



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 04-0314952

**APPLICATION OF METANO ENERGY III, LP TO ADOPT PERMANENT FIELD RULES
IN THE GARCIAS RIDGE (QUEEN CITY) FIELD , STARR COUNTY, TEXAS**

HEARD BY: Richard Eyster, P.G. - Technical Examiner
Kristi M. Reeve - Administrative Law Judge

HEARING DATE: October 30, 2018

APPEARANCES:

Dale E. Miller

REPRESENTING:

Metano Energy III, LP

PROCEDURAL HISTORY

Application Filed:	September 11, 2018
Notice of Hearing:	October 9, 2018
Date of Hearing:	October 30, 2018

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Metano Energy III, LP ("Metano") is proposing to adopt permanent field rules for the Garcias Ridge (Queen City) Field, Starr County, Texas ("Field"). They request to adopt permanent field rules to replace the Statewide Rules that have been in place since the Field was discovered.

The Garcias Ridge (Queen City) Field was discovered on December 15, 1996 at a depth of 9,458 feet. It is currently governed by the following Statewide Rules with the addition of the special gas allowable assignment:

- a. 467'-1200' lease and between well spacing
- b. 40-acre base proration units
- c. No maximum diagonal length
- d. 100% absolute open flow ("AOF") status for the gas Field
- e. Daily Oil Limit of 157 barrels per day for ("bpd") the oil Field

Metano requests that the current spacing, density rule, and allocation formula be amended in the Garcias Ridge (Queen City) Field.

Notice of the application was sent to all operators with wells in the Field. The application is unopposed. The Technical Examiner and Administrative Law Judge (collectively, "Examiners") recommend approval of the permanent field rules for the Garcias Ridge (Queen City) Field, as requested by Metano.

DISCUSSION OF THE EVIDENCE

The Garcias Ridge (Queen City) Field is in Starr County, Texas. The Field was discovered on December 15, 1996 at a depth of 9,458 feet. To date the Field has been developed with fifty-two (52) vertical wells and now the current plan is to do additional in-fill development with horizontal wells.

The Field has a cumulative production of 57,927,212 thousand cubic feet ("MCF") of gas well gas and/or casinghead gas and 1,999,499 barrels ("bbls") of condensate and/or oil production through July 2018. Fifty-one (51) of the wells have been designated as gas wells and one (1) additional well was initiated as a gas well and soon thereafter re-classified to be an oil well.

Metano is requesting to adopt new horizontal well field rules to stimulate new drilling in the Field. They believe that horizontal wells will be able to recover lost or isolated remnant reserves within the reservoir that none of the vertical wells were able to recover.

Volumetric content calculations were performed on the wells in the Field and the average reservoir parameters were determined to be a porosity of 16%, water saturation of 47%, recovery factor of 80%, net effective pay thickness of 43 feet and a drainage area of 80-acres and with 40-acre optional units with a 10% tolerance provision for the gas field. Using these parameters, the recoverable gas-in-place calculated to be 2,802,912 MCF for an 80-acre proration unit and 1,401,456 MCF for a 40-acre unit. The drainage calculations for numerous wells in the Field show a wide range of drainage areas from the vertical wells that support the proposed 80-acre density base proration units along with the 40-acre optional units. The drainage areas were determined for numerous wells in the Field with drainage ranges from zero to 283.59 acres for one well. Of the wells studied, the following was observed:

- Ten wells drained less than 20 acres
- Eleven wells drained between 20 to 60 acres
- Five wells drained between 60.1 to 80 acres
- Two wells drained over 80 acres

This data demonstrates the heterogeneous nature of the reservoir showing the necessity of the proposed horizontal development rules to accommodate the recovery of the trapped or isolated reserves to prevent waste and protect correlative rights.

Therefore, the base 80-acre proration units with the 40-acre optional units for both the oil and gas Field with a 10% tolerance provision for the gas Field is appropriate and will prevent waste and protect correlative rights.

A rule was requested to allow for the filing of the Form P-16 with a plat of the entire lease and no requirement for the filing of individual proration unit plats. This rule eases the administrative burden on both the Commission and the operators. However, they also request to retain the option to file individual proration unit plats if they so desire.

The October 2018 Gas and Oil Proration Schedules shows that there are currently 43 active producing wells in this Field. The requested, more lenient spacing rules are appropriate and will allow for the 80-acre base unit and 40-acre optional unit wells to be drilled into the Field, thereby promoting conservation and preventing waste.

The proposed rules for the Garcias Ridge (Queen City) Field are as follows:

Rule 1: The entire correlative interval from 9,058' to 9,645' as shown on the Dual Induction-SFL-Array Induction-Long Spaced Sonic-Final Composite Log of the Transtexas Gas Corporation, Barrera Gas Unit Well No. 1, (API 42-427-32896), Vela Salvador Porcion, 90 SH. 28, A-178, Starr County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Garcias Ridge (Queen City) Field.

Rule 2: No gas or oil well shall hereafter be drilled nearer than THREE HUNDRED THIRTY (330) feet to any property line, lease line or subdivision line. There will be no minimum spacing requirement (0' between well) to any applied for, permitted or completed vertical or horizontal well in the same reservoir on the same lease, pooled unit or unitized tract. The aforementioned distances in the above rule are minimum distances to allow an operator flexibility in locating a well. 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.

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

- a. No horizontal drainhole well for oil or gas 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.
- b. 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 or any property line, lease line of subdivision line shall be a minimum of THREE HUNDRED THIRTY (330) feet.

For the purpose of assigning additional acreage to a horizontal 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.

Rule 3: The acreage assigned to the individual gas well for the purpose of allocating allowable gas production thereto 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; provided that tolerance acreage of ten (10) percent shall be allowed for each standard proration unit such that an amount not to exceed a maximum of EIGHTY EIGHT (88) acres may be assigned. Each proration unit containing less than EIGHTY (80) acres shall be a fractional proration unit. All proration units shall consist of continuous and contiguous acreage which can reasonably be considered to be productive of gas. No double assignment of acreage will be accepted.

An operator, at his option, shall be permitted to form optional drilling units of FORTY (40) acres. A proportional acreage allowable credit will be given for a well on a fractional proration unit. For the determination of acreage credit in this Field, operators shall file for each oil or gas well in this Field a Form P-16 Data Sheet Acreage Designation with a plat of the entire lease and no requirement to file individual proration plats. However, an operator may file those individual proration plats if they choose to do so.

Rule 4a: The gas field shall be classified as associated-prorated. The daily allowable production of gas from individual wells completed in the subject Field shall be determined by allocating the allowable production, after deductions have been made for wells which are incapable of producing their gas allowables, among the individual wells in the following manner:

NINETY percent (90%) of the total Field allowable shall be allocated equally among all of the individual proratable wells producing from the Field .

TEN percent (10%) of the total Field allowable shall be allocated among the individual wells in the proportion that the acreage assigned such well for allowable purposes bears to the summation of the acreage with respect to all proratable wells producing from the Field.

If the Field 's 100% AOF status should be removed the above formula will be used to assign the allowable.

RULE4b: The maximum daily oil allowable for each well in the subject Field shall be the 1965 Yardstick Allowable and Statewide Rule 86. 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 10% and 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 90% of the maximum daily oil allowable.

FINDINGS OF FACT

1. Notice of this hearing was provided to all persons entitled to notice at least ten (10) days prior to the date of the hearing and no protest were received.
2. The Garcias Ridge (Queen City) Field (Field No. 33972360) is in Starr County, Texas.
3. The Garcias Ridge (Queen City) Field was discovered on December 15, 1996.
4. The Garcias Ridge (Queen City) Field , Starr County, Texas is currently operated under Statewide Rules.
5. The Field has been developed with 52 wells of which 46 are still on the proration schedules. The cumulative production for the field has been 57.927 billion cubic feet of gas or casinghead gas and 1.999 million barrels of condensate or oil.
6. The gas field was designated as a 100% AOF (Absolute Open Flow) Field on June 1, 1997.
7. The last producing well completed in the Field was in 2012. Metano plans to drill new horizontal wells in the Field.
8. On February 1, 2017, the Commission revised Statewide Rule 86. All other provisions of SWR 86 that are not addressed in this application are to be adopted.
9. The field rules will provide for orderly spacing and between well spacing and allow for additional in-fill development.
10. Development of the Field using take points and relaxed spacing rules and the proposed density rules will prevent waste, protect correlative rights and promote the orderly development of the Field.
11. At the hearing, the applicant agreed on the record that the Final Order in this case is to be effective when the Master Order relating to it is signed.

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 §§ 1.43 and 1.45.
3. The proposed field rules will prevent waste, protect correlative rights, and promote the orderly development of the Field.
4. All things have been accomplished or have occurred to give the Railroad Commission jurisdiction in this matter.
5. Amending field rules for the Garcias Ridge (Queen City) Field is necessary to prevent waste, protect correlative rights, promote conservation and to provide for the orderly development of the Field and will satisfy statutory requirements.
6. Pursuant to § 2001.144(a)(4)(A) of the Texas Government Code and the agreement of the applicant, this Final Order is effective when a Master Order relating to the Final Order is presented at Commission conference and signed by the Commissioners.

EXAMINER'S RECOMMENDATION

Based on the above findings of facts and conclusions of law, the examiners recommend that the Commission adopt the permanent field rules, as requested Metano Energy III, LP, for the Garcias Ridge (Queen City) Field, Starr County, Texas.

Respectfully submitted,



Richard Eyster, P.G
Technical Examiner



Kristi M. Reeve
Administrative Law Judge