The examiners recommend adoption of the following proposed Findings of Fact:

- 1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of hearing.
- 2. The matter is not protested.
- 3. The Spraberry (Trend Area) Field was discovered in the 1940s and now extends over nearly 4 million acres in Districts 7C and 8.
- 4. Field rules for the Spraberry (Trend Area) Field were originally adopted in Final Order No. 7C & 8-25,174 on December 22, 1952, and have been amended many times.
- 5. The Commission adopted the current Spraberry (Trend Area) Field rules on June 12, 2012, by Final Order No. 7C-0274561, on the application of Pioneer.
- 6. The Spraberry (Trend Area) Field has a current 3,740-foot correlative interval and, due to consolidation at the requests of operators in the field, includes the Clear Fork, Spraberry, Dean and Wolfcamp Formations.
- 7. Daily production for April 2013 was 292,062 BOPD and 867,398 MCFGPD from 18,437 oil and gas wells.
- 8. The cumulative production through April 2013 was more than 1.2 billion BO and 3.4 trillion CFG.
- 9. The majority of wells completed in the Spraberry (Trend Area) Field produced on initial potential testing less than 10 BOPD due to low porosity, permeability, and other factors.
- 10. Spraberry (Trend Area) Field history indicates development has been refocused at different times since the 1940s, such as:

- a. Initial development in the 1940s and 1950s focused on the Spraberry Formation.
- b. In the 1960s and 1970s operators unitized large portions of the Spraberry (Trend Area) Field (typically in the Spraberry Formation) for secondary recovery.
- c. The field grew in areal extent and vertical depth by development and consolidation, on the application of operators, of other Clear Fork, Spraberry, Dean and Wolfcamp fields.
- d. In the 1980s and 1990s the development focus shifted to in-fill drilling on reduced unit areas.
- e. Exceptions to Statewide Rule 10 expanded production by readily enabling the commingling of hydrocarbons from the Spraberry (Trend Area) Field and deeper formations.
- f. Drilling permit applications for horizontal wells in the Wolfcamp Formation have surged since 2010, when fewer than 10 were requested, and the first seven months of 2013 when nearly such 250 applications were filed.
- 11. Average initial potential production from 20 horizontal wells completed in the Wolfcamp Formation was 760 BOPD and 950 BOEPD, with oil production ranging from 399 to 1,195 BOPD.
- 12. Pioneer has identified six target zones for horizontal development in the Spraberry (Trend Area) Field.
- 13. Pioneer estimates that four of the six target zones (Wolfcamp A, B, D and Jo Mill) contain recoverable reserves of 50 billion BOE.
- 14. There are many instances in the Spraberry (Trend Area) Field in which the mineral rights have been horizontally severed, so that one operator holds the shallow rights in the field and below some point of demarcation another operator holds the deep rights in the same field.
- 15. The instances of horizontally severed mineral ownership are the result of the

- operation of lease contracts and other private transactions outside of the jurisdiction of the Railroad Commission.
- 16. Unitization of large tracts of land by operators conducting secondary recovery projects, typically in the Spraberry Formation, often resulted in horizontally severed mineral ownership for the deeper intervals.
- 17. This case is a matter regarding confiscation and correlative rights, not waste.
- 18. Well spacing, well density (acreage) and fields are integral to the Commission's regulatory responsibilities.
- 19. The instances of horizontally severed mineral ownership are not the result of action or inaction by the Railroad Commission.
- 20. Statewide Rule 40(d) prohibits unit acreage from being assigned to more than one well in a field.
- 21. Current Spraberry (Trend Area) Field rules prohibit unit acreage from being assigned to more than one well in the field.
- 22. Commission Final Orders providing for exceptions to Statewide Rule 10 for authority to downhole commingle the Spraberry (Trend Area) Field with other fields (Docket Nos. 7C-0266343, 7C-0272342 and 7C-0274132) prohibit unit acreage from being assigned to more than one well in the commingled fields.
- 23. Pioneer's three examples of contracts creating depth-severed ownership rights all indicate Pioneer acquired the leases with legal development limited by pre-assigned acreage in vertically offset intervals owned by others.
- 24. Full field development of the Spraberry (Trend Area) Field in situations where horizontally severed mineral ownership exists requires that the various interest owners cooperate.
- 25. The provision for stacked lateral wells in the Spraberry (Trend Area) Field rules allows for full field development in the absence of horizontally severed mineral rights.
- 26. Incorporating mineral ownership criteria into field rules is inappropriate.

- 27. The proposed remedy will disproportionately assign allowables among different wells, favoring tracts in which there exists a horizontal severance.
- 28. Horizontal severances within a field create horizontally planar lease boundaries subject to the spacing requirements of Statewide Rule 37.
- 29. Deconsolidating the Spraberry (Trend Area) Field into four surviving fields (one for each of the Clear Fork, Spraberry, Dean and Wolfcamp Formations) will quadruple the acreage available in the field for development.
- 30. Deconsolidating the Spraberry (Trend Area) Field into four surviving fields (or some other rational configuration based on reservoir conditions) is consistent with the existing regulatory framework.
- 31. Deconsolidating the Spraberry (Trend Area) Field into fields based on geology or a correlative depth interval will resolve most instances of horizontally severed mineral ownership.

CONCLUSIONS OF LAW

The examiners recommend adoption of the following proposed Conclusions of Law:

- 1. Notice of this hearing was given as specified in the provisions of all regulatory codes.
- 2. The Commission does not have jurisdiction over the matters of private contracts that cause mineral ownership to be horizontally severed.
- 3. All things have occurred or been accomplished to give the Commission jurisdiction in this matter as it relates to Statewide and field rules.
- 4. Horizontally severed mineral ownership within a field creates a point of application for Statewide Rule 37 with regard to minimum lease line spacing requirements relative to the horizontal plane dividing mineral ownership on a tract.
- 5. Field rules are special rules that modify the Railroad Commission's well spacing, density, prorationing, and casing requirements for designated fields to deal with differences in reservoir conditions, not mineral ownership.

- 6. Pioneer's application to amend field rules for the Spraberry (Trend Area) Field should not be adopted.
- 7. De-consolidation of the current Spraberry (Trend Area) Field into four separate fields defined by the upper and lower geologic markers fo the Clear Fork, Spraberry, Dean and Wolfcamp Formations will protect correlative rights and facilitate the fair and efficient development of the hydrocarbons contained in the interval now designated as the Spraberry (Trend Area) Field.

Respectfully submitted,

Paul Dubois

Technical Examiner

Laura Miles-Valdez

Legal Examiner

RAILROAD COMMISSION OF TEXAS HEARINGS SECTION

OIL AND GAS DOCKET NO. 7C-0283443 IN THE TREND AREA (CLEAR FORK)
FIELD, SPRABERRY (TREND AREA)
FIELD, TREND AREA (DEAN) FIELD,
AND TREND AREA (WOLFCAMP)
FIELD, VARIOUS COUNTIES, TEXAS

FINAL ORDER
DECONSOLIDATION OF THE
THE SPRABERRY (TREND AREA) FIELD INTO FOUR FIELDS:
TREND AREA (CLEAR FORK) FIELD
SPRABERRY (TREND AREA) FIELD
TREND AREA (DEAN) FIELD
TREND AREA (WOLFCAMP) FIELD;
AMENDING AND ESTABLISHING FIELD RULES,
AND GRANTING BLANKET EXCEPTION AUTHORITY FOR STATEWIDE RULE 10
VARIOUS COUNTIES, TEXAS

The Commission finds that after statutory notice in the above-numbered docket heard on August 7, 2013, the presiding examiner has made and filed a report and recommendation containing findings of fact and conclusions of law, for which service was not required; that the proposed application is in compliance with all statutory requirements; and that this proceeding was duly submitted to the Railroad Commission of Texas at conference held in its offices in Austin, Texas.

The Commission, after review and due consideration of the examiner's report and recommendation, the findings of fact and conclusions of law contained therein, hereby adopts as its own the findings of fact and conclusions of law contained therein, and incorporates said findings of fact and conclusions of law as if fully set out and separately stated herein.

Therefore, it is **ORDERED** by the Railroad Commission of Texas that Field Rules for the Spraberry (Trend Area) Field, Various Counties, Texas adopted in Final Order No. 7C & 8-25,174, effective December 22, 1952, as amended, are hereby amended to deconsolidate the Spraberry (Trend Area) Field into four surviving fields:

- Trend Area (Clear Fork) Field (ID No. 91025 100);
- Spraberry (Trend Area) Field (ID Nos 85279 200 and 85280 300);
- Trend Area (Dean) Field (ID No. 91025 200); and
- Trend Area (Wolfcamp) Field (ID No. 91025 300).

The amended Field Rules are set out in their entirety below:

RULE 1:

Trend Area (Clear Fork) Field (ID No. 91025 100): The entire correlative interval from 6,865 feet to 7,710 feet as shown on the log of the Pioneer Natural Res. USA, Inc. - Houpt Lease, Well No. 1 (API No. 42-329-31029), Section 24, Block 39, T-2-S, T&P RR Co. Survey, Midland County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Trend Area (Clear Fork) Field. This interval is intended to include all reservoirs within the Clear Fork Formation.

Spraberry (Trend Area) Field (ID Nos. 85279 200 [District 7C] and 85280 300 [District 8]): The entire correlative interval from 7,710 feet to 9,100 feet as shown on the log of the Pioneer Natural Res. USA, Inc. - Houpt Lease, Well No. 1 (API No. 42-329-31029), Section 24, Block 39, T-2-S, T&P RR Co. Survey, Midland County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Spraberry (Trend Area) Field. This interval is intended to include all reservoirs within the Spraberry Formation.

Trend Area (Dean) Field (ID No. 91025 200): The entire correlative interval from 9,100 feet to 9,290 feet as shown on the log of the Pioneer Natural Res. USA, Inc. - Houpt Lease, Well No. 1 (API No. 42-329-31029), Section 24, Block 39, T-2-S, T&P RR Co. Survey, Midland County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Trend Area (Dean) Field. This interval is intended to include all reservoirs within the Dean Formation.

Trend Area (Wolfcamp) Field (ID No. 91025 300): The entire correlative interval from 9,290 feet to 10,605 feet as shown on the log of the Pioneer Natural Res. USA, Inc. - Houpt Lease, Well No. 1 (API No. 42-329-31029), Section 24, Block 39, T-2-S, T&P RR Co. Survey, Midland County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Trend Area (Wolfcamp) Field. This interval is intended to include all reservoirs within the Wolfcamp Formation.

RULE 2: No well for oil or gas shall hereafter be drilled nearer than FOUR HUNDRED SIXTY SEVEN (467) feet to any property line, lease line, or subdivision line. There is no minimum between well spacing limitation. The aforementioned distances in the above rule are minimum distances to allow an operator flexibility in locating a well, and the above spacing rule and the other rules to follow are for the purpose of permitting only one well to each drilling and proration unit in either field. Provided however, that the Commission will grant exceptions to permit drilling within shorter distances and drilling more wells than herein prescribed whenever the Commission shall have determined that such exceptions are necessary either to prevent waste or to prevent the confiscation of property. When exception to these rules is desired, application therefore shall be filed and will be acted upon in accordance with the provisions of Commission Statewide Rules 37 and 38, which applicable provisions of said rules are incorporated herein by reference.

In applying this rule, the general order of the Commission with relation to the subdivision of property shall be observed.

Provided, however, that for purposes of spacing for horizontal drainhole wells, the following shall apply:

- a. A take point in a horizontal drainhole well is any point along a horizontal drainhole where oil and/or gas can be produced from the reservoir/field interval. The first take point may be at a different location than the penetration point and the last take point may be at a location different than the terminus point.
- b. No horizontal drainhole well for oil or gas shall hereafter be drilled such that the first and last take points are nearer than ONE HUNDRED (100) feet to any property line, lease line or subdivision line.
- c. For each horizontal drainhole well, the distance perpendicular to such horizontal drainhole from any take point to any point on any property line, lease line or subdivision line shall be a minimum of FOUR HUNDRED SIXTY SEVEN (467) feet.

For the purpose of assigning additional acreage to a horizontal drainhole well pursuant to Statewide Rule 86, the distance from the first take point to the last take point in the horizontal drainhole shall be used in such determination, in lieu of the distance from penetration point to terminus.

In addition to the penetration point and the terminus of the wellbore required to be identified on the drilling permit application (Form W-1H) and plat, the first and last take points must also be identified on the drilling permit application (Remarks Section) and plat. Operators shall file an as-drilled plat showing the path, penetration point, terminus and the first and last take points of all drainholes in horizontal wells, regardless of allocation formula.

If the applicant has represented in the drilling application that there will be one or more no perf zones or "NPZs" (portions of the wellbore within the field interval without take points), then the as-drilled plat filed after completion of the well shall be certified by a person with knowledge of the facts pertinent to the application that the plat is accurately drawn to scale and correctly reflects all pertinent and required data. In addition to the standard required data, the certified plat shall include the as-drilled track of the wellbore, the location of each take point on the wellbore, the boundaries of any wholly or partially unleased tracts within a Rule 37 distance of the wellbore, and notations of the shortest distance from each wholly or partially unleased tract within a Rule 37 distance of the wellbore to the nearest take point on the wellbore.

A properly permitted horizontal drainhole will be considered to be in compliance with

the spacing rules set forth herein if the as-drilled location falls within a rectangle established as follows:

- a. Two sides of the rectangle are parallel to the permitted drainhole and 50 feet on either side of the drainhole:
- b. The other two sides of the rectangle are perpendicular to the sides described in (a) above, with one of those sides passing through the first take point and the other side passing through the last take point.

Any take point of a horizontal drainhole outside of the described rectangle must conform to the permitted distance to the nearest property line, lease line or subdivision line.

For any well permitted in this field, the penetration point need not be located on the same lease, pooled unit or unitized tract on which the well is permitted and may be located on an Offsite Tract. When the penetration point is located on such Offsite Tract, the applicant for such a drilling permit must give 21 days notice by certified mail, return receipt requested to the mineral owners of the Offsite Tract. For the purposes of this rule, the mineral owners of the Offsite Tract are (1) the designated operator; (2) all lessees of record for the Offsite Tract where there is no designated operator; and (3) all owners of unleased mineral interests where there is no designated operator or lessee. In providing such notice, applicant must provide the mineral owners of the Offsite Tract with a plat clearly depicting the projected path of the entire wellbore. 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. If any mineral owner of the Offsite Tract objects to the location of the penetration point, the applicant may request a hearing to demonstrate the necessity of the location of the penetration point of the well to prevent waste or to protect correlative rights. Notice of Offsite Tract penetration is not required if (a) written waivers of objection are received from all mineral owners of the Offsite Tract; or, (b) the applicant is the only mineral owner of the Offsite Tract. To mitigate the potential for well collisions, applicant shall promptly provide copies of any directional surveys to the parties entitled to notice under this section, upon request.

RULE 3: The acreage assigned to an individual well shall be known as a proration unit. The standard drilling and proration units are established hereby to be EIGHTY (80) acres. No proration unit shall consist of more than EIGHTY (80) acres except as hereinafter provided. There is no maximum diagonal limitation in this field. All proration units shall consist of continuous and contiguous acreage which can reasonably be considered to be productive of oil. No double assignment of acreage will be accepted.

Notwithstanding the above, operators may elect to assign a tolerance of not more than EIGHTY (80) acres of additional unassigned lease acreage to a well on an EIGHTY (80) acre unit and shall in such event receive allowable credit for not more than ONE HUNDRED SIXTY (160) acres.

Furthermore, for purposes of additional acreage assignment to horizontal drainhole wells under Statewide Rule 86 (d)(1), the amount specified by applicable rules for a proration unit for a vertical well shall be the EIGHTY (80) acres plus EIGHTY (80) acres tolerance provided in this Rule 3.

Under the following conditions, an operator, at its option, shall be granted an exception to Statewide Rule 38 and permitted to form fractional units of less than EIGHTY (80) acres, but not less than TWENTY (20) acres:

- (a) The Railroad Commission shall notify in writing the designated operators, lessees of record for tracts that have no designated operator, and all owners of unleased mineral interests (i) within 1,867 feet from the location of a vertical well or (ii) within 1,867 feet of any point on a horizontal well within the correlative interval.
- (b) Designated operators, lessees of record for tracts that have no designated operator, and all owners of unleased mineral interests receiving this written notification shall have 21 days from the date of issuance of the notice of application for a Rule 38 density exception to file a written protest with the Railroad Commission, such protest to be received by the Railroad Commission within said 21 day period.
- (c) If no written protest is received by the Railroad Commission within the 21 day period of time, or if written waivers are received from each designated operator, lessee of record for tracts that have no designated operator, and all owners of unleased mineral interests to whom notice is required, the application shall be approved administratively by the Railroad Commission.
- (d) If a written protest is received by the Railroad Commission within 21 days of the date of issuance of the notice of application, the application will be scheduled for hearing at which the applicant must show that the fractional proration unit and the well thereon are necessary to effectively drain an area of the field that will not be effectively drained by existing wells, or to prevent waste or confiscation.
- (e) Permits granted pursuant to the above provision shall be issued as exceptions to Statewide Rule 38.
- (f) For permits requested on fractional units of less than TWENTY (20) acres, the procedures set forth in 16 Tex. Admin. Code § 3.38 (Rule 38) shall apply.

For the determination of acreage credit in this field, operators shall file for each oil or gas well in this field a Form P-15 Statement of Productivity of Acreage Assigned to Proration Units. On that form or an attachment thereto, the operator shall list the number of acres that are being assigned to each well on the lease or unit for proration purposes,

in lieu of amended Form P-15's. For oil and gas wells, operators shall be required to file, along with the Form P-15, a plat of the lease, unit or property; provided that such plat shall not be required to show individual proration units. Operators may, however, file such proration unit plats for individual wells in the field if they so choose.

- **RULE 4:** The maximum daily oil allowable for each well on an EIGHTY (80) acre unit in the subject field shall be the MER Allowable of 515 barrels of oil per day, and the actual allowable for an individual well shall be determined by the sum total of the two following values:
 - a. Each well shall be assigned an allowable equal to the top allowable established for a well having a proration unit containing the maximum acreage authorized exclusive of tolerance acreage multiplied by SEVENTY FIVE percent (75%) and by then multiplying this value by a fraction, the numerator of which is the acreage assigned to the well and the denominator of which is the maximum acreage authorized for a proration unit exclusive of tolerance acreage.
 - b. Each well shall be assigned an allowable equal to TWENTY FIVE percent (25%) of the maximum daily oil allowable above.
- RULE 5: The permitted gas-oil ratio for all wells shall be four thousand (4,000) cubic feet of gas per barrel of oil produced. Any oil well producing with a gas-oil ratio in excess of four thousand (4,000) cubic feet of gas per barrel of oil shall be allowed to produce daily only that volume obtained by multiplying the daily oil allowable of such well as determined by the applicable rules of the Commission by four thousand (4,000) cubic feet; provided that an operator may produce an oil well under a net gas-oil ratio rule. The net gas-oil ratio as used herein shall be determined by subtracting from the total volume of gas produced from said well during any interval prescribed by the Commission that volume thereof that was during the same interval diverted to uses specified as legal uses for sweet natural gas in TEX. NAT. RES. CODE ANN. §86.181(1978), as amended, and by dividing the net volume of gas thus remaining by the oil produced during the same interval. If during any interval the said well has a net gas-oil ratio in excess of four thousand (4,000) cubic feet of gas per barrel of oil produced, its daily of allowable shall be determined and assigned by multiplying by four thousand (4,000) that oil allowable which said well would be assigned under the Commission's rules were its net ratio four thousand (4,000) cubic feet of gas per barrel of oil, or less, and by dividing the product thus obtained by the net gas-oil ratio of said well as determined as hereinabove set out.
- **RULE 6:** For oil and gas wells, Stacked Lateral Wells within the correlative interval for the field that are drilled from different wellbores may be considered a single well for regulatory purposes, as provided below:
 - 1. A horizontal drainhole well qualifies as a Stacked Lateral Well under the following conditions:
 - a) There are two or more horizontal drainhole wells on the same lease

or pooled unit within the correlative interval for the field;

- b) Horizontal drainholes are drilled from different surface locations;
- c) Each point of a Stacked Lateral Well's horizontal drainhole shall be no more than 300 feet in a horizontal direction from any point along any other horizontal drainhole of that same Stacked Lateral Well. This distance is measured perpendicular to the orientation of the horizontal drainhole and can be illustrated by the projection of each horizontal drainhole in the Stacked Lateral Well into a common horizontal plane as seen on a location plat. Where one drainhole of a Stacked Lateral is longer than that of another drainhole of the Stacked Lateral, the 300 feet maximum shall be measured between the longer lateral and a projection of the shorter lateral along the same path as the existing lateral; and
- d) There shall be no maximum or minimum distance limitations between horizontal drainholes of a Stacked Lateral Well in a vertical direction.
- 2. A Stacked Lateral Well, including all surface locations and horizontal drainholes comprising such Stacked Lateral Well, shall be considered as a single well for density and allowable purposes.
 - a) All points between the first Take Point and the Last Take Point on all drainholes of a Stacked Lateral Well, including all Take Points on any horizontal drainhole that is longer than the Record Well, must fall within a box with a surface area equal to the number of acres to be assigned to the Stacked Lateral Well for allowable purposes. Two sides of the box will be formed by the two horizontal laterals that are the farthest apart in a horizontal direction, which shall be no greater than the 300 foot requirement in Item 1 above.
 - b) For the purpose of assigning additional acreage to the Stacked Lateral Well pursuant to Rule 86, the horizontal drainhole displacement shall be calculated based on the distance from the first take point to the last take point in the horizontal drainhole for the Record Well, regardless of the horizontal drainhole displacement of other horizontal drainholes of the Stacked Lateral Well.
- 3. Each surface location of a Stacked Lateral Well must be permitted separately and assigned an API number. In permitting a Stacked Lateral Well, the operator shall identify each surface location of such well with the designation "SL" in the well's lease name and also describe the well as a Stacked Lateral Well in the "Remarks" of the Form W-1 drilling permit application. The operator shall also identify on the plat any other existing, or applied for, horizontal drainholes comprising the Stacked Lateral Well being permitted.

- 4. To be a regular location, each horizontal drainhole of a Stacked Lateral Well must comply with (i) the field's minimum spacing distance as to any lease, pooled unit or property line, and (ii) the field's minimum between well spacing distance as to any different well, including all horizontal drainholes of any other Stacked Lateral Well, on the same lease or pooled unit in the field. Operators may seek exceptions to Rules 37 and 38 for Stacked Lateral Wells in accordance with the Commission's rules, or any applicable rule for this field.
- 5. Operators shall file separate completion forms for each surface location of the Stacked Lateral Well. Operators shall also file a certified as-drilled location plat for each surface location of a Stacked Lateral Well showing each horizontal drainhole from that surface location, confirming the well's qualification as a Stacked Lateral Well and showing the maximum distances in a horizontal direction between each horizontal drainhole of the Stacked Lateral Well.
- 6. In addition to the completion forms for each surface location of a Stacked Lateral Well, the operator must file a separate Form G-1 or Form W-2 for record purposes only for the Commission's Proration Department to build a fictitious "Record Well" for the Stacked Lateral Well. This Record Well will be identified with the words "SL Record" included in the lease name. This Record Well will be assigned an API number and Gas Well ID or Oil lease number and listed on the proration schedule with an allowable if applicable.
- 7. In addition to the Record Well, each surface location of a Stacked Lateral Well will be listed on the proration schedule, but no allowable shall be assigned for an individual surface location. Each surface location of a Stacked Lateral Well shall be required to have a separate G-10 or W-10 test and the sum of all horizontal drainhole test rates shall be reported as the test rate for the Record Well.
- 8. Operators shall report all production from horizontal drainholes included as a Stacked Lateral Well on Form PR to the Record Well. Production reported for a Record Well is the total production from the horizontal drainholes comprising the Stacked Lateral Well. Operators shall measure the production from each surface location of a Stacked Lateral Well. Operators may measure full well stream with the measurement adjusted for the allocation of condensate based on the gas to liquid ratio established by the most recent G-10 well test rate for that surface location. The gas and condensate production will be identified by individual API number and recorded and reported on the "Supplementary Attachment to Form PR".
- 9. If the field's 100% AOF status should be removed, the Commission's Proration Department shall assign a single gas allowable to each Record Well classified as a gas well. The Commission's Proration Department shall also assign a single oil allowable to each Record Well classified as an oil well. The assigned allowable may be produced from any one or all of the horizontal drainholes comprising the Stacked Lateral Well.
- 10. Operators shall file an individual Form W-3A Notice of Intention to Plug and

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Abandon and Form W-3 Well Plugging Report for each horizontal drainhole comprising the Stacked Lateral Well as required by Commission rules.

11. An operator may not file Form P-4 to transfer an individual surface location of a Stacked Lateral Well to another operator. P-4's filed to change the operator will only be accepted for the Record Well if accompanied by a separate P-4 for each surface location of the Stacked Lateral Well.

It is further **ORDERED** that blanket authority for exception to Statewide Rule 10 is hereby approved for all wells in the Trend Area (Clear Fork) Field (ID No. 91025 100), the Spraberry (Trend Area) Field (ID Nos 85279 200 and 85280 300), the Trend Area (Dean) Field (ID No. 91025 200), and the Trend Area (Wolfcamp) Field (ID No. 91025 300). The operator of any well downhole commingled in the subject fields shall file the appropriate drilling permit, completion forms, an abbreviated Statewide Rule 10 Data Sheet for Wells Subject to Fieldwide Statewide Rule 10 exception (See Attachment A) and shall file at the same time, the appropriate Commission required administrative Statewide Rule 10 exception downhole commingling fee. The fee is waived if the wells were granted an exception to Statewide Rule 10 for the Spraberry (Trend Area) Field prior to the date of this order shown below.

It is further **ORDERED** that all previous Commission Final Orders granting blanket authority for exception to Statewide Rule 10 in the Spraberry (Trend Area) Field (Docket Nos. 7C-0266343, 7C-0272342 and 7C-0274132) also apply to the Trend Area (Clear Fork) Field, Trend Area (Dean) Field, and Trend Area (Wolfcamp) Field.

Done this _	ⁱⁿ day of	, 2013.
		RAILROAD COMMISSION OF TEXAS
		CHAIRMAN BARRY T. SMITHERMAN
		COMMISSIONER DAVID PORTER
ATTECT.		COMMISSIONER CHRISTI CRADDICK
ATTEST:		