

**RAILROAD COMMISSION OF TEXAS
HEARINGS DIVISION**

**OIL AND GAS DOCKET NO.
7C-0297279**

**IN THE SQUARE TOP (BARN-WOOD)
FIELD, UPTON COUNTY, TEXAS**

**FINAL ORDER
APPROVING THE APPLICATION OF APACHE CORPORATION
FOR NEW FIELD DISCOVERY DESIGNATION FOR THE PROPOSED
SQUARE TOP (BARN-WOOD) FIELD AND THE ADOPTION
OF TEMPORARY FIELD RULES FOR THE
SQUARE TOP (BARN-WOOD) FIELD, UPTON COUNTY, TEXAS**

The Commission finds that after statutory notice in the above-numbered docket heard on August 11, 2015, the presiding 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.

Therefore, it is ordered by the Railroad Commission of Texas that the application of Apache Corporation for a new field discovery for the Square Top (Barn-Wood) Field (RRC Field No. xxxxx-xxx), Upton County, Texas be and hereby is approved.

Therefore, it is ordered by the Railroad Commission of Texas that the following temporary operating rules shall be adopted for the Square Top (Barn-Wood) Field, Upton County, Texas.

RULE 1: The entire combined correlative interval from 8,576 feet to 9,103 feet as shown on the log of the Apache Corp., ZPZ Fee Lease, Well No. 501M (API No. 42-461-39797), Section 6, Block 1, MK&TE RR Co./C.W. Oldham Survey, A-857), Upton County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Square Top (Barn-Wood) Field. This interval is intended to include all reservoirs between the top of the Barnett Shale and the base of the Woodford Shale Formations.

RULE 2: No well for oil or gas shall hereafter be drilled nearer than THREE HUNDRED THIRTY (330) 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 THREE HUNDRED THIRTY (330) 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.

Distances for purposes of spacing exceptions shall be measured in the same manner as the spacing requirement such that notice distances from first and last take point shall be measured THREE HUNDRED THIRTY (330) feet perpendicular to the horizontal well and in a ONE HUNDRED (100) foot radius from the first and last take point.

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. Except as provided in these rules, 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 SIX HUNDRED SIXTY (660) feet from the location of a vertical well or (ii) within SIX HUNDRED SIXTY (660) 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.

The density rules for the Square Top (Barn-Wood) Field shall apply separately to horizontal wells and vertical wells such that proration units on a tract for horizontal and vertical wells are independent and may overlap. Operators shall file a P-16 Data Sheet or successor form along with the Form W-1 and completion report for all horizontal wells and all wells on a tract where both vertical wells and horizontal wells are assigned to the same field number on the same acreage in this field.

RULE 4: The maximum daily oil allowable for each oil well on an EIGHTY (80) acre unit in the subject field shall be the discovery allowable of pursuant to Statewide Rule 40 for wells completed at this depth, 440 bopd, and subject to Statewide Rule 86 allowable based on additional acreage assignment until expiration of the discovery allowable. 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.

Upon an operator's written request, the Commission shall cancel overproduction for any lease in this field for any twelve one-month periods.

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 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 here in above set out.

It is further ORDERED by the Railroad Commission of Texas that exceptions to Statewide Rule 10 are hereby approved for all wells in the Spraberry (Trend Area) Field and the Square Top (Barn-Wood) Field. For wells which are commingled in any combination of the subject fields, the commingled production shall be assigned to the Spraberry (Trend Area) Field. Further, acrea assigned to wells on any leases for allocation of allowable shall not be assigned to any other wells or wells projected to or completed in any of the fields; 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, such reformantion does not violate other conservation regulations. The operator of any well downhole commingled in any combination of the subject fields shall file the appropriate completion forms and/or other forms as required by the Commission and shall file at the same time the appropriate Commission required administrative Rule 10 exception downhole commingling fee.

It is further ordered that these rules are temporary and effective until September 29, 2017, 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.

Done this 29th day of March, 2016.

RAILROAD COMMISSION OF TEXAS

**(Order approved and signatures affixed by
Hearings Division Unprotected Master Order
dated March 29, 2016)**