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DANA AVANT LEWIS  
*INTERIM DIRECTOR*

# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

**OIL & GAS DOCKET NO. 06-0308079**

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**APPLICATION OF VALENCE OPERATING COMPANY (881167) TO AMEND FIELD RULES FOR THE GIRLIE CALDWELL (GOODLAND LM) FIELD, SMITH, HENDERSON AND VAN ZANDT COUNTIES, TEXAS**

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### PROPOSAL FOR DECISION

**HEARD BY:** Robert Musick - Technical Hearings Examiner  
Jennifer Cook - Administrative Law Judge

### PROCEDURAL HISTORY:

|                               |  |
|-------------------------------|--|
| Application Filed:            | November 29, 2017                                |
| Notice of Hearing Issued:     | December 12, 2017, January 30 and March 16, 2018 |
| Hearing Date:                 | January 22, 2018                                 |
| Request to Reopen Hearing:    | February 27, 2018                                |
| Reopened Hearing Date:        | April 3, 2018                                    |
| Close of Record:              | August 23, 2018                                  |
| Proposal for Decision Issued: | November 6, 2018                                 |

### APPEARANCES:

#### **For Applicant Valence Operating Company**

Mr. David Gross, *Gross & Nelson*, Attorneys at Law.

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## I. Statement of the Case<sup>1</sup>

Valence Operating Company ("Valence") seeks to amend the current oil and gas field rules in effect for the Girlie Caldwell (Goodland LM) Field ("Field"), Smith County, Texas.<sup>2</sup> Wells in the Field are predominantly in Smith County, but the Field extends into Henderson and Van Zandt Counties, Texas.

Valence is having difficulty securing leases because of urbanization encroachment. The surface properties over the Field have been fractionated such that the small five and ten-acre tracts have numerous mineral interest owners from years of partitioning among heirs. Valence proposes to reduce the lease-line spacing requirement for the Field from 330 feet to 200 feet.<sup>3</sup> Valence asserts narrowing the lease-line spacing requirement for the Field and slightly modifying the well track for their proposed Denney 1H well ("proposed Well"), will result in an increased participation of mineral interest owners along the well track, thus causing a 34 percent reduction in non-perforated zones ("NPZ") along the Well's lateral drainhole. Ultimately, the requested field rule change to amend the lease-line spacing will result in increased oil recovery for the proposed Well.

Valence indicates the proposed Well will not be economically feasible to develop and produce oil and gas without the requested field rule amendment.<sup>4</sup> Valence asserts the high number of mineral interest owners for small tracts are common in the Field, which is why a Field rule amendment is requested instead of pursuing the modification of lease-line spacing for the proposed Well through Statewide Rule ("SWR") 37. In addition, Valence asserts SWR 37 will be difficult to get approval within the existing Valence lease expiration timeframes.<sup>5</sup> Valence is aware that a 200-foot lease-line spacing requirement for a 40-acre density drilling unit is not a common practice for the Field or throughout Texas, but argues it is a fix under the current circumstances and appropriate for the Field.<sup>6</sup>

In addition, Valence is requesting to amend the reporting format from the Form P-15 (*Statement of Productivity of Acreage assigned to Proration Units*) to Form P-16 (*Acreage Designation*). Valence asserts the change in lease-line spacing and report filing format will promote horizontal well development in the Field.

Evidence presented at the hearing was specific to the proposed Well. The Examiners find that Valence did not prove their case to amend the Field rule for the lease-line spacing, but find evidence supporting their request for relief through SWR 37. The

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<sup>1</sup> The January 22, 2018 hearing audio file in this case is referred to as "Aud. at [minute(s)]." The April 3, 2018 reopened hearing audio is referred to as "April 3, 2018 Aud..at [minute(s)]." Applicant's exhibits are referred to as "Ex. [exhibit no]."

<sup>2</sup> Ex.1.

<sup>3</sup> Aud. at 1:30 minutes to 4 minutes.

<sup>4</sup> Aud. at 46 to 48 minutes.

<sup>5</sup> Aud. at 35 to 37 minutes and 40 to 45 minutes.

<sup>6</sup> Aud. at 5:50 to 6:30 minutes.

Examiners recommend the Commission deny the request by Valence to amend the lease-line or subdivision line spacing from 330 feet to 200 feet through a field rule.

The Technical Examiner and Administrative Law Judge (collectively, "Examiners") respectfully submit the Proposal for Decision ("PFD") and recommend the Railroad Commission ("Commission" or "RRC") approve the Form P-16 reporting format to accommodate horizontal wells, but recommend denial to amend the lease-line or subdivision line spacing from 330 feet to 200 feet through a field rule.

## **II. Relief Sought**

Valence is seeking the following amendments to the existing Field rules:

- Amend the lease-line spacing from 330 feet to 200 feet, such that the beginning of Field Rule 2, would read: "200/600" instead of "330/600".
- Amend Field Rule 2, Part 2.c. so the proposed language would read: "For each horizontal drainhole well, the perpendicular distance from any take point on such horizontal drainhole to any point on any property-line, lease-line or subdivision-line shall be a minimum of two hundred (200) feet". Therefore, 2.c would change the lease-line spacing from 330 feet to 200 feet.
- Amend the reporting format in Field Rule 3, from Form P-15 to Form P-16. Valence proposed the following language:

"The acreage assigned to the individual well for the purpose of allocating allowable oil production thereto shall be known as a proration unit. The standard drilling and proration units are established hereby to be FORTY (40) acres for a vertical well. No proration unit shall consist of more than FORTY (40) acres for a vertical well except as hereinafter provided. Additional acreage may be assigned to a horizontal well pursuant to SWR 86, and 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. 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. Operators may elect to not file plats of the acreage assigned to proration units. Instead of filing proration unit plats operators may file Form P-16 listing wells and the acreage assigned to each well".

## **III. Jurisdiction and Notice**

Sections 81.051 and 81.052 of the Texas Natural Resources Code provide the Commission with jurisdiction over all persons owning or engaged in drilling or operating

oil or gas wells in Texas, and the authority to adopt all necessary rules for governing and regulating persons and their operations under the jurisdiction of the Commission.

The Notice of Hearing ("Notice") was issued by the Commission on December 12, 2017, to all operators in the Field. Consequently, all parties received more than 10 days' notice. The Notice contains (1) a statement of the time, place, and nature of the hearing; (2) a statement of the legal authority and jurisdiction under which the hearing is to be held; (3) a reference to the particular sections of the statutes and rules involved; and (4) a short and plain statement of the matters asserted.<sup>7</sup> A hearing was held on January 22, 2018.<sup>8</sup> The application was not protested. Valence appeared and participated at the hearing.

#### **IV. Applicable Legal Authority**

The applicable legal authority is found in the Field rules as follows:

- The Girlie Caldwell (Goodland LM) Field has permanent field rules that allow for 330 feet lease-line spacing. The Applicant is seeking to amend the lease-line spacing in the Field rule (i.e., Field Rule 2) from 330 feet to 200 feet.
- The Girlie Caldwell (Goodland LM) Field has permanent field rules that allow reporting on Form P-15. The Applicant is seeking to amend the reporting format in the Field rules (Field Rule 3) from Form P-15 to Form P-16 which is discussed in Statewide Rule ("SWR") 86 for horizontal drainhole wells.

#### **V. Discussion of Applicant's Evidence**

Applicant provided two witnesses and fourteen exhibits at the hearings for this case.

##### **Field Information:**

The Field (No. 35060500) was discovered on June 15, 1972, and was under SWRs from discovery in 1972, until the adoption of Field rules in Final Order No. 06-0301489, dated December 6, 2016 ("2016 Final Order").<sup>9</sup> The correlative interval was established in the 2016 Final Order with the interval ranging from 9,050 feet to 9,290 feet based on the well log of the Valence Operating Company-Katherine Luscombe Gas Unit Well #5 (API No. 42-423-32263).<sup>10</sup>

Valence provided a portion of the January 22, 2018 proration schedule which

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<sup>7</sup> See Tex. Gov't Code §§ 2001.051, 052; 16 Tex. Admin. Code §§ 1.42, 1.45.

<sup>8</sup> Ex.1; Aud. at 38 to 39 minutes.

<sup>9</sup> Aud. at 4 to 5 minutes; Ex. 2 and Ex. 4.

<sup>10</sup> Ex. 3 and Ex. 4.

identifies three operators in the Field: Valence, Chesapeake Operating, LLC and Wenexco, Inc.<sup>11</sup> Valence has a total of five wells in the Field with four of the wells being horizontal wells. Chesapeake Operating, LLC has one horizontal well in the Field and Wenexco, Inc. has one vertical well in the Field. The January 22, 2018 proration schedule indicates all wells are producing oil and gas except for the Wenexco well, which shows no production as of December 2017.<sup>12</sup> Each producing well in the Field typically produces from 35 to 85 barrels of oil per day ("BOPD") and from 300 to 1,600 thousand cubic feet per day ("MCF/Day") of casinghead gas. The average gravity of oil in the reservoir is 36.0 API with a Net Gas-Oil Ratio ("GOR") of 2000:1 established by SWR requirements. The allowance for the Field is 157 BOPD.<sup>13</sup>

The cumulative production estimates from discovery through December 2017 is 160.47 thousand barrels of oil ("MBO") and 52.16 million cubic feet ("MMCF") of gas.<sup>14</sup> Production activity for the Field has primarily occurred using horizontal wells, with up to six wells producing oil and gas from 2011 through 2017. The highest producing well in the Field is Valence's Cowan Unit 1H Well, producing 72% of the oil and 68% of the gas in the Field.<sup>15</sup> There was testimony that the Cowan Unit 1H Well drilled in 2013 produced 116.71 MBO and 35.60 MMCF of casinghead gas, which was used to estimate an upper-end estimated ultimate recovery ("EUR") value of 29.44 BO per foot of perforated lateral drainhole for the Field.<sup>16</sup>

The Field currently has a 40-acre density and a 330-foot lease-line spacing and 600-foot between well spacing with a diagonal maximum length established at 2,100 feet. The current rules for the Field establish no minimum well spacing between horizontal wells and vertical wells, but does establish a between well spacing of 600 feet for vertical wells. The Field rules also establish a 100-foot first and last take point requirement for horizontal wells; a drill box rule with a 50-foot tolerance requirement, and the option to have an off-lease penetration point.<sup>17</sup> The Field rules also have an allocation formula based on 100% acreage, with additional acreage assigned under SWR 86 for horizontal wells.

#### **Lease Information:**

The Valence leases are located on the outskirts of Tyler, Texas, on properties that have produced oil and gas for numerous years.<sup>18</sup> It is common for oil and gas leases in this Field to be in partially urban/rural mixed land use development, with relatively dense

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<sup>11</sup> Ex 2.

<sup>12</sup> Ex. 2.

<sup>13</sup> Ex. 2.

<sup>14</sup> Ex. 5.

<sup>15</sup> Aud. at 15 to 16 minutes.

<sup>16</sup> Ex. 5, Ex. 6; Aud. at 20 to 21 minutes.

<sup>17</sup> Ex. 3.

<sup>18</sup> Aud. at 4.5 to 5 minutes.

populations and small tracts of property from five (5) to ten (10) acres in size. Valence has leased 9,000 acres of the approximately 50,000-acre Field, or about 18 percent of the total acreage in the Field.<sup>19</sup>

There was testimony that a typical drilling unit in the Field is composed of 10 to 50 parcels of property and larger drilling units may include up to 7,500 tracts of land.<sup>20</sup> A portion of the tracts will have multiple mineral owners with an average tract composed of three (3) to ten (10) mineral interest owners, thus resulting in an average-sized drilling unit with up to 50 mineral owners and larger tracts having as many as 500 mineral owners.<sup>21</sup> Many mineral owners cannot be located, thus Valence must use options such as moving the horizontal well track or other legal remedies (e.g., receivership lease).<sup>22</sup>

Valence asserts that a SWR 37 exception, which requires a hearing if an affected person protests, will take about four to six months to grant the exception and is complicated by the current existing Valence lease expiration timeframes.<sup>23</sup> Also, Valence maintains the SWR 37 requirements, which require notification to mineral interest owners, is problematic and probably impossible.<sup>24</sup>

Valence is seeking to increase the perforated interval along the horizontal laterals by reducing the lease-line spacing from 330 feet to 200 feet.<sup>25</sup> In the hearing, Valence illustrated with Exhibits 7 and 8 (*inserted next page for illustration and attached to the PFD for details*) that narrowing of the lease-line spacing in conjunction with a slight deviation of the proposed Well track will significantly increase the number of mineral interest owners that have leases with Valence, thus decreasing the NPZ of the lateral well from 3,200 feet to only 1,250 feet.<sup>26</sup>

These increased perforations along the lateral drainhole of the proposed Well will result in more oil being recovered from the Field. The increase in the perforated intervals by 34 percent for the proposed Well equates to an increase of 58,880 BO above estimates using the existing Field rule of 330 feet and no modified well track.<sup>27</sup>

A comparison of the two Exhibits show the NPZ in orange highlights associated with mineral interest not leased by Valence. The left image on the next page with a 330-foot lease-line spacing has NPZ for 34 percent of the lateral drainhole compared to the

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<sup>19</sup> Aud. at 31 to 34 minutes and 36 to 38 minutes.

<sup>20</sup> Aud. at 32 to 33 minutes.

<sup>21</sup> Aud. at 4.5 to 6 minutes and 33 to 34 minutes.

<sup>22</sup> Aud. at 34 to 36 minutes.

<sup>23</sup> Aud. at 35 to 37 minutes and 40 to 43 minutes.

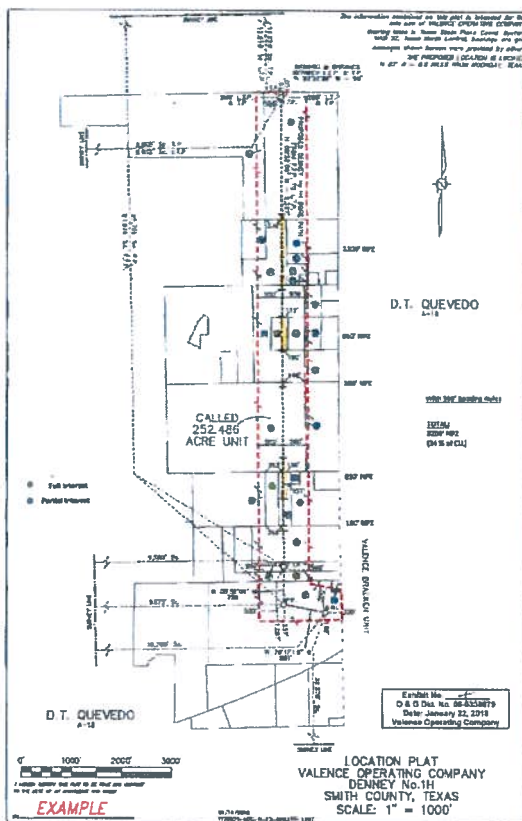
<sup>24</sup> Aud. at 49 to 50 minutes.

<sup>25</sup> Aud. at 43 to 46 minutes.

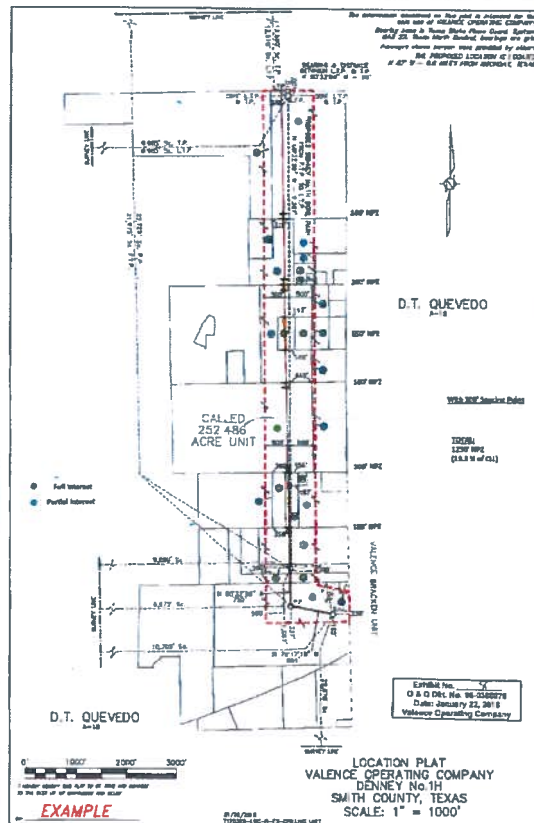
<sup>26</sup> Aud. at 24 to 48.5 minutes. Ex. 7 and Ex. 8.

<sup>27</sup> Aud. at 21 to 22 minutes. Ex. 6.

right image with a 200-foot lease-line with NPZ for 13 percent of the lateral drainhole.<sup>28</sup> For details, please see the larger versions of the two images below at the end of this PFD identified as Attachment A (330-foot Lease-line spacing) and Attachment B (200-foot Lease-line spacing).



330-foot Lease-line spacing



200-foot Lease-line spacing

### April 3, 2018 Re-Opened Hearing:

In the re-opened hearing on April 3, 2018, Valence presented testimony on the potential capture of oil from adjacent properties not leased. Testimony and exhibits were presented to illustrate the percentage of off-lease reserves in the Field being recovered by a hypothetical vertical well in the perspective field. In the hypothetical vertical well used as a sample for discussions in the hearing, the vertical well's cone of influence is equivalent to the designated drilling unit size/well density. Valence gave scenarios which mirror the Spraberry (Trend Area) Field in Midland County and this Field, the Girle Caldwell (Goodland LM) Field in Smith County, Texas. In the hearing, Rick Johnston, a

<sup>28</sup> Aud. at 21 to 22 minutes.



petroleum Engineer, presented the following two examples:

- The Spraberry (Trend Area) Field, Midland County, Texas - The Spraberry (Trend Area) Field has a 330-foot lease-line spacing and an 80-acre density drilling unit. The example Mr. Johnston discussed assumed the 80-acre base density would drain 80 acres in a radius pattern around the vertical well. In Mr. Johnston's testimony, moving a well from the center of the drilling unit to the southeast corner with the 330 feet lease-line spacing set-back will result in the vertical well having 49% of the drainage pattern being from adjacent off-lease reserves.<sup>29</sup>
- The Girlie Caldwell (Goodland LM) Field (this case) - Valence used the proposed 200-foot lease-line spacing and a 40-acre density drilling unit which is consistent with the proposed Field rule. The example assumed the radius of influence of the vertical well is the same as the drilling unit size, 40 acres. In this example, a vertical well located 200 feet from the Girlie Caldwell (Goodland LM) Field's lease-line boundary will result in about 49% of the oil recovered to be from off-lease reserves, which is the same as the Spraberry (Trend Area) Field in Midland County, Texas.<sup>30</sup> In contrast, testimony from Mr. Johnston, a professional engineer, indicate the Girlie Caldwell (Goodland LM) Field with the current 330-foot lease-line spacing and a 40-acre drilling unit will typically result in less off-lease recovery.<sup>31</sup>

Valence asserted through the examples that the proposed 200-foot lease-line spacing for the subject Field is as protective as the Spraberry (Trend Area) Field, Midland County, Texas. Valence claims that drainage of adjacent land, such as 49% of the oil per the examples provided by Valence, is common.<sup>32</sup>

## **VI. Examiners' Analysis**

The Examiners recommend approval of one of the two requests sought by Valence. The Examiners recommend that the Commission approve the amendment to the Field rule that changes the reporting format from the Form P-15 (*Statement of Productivity of Acreage assigned to Proration Units*) to Form P-16 (*Acreage Designation*). The Examiners recommend the Commission deny the request by Valence to amend the lease-line or subdivision-line spacing from 330 feet to 200 feet.

### **Request to Amend the Reporting Format in the Existing Field Rule:**

Valence is seeking to adopt language as part of Field Rule 3, which allows the operators in the Field to file Form P-16 identifying the wells and acreage assigned to each well in lieu of filing the proration unit plats required by Form P-15. The requested change in filing format is consistent with the requirements in SWR 86 for horizontal wells. The

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<sup>29</sup> Aud. at 3 to 8 minutes. Ex. 9.

<sup>30</sup> April 3, 2018 Aud. at 8 to 10 minutes. Ex.10.

<sup>31</sup> April 3, 2018 Aud. at 10 to 11 minutes.

<sup>32</sup> April 3, 2018 Aud. at 10 to 12 minutes.

Examiners recommend approval of the Form P-16 language requested by Valence.

**Request to Amend the Lease-Line Spacing:**

Valence maintains narrowing the lease-line spacing requirement for the Field and slightly modifying the well track for the proposed Well will result in an increased participation of mineral interest owners along the well track, thus causing a 34 percent reduction in NPZ along the Well's lateral drainhole.

Valence asserts the high number of mineral interest owners for small tracts are common in the Field, which is why a Field rule amendment is requested. In the hearing, Valence's evidence showed urbanization encroachment on their lease and provided an example using the proposed Well, to demonstrate the effects of the urbanization on leasing properties and volume of oil recovered. The Examiners agree that adjusting the lease-line spacing and the Well's track may contribute to an increased participation of mineral interest owners for this specific case, which ultimately would cause more oil to be recovered from the Field. Since Valence's evidence supporting their assertion was limited to the one proposed Well, it is uncertain if a Field-wide change to lease-line spacing would cause similar results for other future wells in the Field.

There is a process in the Field rules for obtaining lease-line spacing exceptions for a well. Rule 2, of the existing Field rule states:

*When an 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 SWR 37, exceptions to lease-line spacing are authorized to prevent waste or to prevent the confiscation of property. The Examiners also reviewed the "The *Discussions of Law, Practice and Procedure*" guidance published by the Oil and Gas Division of the Commission. The specified guidance establishes deviation from the provisions of SWR 37 and 38 are acceptable, such as when a field area is composed of long and narrow leases and when the reservoir conditions dictate, such as lenticularity and faulting. This guidance document indicates spacing and density provisions in the field rules are intended to establish regular development in a field and avoid clustering of wells to the detriment of the reservoir. A review of the requirements outlined by SWR 37 and the specified agency guidance provide examples in which lease-line exceptions are granted. Exceptions to lease-line spacing have historically been given when there are conditions related to the designated petroleum reservoir where the exception is sought, such as a geological condition specific to that area.

Valence's primary argument in this case is that obtaining SWR 37 exceptions for wells in this Field is too burdensome due to the small tract sizes and number of mineral interest owners. Valence provides no precedent for reducing lease-line spacing based on the difficulty of obtaining exceptions. SWR 37 is designed to address well-specific issues such as the lease-line spacing that Valence is seeking relief from through the field rules.

Valence asserts in the hearing that a field rule was requested because SWR 37 will be difficult to get approval within the existing Valence lease expiration timeframes.<sup>33</sup> Valence maintains the SWR 37 requirements, which require notification to mineral interest owners, is problematic and probably impossible due to the fractionation of tracts and partitioning of property among heirs.<sup>34</sup> It is noted that an amended Field rule only requires notification to the operators in the Field and does not require notice to affected persons, which include all lessees of record that have no designated operator and all owners of record of unleased mineral interests, which is required in SWR 37.<sup>35</sup> In this case, the Examiners note the lease-line spacing reduction was requested through a field rule amendment to avoid the public notice in accordance with SWR 37.

In the hearing, Valence asserted through a comparison of drilling unit densities that the proposed 200 feet lease-line spacing requirement for the subject Field is as protective as the Spraberry (Trend Area) Field, Midland County, Texas, even though that field has a 330 feet lease-line spacing for horizontal wells.<sup>36</sup> Valence's analogy was based on applying density provisions to hypothetical vertical wells. The density provisions in SWR 38 are intended to establish the number of acres a well will effectively drain. The Field has established a drilling unit density at 40 acres. Valence is not requesting any field amendment modifications to the 40-acre drilling unit and between-well-spacing because of the inability to drain the reservoir. According to Valence, if a vertical well is placed at the minimum distance allowed by lease-line spacing for either field, oil from a vertical well at the lease-line boundary would recover about 49% of the oil reserves associated with that well from adjacent off-lease properties. Valence compared hypothetical drainage from a vertical well although the proposed Well and many of the wells in both fields are horizontal wells. Valence argues that there is substantial drainage permissible in current Commission rules and field rules. The Examiners are not persuaded that Valence's hypothetical comparison provides justification for amending the Field rules to reduce the lease-line spacing in this case from 330 feet to 200 feet. It is also noted that the most recent change to lease-line spacing was performed in December 2016, to accommodate horizontal wells and promote orderly development in the Field. If 330 feet was found appropriate in 2016, it is unclear why it should now be reduced to 200 feet.

The Examiners recommend that Valence's request for a Field rule amendment reducing the lease-line spacing to 200 feet be denied. Valence provided no precedent of the Commission reducing lease-line spacing by Field rule based on the difficulty of obtaining an exception to the spacing limitations.

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<sup>33</sup> Aud. at 35 to 37 minutes and 40 to 45 minutes.

<sup>34</sup> Aud. at 49 to 50 minutes.

<sup>35</sup> See SWR 37(a)(2)(A), 16 Tex. Admin Code § 3.37(a)(2)(A).

<sup>36</sup> April 3, 2018 Aud. at 10 to 12 minutes.

## VII. Findings of Fact, Conclusions of Law and Recommendation

### Findings of Fact

1. Notice of this hearing was given to all operators in the Field at least ten days prior to the date of the hearing and no protests were received.
2. Valence seeks to amend the current oil and gas field rules in effect for the Girlie Caldwell (Goodland LM) Field, ("Field") Smith County, Texas. Wells in the Field are predominantly in Smith County, but the Field extends into the adjacent counties, Henderson and Van Zandt Counties, Texas.
3. The Valence leases are located on the outskirts of Tyler, Texas on properties that have produced oil and gas for numerous years. It is common for oil and gas leases in this Field to be in partially urban/rural mixed land use development, with relatively dense populations and small tracts of property from five (5) to ten (10) acres in size. Valence has leased 9,000 acres of the approximately 50,000 surface acres-sized Field, or 18 percent of the total acreage in the Field.
4. The initial application was filed on November 29, 2017. A hearing was held on January 22, 2018 and a re-opened hearing was held on April 3, 2018. Valence appeared and participated in the hearings.
5. Valence has projected that narrowing of the lease-line spacing in conjunction with a slight deviation of the Denney 1H well's track will significantly increase the number of mineral interest owners that have leases with Valence, thus decreasing the NPZ of the lateral well from 3,200 feet to only 1,250 feet, a change of 34 percent.
6. Valence provided calculations estimating 29.44 BO are potentially produced for each foot of lateral drainhole. According to these calculations, the increase in the perforated intervals will increase production for the proposed Well by about 58,880 BO above estimates using the existing Field rule of 330 feet.
7. Valence proposes to amend the current Field rules to accommodate development of the Field using horizontal wells. Changes requested for the Field are:
  - Lease-line spacing from 330 feet to 200 feet such that the beginning of Rule 2 will read 200/600 instead of 330/600; and Part of Rule 2c will read: "For each horizontal drainhole well, the perpendicular distance from any take point on such horizontal drainhole to any point on any property-line, lease-line or subdivision-line shall be a minimum of TWO HUNDRED (200) feet."
  - Amend the reporting format in Field Rule 3, from Form P-15 (*Statement of Productivity of Acreage assigned to Proration Units*) to Form P-16 (*Acreage*

*Designation*) to accommodate horizontal wells. Valence proposed the following language:

“The acreage assigned to the individual well for the purpose of allocating allowable oil production thereto shall be known as a proration unit. The standard drilling and proration units are established hereby to be FORTY (40) acres for a vertical well. No proration unit shall consist of more than FORTY (40) acres for a vertical well except as hereinafter provided. Additional acreage may be assigned to a horizontal well pursuant to SWR 86, and 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. 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. Operators may elect to not file plats of the acreage assigned to proration units. Instead of filing proration unit plats operators may file Form P-16 listing wells and the acreage assigned to each well.”

8. The field rules for the Girlie Caldwell (Goodland LM) Field are set out in Final Order No. 06-0301489, dated December 6, 2016. The Field currently has a 40-acre density and a 330-foot lease-line spacing and 600-foot between well spacing with a diagonal maximum length established at 2,100 feet.
9. The requested change in filing format from Form P-15 to Form P-16 is consistent with the requirements in SWR 86 for horizontal wells and will promote horizontal drilling in the Field.
10. Valence's primary reason for asking for a Fieldwide 200-foot lease-line spacing is that obtaining SWR 37 exceptions for wells in this Field is too burdensome due to the small tract sizes and number of mineral interest owners.
11. Valence provided no precedent of the Commission reducing lease-line spacing by Field rule based on the difficulty of obtaining an exception to the spacing limitations through SWR 37.
12. Rule 2, of the existing Field rule requires, “When an 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.”
13. An amended Field rule requires notification to the operators in the Field and does not require notice to affected persons required by SWR 37. SWR 37 requires notice to all affected persons, including all lessees of record that have no designated operator and all owners of record of unleased mineral interests.

14. Valence failed to provide sufficient evidence for amending the Field's rules to allow 200-foot lease-line spacing.

### Conclusions of Law

1. Proper notice of hearing was timely issued to persons entitled to notice. *See, e.g.*, Tex. Gov't Code §§ 2001.051, 052; 16 Tex. Admin. Code §§ 1.42, 1.45.
2. The Commission has jurisdiction in this case. *See, e.g.*, Tex. Nat. Res. Code § 81.051.
3. The requested change in filing format from Form P-15 to Form P-16 is consistent with the requirements in Statewide Rule 86. Field rules should be amended changing the filing format to Form P-16 to promote horizontal drilling in the Field.
4. A field rule amendment or Statewide Rule 37 exception is needed because the proposed Well's take point is closer than authorized by the existing Field rule.
5. Applicant has not met the burden of proof and satisfied the requirements to obtain an amended Field rule for the lease-line spacing of 200 feet.
6. Applicant's request to amend the Field rules from having a minimum 330-foot lease-line spacing limit to a minimum 200-foot lease-line spacing limit should be denied.

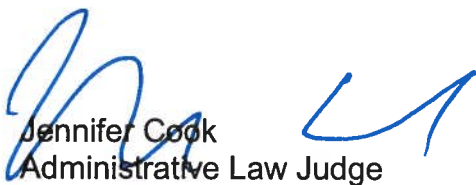
### Recommendations

The Examiners recommend the Commission approve the P-16 Form as proposed by Valence to accommodate horizontal drilling, but recommend denial to amend the Field's lease-line spacing limit to 200 feet.

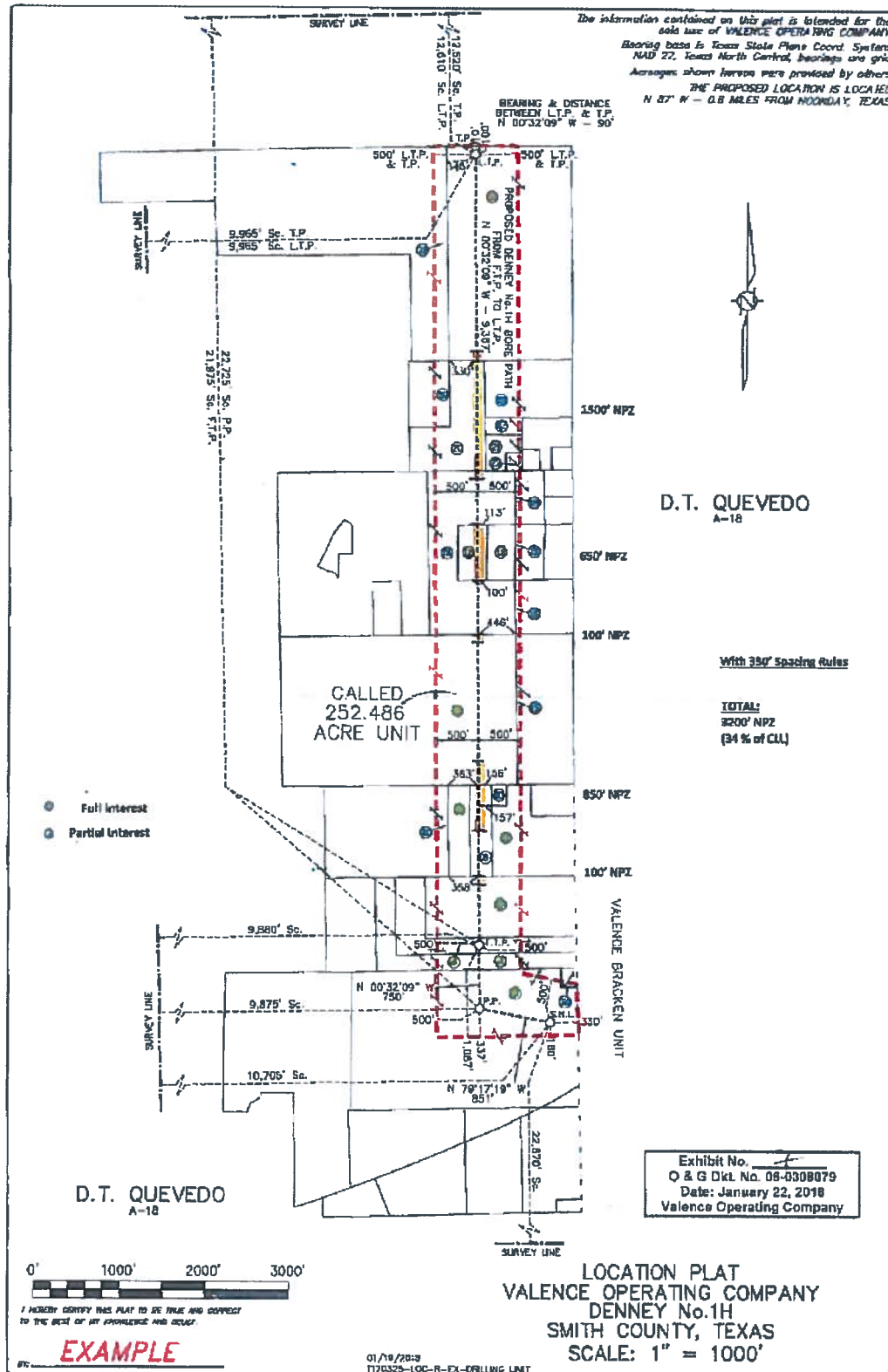
Respectfully,



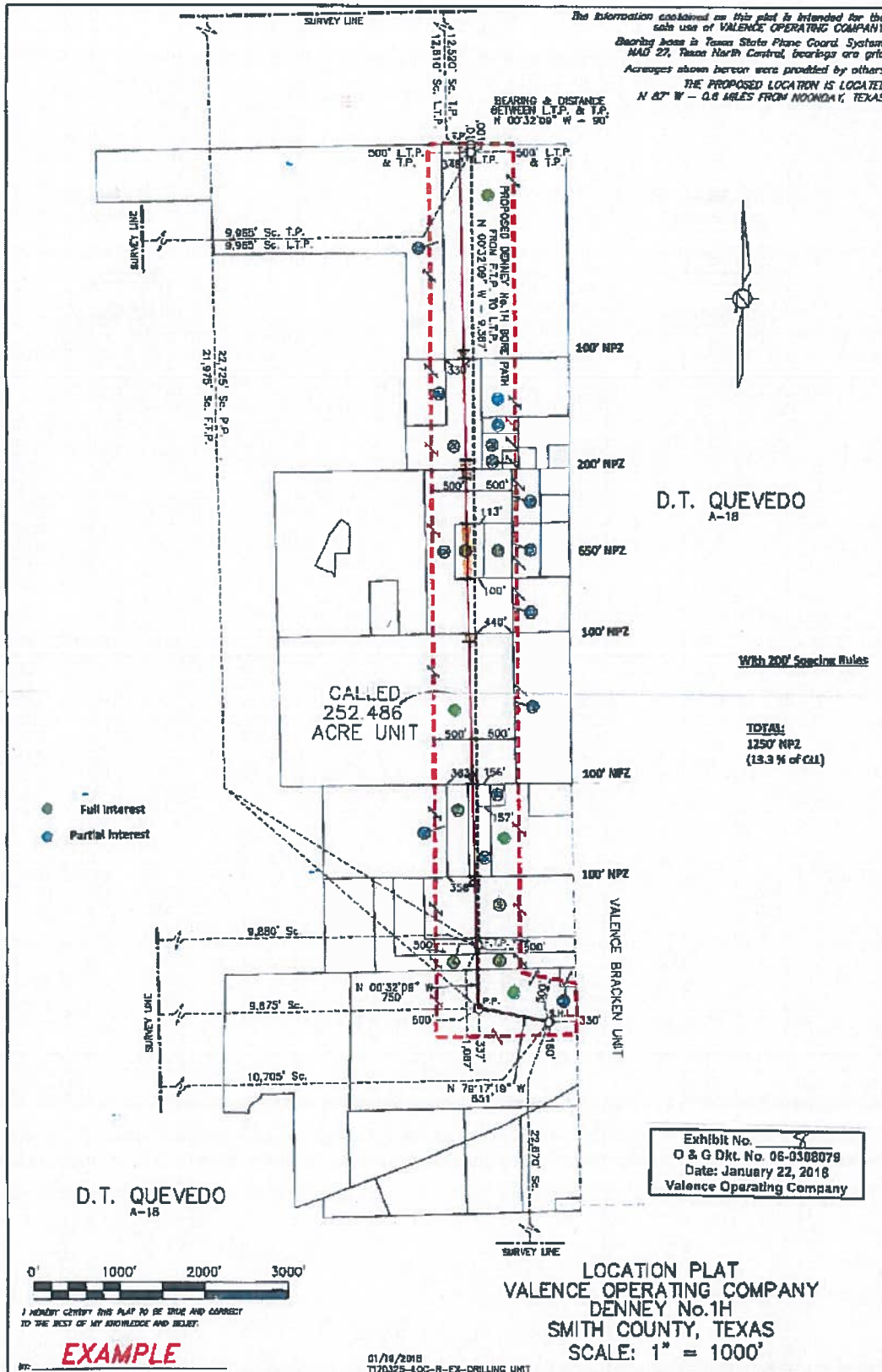
Robert Musick  
Technical Examiner



Jennifer Cook  
Administrative Law Judge



Attachment B - 200-foot Lease-line spacing





**RAILROAD COMMISSION OF TEXAS**  
**HEARINGS DIVISION**

**OIL & GAS DOCKET NO. 06-0308079**

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**APPLICATION OF VALENCE OPERATING COMPANY (881167) TO AMEND FIELD RULES FOR THE GIRLIE CALDWELL (GOODLAND LM) FIELD, SMITH, HENDERSON AND VAN ZANDT COUNTIES, TEXAS**

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**FINAL ORDER**

The Commission finds that after statutory notice in the above-numbered docket heard on January 22, 2018 and April 3, 2018, the presiding Technical Examiner and Administrative Law Judge (collectively, "Examiners") have 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 Examiners' 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.

It is **ORDERED** by the Railroad Commission of Texas that the application of Valence Operating Company to consider amending the lease line or subdivision line spacing from 330 feet to 200 feet for the Girlie Caldwell (Goodland LM) Field, Smith County, Texas, is hereby **DENIED**. Each exception to the Examiners' proposal for decision not expressly granted herein is overruled. All requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

It is further **ORDERED** by the Railroad Commission of Texas that the Field Rules, for the Girlie Caldwell (Goodland Lm) Field, (ID No. 35060500), Smith County, Texas are hereby amended. The amended Field Rules are set out in their entirety as follows:

**RULE 1:** The entire correlative interval from 9,050 feet to 9,290 feet as shown on the log of the Valence Operating Company – Katherine Luscombe Gas Unit Well # 5 (Luscombe # 5). (API No. 42-423-32263), T. Quevado Survey A-18, Smith County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Girlie Caldwell (Goodland Lm) Field.

**RULE 2:** No oil well shall hereafter be drilled nearer than **THREE HUNDRED AND THIRTY (330)** feet to any property line, lease line, or subdivision line; and no well shall be drilled nearer than **SIX HUNDRED (600)** feet to any applied for, permitted or completed well in the same reservoir on the same lease, pooled unit or unitized tract. There is no minimum between well spacing limitation between horizontal and vertical wells. 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. 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 therefor 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 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 into the wellbore 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 shall hereafter be drilled such that the first and last take point are nearer than ONE HUNDRED (100) feet to any property line, lease line or subdivision line.
- c. For each horizontal drainhole well, the perpendicular distance from any take point on such horizontal drainhole between the first take point and the last take point to any point on any property line, lease line or subdivision line shall be a minimum of THREE HUNDRED AND THIRTY (330) feet.

For the purpose of assigning additional acreage to a horizontal well pursuant to 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.

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 point of a horizontal drainhole outside of the described rectangle must conform to the permitted distance of the nearest property line, lease line or subdivision line measured perpendicular from the wellbore.

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 designed 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 the individual oil well for the purpose of allocating allowable oil production thereto shall be known as a proration unit. The standard drilling and proration units are established hereby to be FORTY (40) acres for a vertical well. No proration unit shall consist of more than FORTY (40) acres for a vertical well except as hereinafter provided. Additional acreage may be assigned to a horizontal well pursuant to Rule 86, and 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. 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. Operators may elect to not file plats of the acreage assigned to proration units. Instead of filing proration unit plats operators may file Form P-16 listing wells and the acreage assigned to each well.

**RULE 4:** The maximum daily oil allowable for a well in the field shall be determined by multiplying the applicable yardstick allowable for a well in the field by a fraction, the numerator of which is the acreage assigned to the well for proration purposes and the denominator of which is the maximum acreage authorized by these field rules for a vertical well for proration purposes, exclusive of tolerance acreage.

It is further **ORDERED** by the Commission that this order shall not be final and effective until 25 days after the Commission's Order is signed, unless the time for filing a motion for rehearing has been extended under TEX. GOV'T CODE § 2001.142, by agreement under TEX. GOV'T CODE § 2001.147, or by written Commission Order issued pursuant to TEX. GOV'T CODE § 2001.146(e). If a timely motion for rehearing of an application is filed by any party at interest, this order shall not become final and effective until such motion is overruled, or if such motion is granted, this order shall be subject to further action by the Commission. Pursuant to TEX. GOV'T CODE § 2001.146(e) and 16 TEX. ADMIN. CODE § 1.149(c), the time allotted for Commission action on a motion for rehearing in this case prior to its being overruled by operation of law is hereby extended until 90 days from the date the Commission Order is signed.

Each exception to the Proposal for Decision not expressly granted herein is overruled. All

requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

**ENTERED** in Austin, Texas on this 11<sup>th</sup> day of December 2018.

**RAILROAD COMMISSION OF TEXAS**

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**CHAIRMAN CHRISTI CRADDICK**

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**COMMISSIONER RYAN SITTON**

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**COMMISSIONER WAYNE CHRISTIAN**

**ATTEST**

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**SECRETARY**

**RAILROAD COMMISSION OF TEXAS**  
**HEARINGS DIVISION**

**OIL & GAS DOCKET NO. 06-0308079**

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