RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

PROPOSAL FOR DECISION

OIL AND GAS DOCKET NO. 09-0291225

THE APPLICATION OF EAGLE HYDROCARBONS LLC FOR AN ORDER MAKING PERMANENT THOSE TEMPORARY FIELD RULES APPROVED ON OCTOBER 2, 2012, FOR THE SHORT GRASS PRAIRIE (CONG) FIELD, HARDEMAN COUNTY, TEXAS

HEARD BY: Paul Dubois – Technical Examiner
Laura Miles-Valdez – Hearings Examiner

APPEARANCES:	**REPRESENTING:**
APPLICANT:	
Michael Choate	Eagle Hydrocarbons LP
Don Charbula, P.E.	
Stephen Pattee	
PROTESTANT:	
Jackie Hanners	pro se

PROCEDURAL HISTORY

Notice of Administrative Review:	August 13, 2014
Request to Make Rules Permanent:	September 9, 2014
Protest Received:	December 1, 2014
Request for Hearing:	September 9, 2014
Notice of Hearing:	March 11, 2015
Date of Hearing:	July 20, 2015
Transcript Received:	August 4, 2015
Proposal For Decision Issued:	November 2, 2015

STATEMENT OF THE CASE

Temporary field rules for the Short Grass Prairie (Cong) Field in Hardeman County, Texas, were established by Commission Final Order in Oil & Gas Docket No. 09-0277359 on October 2, 2012.[1] The Commission establishes temporary field rules based on limited well data to encourage development and delineate more rapidly the limits of the reservoir and to prevent the wasteful clustering of wells near the discovery well. Upon review of the field rules at the end of the temporary term, the Commission may make the temporary rules permanent, cancel the temporary rules, or extend the temporary rules for an additional period of time. The temporary field rules were set to expire on October 2, 2014. On August 13, 2014, Commission staff notified the only operator of record of wells in the field, Eagle Hydrocarbons LLC (Eagle), that it would review the temporary status of the field rules. Eagle seeks to make permanent the existing temporary field rules. Jackie Hanners, a mineral owner in the field, protests the field rules being made permanent.

Eagle requests the permanent rules retain a standard proration unit size of 160 acres with the additional acreage provisions in the temporary rules. Mr. Hanners asserts the field should be on statewide density rules. With regard to additional acreage allocation for horizontal wells, Mr. Hanners requests the additional acreage provision revert to that provided in Statewide Rule 86 [16 Tex. Admin. Code §3.86(d)]. The other field rule provisions are not in dispute.

On October 5, 2015, the Examiners notified the parties of their intent to take official notice of Commission records relating to field rules and well locations used in the application for field rules in Docket No. 02-0277359. Eagle and Mr. Hanner did not object.

Based on the evidence within the record, the Examiners recommend the Commission enter an order amending the temporary field rules to include 40-acre standard proration units and additional acreage according to Statewide Rule 86(d), and making the temporary field rules permanent.

APPLICABLE LAW

Statewide Rule 43 states:[2]

> Temporary field rules will apply until permanent field rules are adopted.

The existing temporary field rules for the Short Grass Prairie (Cong) Field state:

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1 *See* Oil & Gas Docket No. 09-0277359, the Application of Holmes Exploration, LLC to Consider a New Field Designation and to Adopt Temporary Field Rules for the Proposed Short Grass Prairie (Long) Field, Hardeman County, Texas. Final Order issued October 2, 2012.

2 16 Tex. Admin. Code § 3.43, Application for Temporary Field Rules.

> It is further ordered that these rules are temporary and effective until October 2, 2014, or until Commission staff evaluates appropriate data after notice and opportunity for hearing as offered by the Commission prior to the expiration of the rules. After this notice and opportunity for hearing, should the evidence evaluated during review be insufficient to sustain spacing or proration unit rules, these temporary rules, on the Commission's own motion, will be terminated and the field will revert to Statewide spacing and density rules.[3]

With regard to temporary and permanent field rules the Commission's historic publication, "Discussions of Law, Practice and Procedure," states the following:[4]

> The purpose of permitting (temporary) field rule applications based on limited well data is to encourage development to delineate more rapidly the limits of the reservoir and to prevent the wasteful clustering of wells near the discovery well.
>
> Permanent rules are established for a field only where adequate information is available to determine the drainage abilities of wells in the field. Evidence of pressure communication between wells in the field constitutes evidence of acreage being drained. *Applicants requesting large proration units should prove that existing wells are draining the requested number of acres.*[5]

DISCUSSION OF EVIDENCE

On October 2, 2012, the Commission designated the Short Grass Prairie (Cong) Field (ID No. 83413 500) in Hardeman County, Texas, as a new field and established temporary field rules accordingly. Those temporary field rules provide for the following:

1. The field is designated as the correlative interval from 7,298 feet to 7,530 feet as shown on the log of the Sidwell Oil & Gas, Inc. - Wilson Trust Lease, Well No. 1 (API No. 42-197-30341);

2. The lease line spacing is 467 feet, and the between well spacing is 660 feet. The rules contain special provisions for horizontal wells, including (1)

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3 Oil & Gas Docket No. 09-0277359, the Application of Holmes Exploration, LLC to Consider a New Field Designation and to Adopt Temporary Field Rules for the Proposed Short Grass Prairie (Long) Field, Hardeman County, Texas. Final Order issued October 2, 2012.

4 Railroad Commission of Texas. 1991. "Discussions of Law, Practice and Procedure." Oil and Gas Division. April.

5 *Id.* Page 3 (emphasis added).

definition of take points; (2) 100-foot lease line spacing for the first and last take point in horizontal drainhole well; (3) no minimum between well spacing limitation between vertical and horizontal drainhole wells or horizontal wells that are parallel or sub-parallel and do not overlap more than 500 feet; (4) a 50-foot box rule; and (5) off-lease penetration points for horizontal drainhole wells.

3. The standard drilling and proration unit size is 160 acres. For horizontal wells, additional acreage may be assigned to the well based on the following formula:

$$A = (L \times 0.15) + 160$$

Where A is the total acreage assignable to the well and L is the horizontal drainhole displacement (feet) between the first take point and the last take point.

4. Allocation is based on 100% acres, and the 1965 yardstick allowable is 353 barrels of oil per day (bopd) for a well on 160-acre standard units in the 7,000 feet to 8,000 feet depth interval.

Four horizontal wells were drilled and completed between August 2011 and August 2012. The wells were drilled by Holmes Exploration, LLC and Panther Energy; all four of the wells are currently operated by Eagle.

APPLICANT'S EVIDENCE

The Short Grass Prairie (Cong) Field is defined as a 232-foot vertical interval at the base of the Atoka Formation. The lower 50 to 70 feet of the defined field interval includes two productive conglomerate wash zones–the Atoka Wash A and B zones. The pay thickness of the Wash A zone ranges from 9 feet to 22 feet. An approximate 8-foot thick shale strata separates the Wash A and Wash B zones. The pay thickness of the lower Wash B zone ranges from about 15 to 26 feet. Mr. Charbula testified the low permeability pay zones consist of very well cemented wash conglomerates with quartz and some pelagic clay.[6] Table 1 summarizes relevant completion and production information:

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[6] Tr. 25: 16-20. The Examiners note, however, that an annotation on Eagle Exhibit No. 7 (specifically, the well log of the Angelo 4 Well No. 1H) describes the Wash A and Wash B intervals as "Poorly cemented conglomerate and sandy conglomerate."

TABLE 1
WELL COMPLETION DETAILS

Well	Drainhole Length (ft)		No. Of Frac Stages	Frac Fluid (bbl)	Proppant (lbs)	Initial Potential (bbl)	Estimated Ultimate Recovery (EUR) (bbl)
	Initial	Revised					
Angelo 4 No. 2H	2,300	968	10	24,587	931,541	113	16,208
Johnson 1 No. 1H	3,900	3,608	16	44,797	1,255,039	109	66,481
Spanky 2 No. 2H	3,900	3,819	16	49,402	1,290,248	305	69,615
Zip 74 No. 1H	4,000	3,541	17	54,959	1,352,902	683	144,353

Sources: Exh. Nos. 10, 12, 13, 14 and 15.

Mr. Hanners questioned the reported drainhole length of the Angelo well, which he believed to be 968 feet, not the reported 2,300 feet. After examining well records, Eagle agreed with Mr. Hanners. A revised Exhibit No. 10 was submitted after the hearing, which also revised downward the drainhole lengths of the other three wells.

Of the four named wells, Eagle considers the Angelo Lease Well No. 2H to be an underperforming outlier. The reasons that the Angelo well underperforms are not entirely clear to Eagle, as Eagle was not the operator who drilled the well. Eagle speculates there were issues drilling the Angelo well and perhaps the wellbore drifted out of its targeted interval. Eagle suggests the completion methods used for the Angelo well (specifically, lower frac fluid volume and proppant load) contributed to its estimated ultimate recovery (EUR) being significantly less than the other three wells. Eagle also notes that the Zip well, the best performing well, was the only well stimulated with nitrogen. Stimulation of the Zip well included the injection of 7 million cubic feet (MMCF) of nitrogen.

Eagle did not include data from the Angelo 4 Lease Well No. 2H in its assessment of reservoir properties for the subject field. Eagle reports the following reservoir properties for the field based on analyses of well logs, core samples and reservoir fluid samples: (1) average net pay thickness is 26.3 feet; (2) porosity is 12.6 percent; (3) permeability is 0.330 millidarcies (md); (4) water saturation is 44 percent; (5) oil viscosity is 0.313 centipoise; (6) formation volume factor is 1.602 reservoir barrels per stock tank barrel; and (7) a depletion drive recovery factor of 10.7 percent. Horizontal wells in the field are fracture stimulated. Based on the production and reservoir characteristics of the Johnson, Spanky and Zip wells, Eagle estimates that a typical well in the Short Grass Prairie (Cong) Field will drain 97 acres with an EUR of 93,483 barrels of oil.

Eagle stated 160-acre proration units are appropriate for this field because a typical well will drain 97 acres.[7] In other words, a typical well will drain more than 80-acres, therefore, the appropriate standard proration unit size is 160 acres. Mr. Choate affirmed that under the current field rules, the Zip well with a 4,000 foot lateral would be eligible to hold a maximum of 760 acres.[8] Mr. Charbula testified that making the temporary field rules permanent would prevent waste and protect the correlative rights of the mineral owners.[9]

With regard to pressure communication between wells in the field, Mr. Charbula stated, "Well, ... as far as being in pressure communication, that's a little uncertain at this point to be quite frank is, the data. ... The wells have not been on–in our opinion–long enough to determine if there is any interference between the wells." [10]

PROTESTANT'S EVIDENCE

Mr. Hanners is a lessor who holds a mineral interest in two wells in the Johnson 1 Well No. 1H and the Angelo 4 Well No. 2H. Mr. Hanners asserts that the temporary field rules allow the operator of a horizontal well to hold far more acreage than can be drained. He asserts that these rules, if continued or made permanent, will harm his correlative rights. Specifically, Mr. Hanners notes the temporary field rules provide for the following:

- The Johnson 1 Well No. 1H may hold a maximum of 714 acres;[11]
- The Angelo 4 Well No. 2H may hold a maximum of 305.2 acres.[12]

However, Mr. Hanners argues that additional acreage for horizontal wells should be based on Statewide Rule 86 (16 Tex. Admin. Code § 3.86), not the current field rule formula. With a standard proration unit size of 80 acres, Mr. Hanners stated that Statewide Rule 86 would provide for the following:[13]

- The Johnson 1 Well No. 1H could hold a maximum of 280 acres;

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7 Tr. 65:4-9.

8 The 760 acre value was stated before the drainhole length of the Zip well was revised downward to 3,541 feet in the revised Exh. No. 10. A 3,541-foot drainhole well could hold up to 691 acres under the existing temporary rules.

9 Tr. 62:10 through 63:7.

10 Tr. 23: 6-18.

11 Exh. No. 3 (proration schedule) indicates the Johnson well to be holding 453 acres.

12 Exh. No. 3 (proration schedule) indicates the Angelo well to be holding 305.2 acres.

13 Exh. P-2.

- The Angelo 4 Well No. 2H could hold a maximum of 160 acres.

Mr. Hanners stated that a 160 acre total drainage area, inclusive of additional acreage for horizontal wells, would be acceptable to him.[14] Mr. Hanners also stated that the recent production from wells in the field indicates they are draining much less acreage than is being held. He did not provide other technical rationale for this assertion, other than production data from the last year for the four wells in the field:[15]

- The Angelo 4 Well No. 2H produced an average of 1.69 bopd;
- The Johnson 1 Well No. 2H produced an average of 15.21 bopd;[16]
- The Spanky 2 Well No. 2H produced an average of 10.12 bopd;
- The Zip 74 Well No. 2H produced an average of 26.82 bopd.

Mr. Hanner is concerned that an operator's ability to hold excessive acreage will prevent the operation of his lease's Pugh Clause and the release of developable acreage for other opportunities. The Examiners informed Mr. Hanners that matters related to the operation of lease agreements were not within the Commission's jurisdiction, but can be presented in District Court.

EXAMINERS' ANALYSIS OF THE EVIDENCE

The parties dispute the appropriate standard proration unit size and the method of providing additional acreage for horizontal wells:

- With regard to the existing field rules, Eagle contends a 160-acre density and existing special formula for acreage allocation are appropriate.
- Mr. Hanners, however, contends the existing additional acreage allocation formula should be removed entirely and instead based on the tables provided in Statewide Rule 86(d). Furthermore, the total acreage held by a horizontal well should be 160 acres.

The Examiners conclude that the evidence in the record demonstrates the appropriate standard proration unit size for wells in the field is 40-acres and additional acreage may be assigned pursuant to Statewide Rule 86(d). This recommendation is

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14 Tr. 13:14-15.

15 Exh. P-3 through P-6.

16 Mr. Hanners questioned a possible reporting error for March 2015, which, if corrected, may lower the average for this well to about 6 bopd.

based on the evidence provided by Eagle. At the hearing, Eagle failed to persuasively demonstrate that a vertical well in the field–the traditional basis for standard proration unit size–would drain 160 acres. To the contrary, Eagle's evidence demonstrated that horizontal wells in the field with laterals as long as 3,819 feet typically drain 97 acres, an area inclusive of additional acreage for horizontal wells. The Examiners recommend, therefore, that wells in the field be assigned 40-acre standard proration units with additional acreage for horizontal wells assigned pursuant to Statewide Rule 86(d). In addition, those changes the temporary field rules be made permanent. The top oil allowable in the field should also be adjusted based on a 40-acre proration unit size.

Standard Proration Unit Size

Eagle's evidence indicates a typical horizontal well in the field will drain 97 acres. As calculated, however, this acreage already includes additional acreage for horizontal wells. It would therefore be inappropriate to use 160 acres (i.e., the next-larger standard unit size) for the field and allow acreage to be assigned beyond 160 acres based on drainhole length. The purpose of establishing unit sizes is to prevent the drilling of unnecessary wells that are not needed to effectively drain the reservoir. In this case, the proposed 160-acre unit size could prevent the drilling of wells that are needed to effectively drain the reservoir.

The temporary field rules for the Short Grass Prairie (Cong) Field established a standard proration unit of 160 acres for wells in the field. Because information from the Short Grass Prairie (Cong) Field was limited at the time of discovery, two vertical wells in two "nearby" conglomerate fields were used as analogs. The Neal 2 Well No. 1 (API No. 42-197-31318) was completed in the BBBB (Congl.) Field located about 11 miles south-southwest of the Short Grass Prairie (Cong) Field. The Cato Holmes Unit Well No. 1 (API No. 42-197-30954) was completed in the Kadane Cato (Congl) Field located about 16 miles south-southeast of the Short Grass Prairie (Cong) Field. In the temporary field rule hearing (Docket No. 09-0277359), Holmes Exploration estimated those two vertical wells drained 109 and 124 acres, respectively.[17] Holmes concluded therefore that the temporary field rules established a proration unit size of 160 acres. However, the BBBB (Congl.) and the Kadane Cato (Congl) Fields are on Statewide Rules. That is, the standard proration unit size for wells in these fields is 40 acres, not 160 acres.

While it may have been reasonable to base the temporary field rules on 160-acre units, in the instant case a clearer picture of the productivity of the field has evolved through two additional years of development with a total of four horizontal wells.

The Examiners find Eagle lacks persuasive evidence to suggest that the four wells in the field are in pressure communication with one another–evidence which, if it existed,

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[17] Two other wells were drilled into the Atoka Formation conglomerate within 2.5 miles of the Spanky well, but were not considered to be comparable wells to the Spanky 2 Well No. 2H, the discovery well for the Short Grass Prairie (Cong) Field.

might suggest the proposed proration unit size and well spacing are appropriate. The production decline curves for the four wells (Exhibit Nos. 12 through 15) do not indicate disturbance from offset well fracture stimulation or production. In addition, the Eagle's own evidence did not describe any evidence of pressure communication.[18]

The Examiners conclude the evidence in the record demonstrates 40 acres to be an appropriate standard proration unit size for the subject field.

Additional Acreage for Horizontal Wells

Horizontal wells may be assigned additional acreage based on the horizontal drainhole length. The amount of additional acreage is specified in Statewide Rule 86(d)(16 Tex. Admin. Code § 3.86, Horizontal Drainhole Wells). For fields in which the standard proration unit size is 40 acres or less, Statewide Rule 86(d) provides additional acreage, rounded up to the nearest 20 acres, can be calculated based on drainhole length (in feet) as follows:

$$AdditionalAcreage = \left[\frac{Length}{585} \times 20\right] \approx \left[Length \times 0.034\right]$$

For fields where the standard proration unit size is more than 40 acres, Statewide Rule 86(d) provides additional acreage, rounded up to the nearest 40 acres, may be calculated based on drainhole length (in feet) as follows:

$$AdditionalAcreage = \left[\frac{Length}{827} \times 40\right] \approx \left[Length \times 0.048\right]$$

In contrast, the temporary field rules for the Short Grass Prairie (Cong) Field provide the following formula for calculating the additional acreage that may be assigned to a horizontal well:

$$AdditionalAcreage = \left[Length \times 0.15\right]$$

Eagle provided little evidence to indicate that the current temporary field rule provision for additional acreage (drainhole length multiplied by 0.15) is appropriate for this field. As stated previously, Eagle's 97-acre drainage area is based on EURs of three horizontal wells with drainhole lengths ranging from 3,541 feet to 3,819 feet. That is, Eagle's 97-acre typical drainage area already accounts for additional productive acreage from a horizontal well. Therefore, Eagle's approach allowing an operator to assign additional acreage to a well is duplicative, as it considers additional acreage from horizontal drainhole wells twice. For example, the standard 160-acre unit size is based on

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[18] Tr. 23: 6-18.

typical horizontal wells draining 97 acres; second, it allows additional acreage to be assigned based on the length of the drainhole. Table 2 provides a comparison of acreage assignment scenarios.

TABLE 2
ADDITIONAL ACREAGE SCENARIOS

Well	Drainhole Length (ft)	Extra Acreage per Field Rules 160 acre units	Extra Acreage per Rule 86(d) 160 acre units	Extra Acreage per Rule 86(d) 40 acre units
Angelo 4, Well No. 2H	968	160 + 145 = 305	160 + 80 = 160	40 + 40 = 80
Johnson 1, Well No. 1H	3,608	160 + 541 = 701	160 + 200 = 360	40 + 120 = 160
Spanky 2, Well No. 2H	3,819	160 + 573 = 732	160 + 200 = 360	40 + 120 = 160
Zip 74, Well No. 1H	3,541	160 + 531 = 691	160 + 200 = 360	40 + 120 = 160

Mr. Hanners did not provide any evidence of the drainage capabilities of wells in the field. Rather, Mr. Hanners pointed to the absurdity of a field rule allowing a 4,000 foot horizontal well to hold up to 760 acres when the well itself is draining far less.

The Examiners conclude that the evidence in the record indicates that 40-acre proration units with the option to assign additional acreage based on Statewide Rule 86(d) is the best fit to the observed and reported field data provided by Eagle. Adopting 40-acre field rules with additional acreage per Rule 86(d) will not strand hydrocarbons or otherwise cause waste.

Outliers

Eagle asserts that the Angelo well is the an outlier in terms of productivity. Eagle links the outlier status to possible technical issues during well drilling and completion. However, as seen on Table 1, however, the Angelo well has a revised drainhole length about one-quarter that of the Johnson and Spanky wells. Similarly, the EUR of the Angelo well is one-quarter that of the Johnson and Spanky wells. Based on drainhole length, then, the Angelo well appears to be consistent with two other wells, and not an outlier, if EUR is a function of drainhole length.

It may be that the true outlier in terms of productivity is the Zip well, which has an EUR of more than twice that of the Johnson and Spanky wells while also having a similar drainhole length (see Table 1), fracture stages, fracture fluid, and proppant loads. The Zip well has an EUR of 144,353 barrels of oil, which corresponds to a drainage area of about 150 acres. However, the Zip well was fracture stimulated with 7 million cubic feet (MMCF) of nitrogen. Nitrogen is commonly used in enhanced oil recovery projects to improve

miscibility, effectively increasing the recovery factor above 10.7 percent (the value used for the other three wells), and resulting in a significantly increased EUR.

According to the information presented in Exhibits 10 through 12, the Zip well, with its 3,541-foot drainhole and EUR of 144,353 barrels of oil, may have a drainage area of about 150 acres. However, hypothetically, if the addition of nitrogen to the well completion program increased the recovery factor from 10.7 percent to, say, 15 percent, then the drainage area of the Zip well would be reduced to about 70 acres. Either way, the 160-acre proration unit size, with additional horizontal well acreage, appears to be appropriate.

Top Oil Allowable

The current Field Rule No. 4 provides for an allowable of 353 bopd based on a 160-acre standard proration unit. Reducing the standard unit size to 40 acres would also require a reduced top allowable. From Statewide Rule 45 (16 Tex. Admin. Code § 3.45), the 1968 yardstick allowable for a well producing from a depth of 7,000 feet to 8,000 feet on a 40-acre unit is 121 bopd. However, the allowable can be increased based on additional acreage assigned to horizontal wells. The Johnson, Spanky, and Zip wells would have a resulting top oil allowable of 484 bopd.[19] Only one of the four wells in the field tested at a higher rate than 484 bopd. The Zip well reported an initial potential test of 683 bopd. This production rate was not sustained. Within about three months the daily rate had fallen below 400 bopd.[20]

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. Temporary field rules for the Short Grass Prairie (Cong) Field in Hardeman County, Texas, were established by Commission Final Order in Oil & Gas Docket No. 09-0277359 on October 2, 2012.

3. Eagle Hydrocarbons, LLC (Eagle) seeks to make permanent the existing temporary field rules.

4. The 160-acre proration unit size established in the temporary field rules was based on two vertical wells in the BBBB (Congl.) and the Kadane Cato (Congl) Fields. The wells used to estimate drainage area are located 11 to 16 miles to the south of the Short Grass Prairie (Cong) Field. The BBBB

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19 Adjusted allowable = (121 bopd) x (160 acres / 40 acres) = 484 bopd.

20 Exh. No. 15.

(Congl.) and the Kadane Cato (Congl) Fields are on 40-acre Statewide Rules for density and spacing.

5. Since the establishment of the temporary field rules, four horizontal wells have been completed in the field and are producing oil, which are the:

   a. Angelo 4, Well No. 2H;

   b. Johnson 1, well No 1H;

   c. Spanky 2, Well No. 2H; and

   d. Zip 74, Well No. 1H.

6. The field can be effectively and efficiently developed with horizontal wells, and the following horizontal rules will facilitate this development: (1) definition of take points; (2) 100-foot lease line spacing for the first and last take point in horizontal drainhole well; (3) no minimum between well spacing limitation between vertical and horizontal drainhole wells or horizontal wells that are parallel or sub-parallel and do not overlap more than 500 feet; (4) a 50-foot box rule; and (5) off-lease penetration points for horizontal drainhole wells.

7. Horizontal wells in this field with drainhole lengths ranging from 3,541 feet to 3,819 feet drain 97 acres.

8. The Johnson 1 Well No. 1H is currently assigned 453 acres. The Angelo 4 Well No. 2H is currently assigned 305.2 acres.

9. Under current field rules, the a well in the field with a 4,000 foot drainhole can be assigned up to 760 acres.

10. With 40-acre standard proration units and additional acreage according to Statewide Rule 86(d), horizontal wells in this field with drainhole lengths from 3,541 feet to 3,819 feet can be assigned 160 acres.

11. No evidence of pressure communication between the wells was presented.

12. Lease line spacing of 467 feet and between well spacing of 660 feet are appropriate for this field.

13. 40-acre standard proration units and additional acreage according to Statewide Rule 86(d) are appropriate for this field.

14. The 1968 yardstick allowable for a well producing from a depth of 7,000 feet to 8,000 feet on a 40-acre unit is 121 barrels of oil per day. The allowable can be increased based on additional acreage assigned to horizontal wells.

15. Adopting 40-acre proration units with additional acreage per Rule 86(d) with a allow a 4,000-foot lateral to hold up to 160 acres, will not strand hydrocarbons or otherwise cause waste, and will protect correlative rights.

CONCLUSIONS OF LAW

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051.

2. All notice requirements have been satisfied. 16 Tex. Admin. Code § 1.45.

3. 40-acre standard proration units and additional acreage according to Statewide Rule 86(d) will prevent waste and protect correlative rights.

4. Lease line spacing of 467 feet and between well spacing of 660 feet will prevent waste and protect correlative rights.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend the Commission enter an order amending the temporary field rules for the Short Grass Prairie (Cong) Field to include 40-acre standard proration units and additional acreage according to Statewide Rule 86(d), and making the temporary field rules permanent.

Respectfully submitted,

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Laura Miles-Valdez
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