

**RAILROAD COMMISSION OF TEXAS
HEARINGS DIVISION**

**OIL AND GAS DOCKET
NO. 09-0286297**

**IN THE KRS (MARBLE FALLS) FIELD,
JACK COUNTY, TEXAS**

**FINAL ORDER
AMENDING FIELD RULES FOR THE
KRS (MARBLE FALLS) FIELD, JACK COUNTY, TEXAS**

The Commission finds that after statutory notice in the above-numbered docket heard on January 16, 2014, 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 Field Rules adopted in Final Order No. 09-0275135, effective April 24, 2012, for the KRS (Marble Falls) Field, Jack County, Texas, are hereby amended. The amended Field Rules are set out in their entirety as follows:

RULE 1: The entire correlative interval from 5,070 feet to 5,481 feet as seen on the log of the Swan PC, LP - W.B. Owen Lease, Well No. 1 (API No. 42-237-30424), G. Gates Survey, A-238, Jack County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the KRS (Marble Falls) Field.

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. 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. The first take point and last take point in a horizontal well shall not be nearer than ONE HUNDRED (100) feet from 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 THIRTY (330) feet.

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

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

RULE 3a: The acreage assigned to an individual vertical gas well for the purpose of allocating allowable production thereto shall be known as a proration unit. The standard drilling and proration units are established hereby to be THREE HUNDRED TWENTY (320) acres. No double assignment of acreage will be allowed. There is no maximum diagonal limitation in this field.

Notwithstanding the above, the acreage assigned to a gas well which has been drilled as a horizontal drainhole may contain more than THREE HUNDRED TWENTY (320) acres providing that the following formula is utilized to determine the proper assignment of acreage:

$$A = (L \times 0.14) + 320 \text{ acres}$$

Where: A = calculated area assignable, if available, to a horizontal drainhole for proration purposes rounded upward to the next whole number evenly divisible by 40 acres;

L = the horizontal drainhole distance measured in feet between the first take point and the last take point.

For the purpose of assigning additional acreage to a horizontal drainhole gas well pursuant to the formula above, 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 3b: The acreage assigned to an individual vertical 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 ONE HUNDRED SIXTY (160) acres. No proration unit shall consist of more than ONE HUNDRED SIXTY (160) acres except as hereinafter provided. 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.

If after the drilling of the last well on any lease or pooled unit and the assignment of acreage to each well thereon in accordance with the regulations of the Commission there remains additional unassigned acreage of less than ONE HUNDRED SIXTY (160) acres, then and in such event the remaining unassigned acreage up to and including a total of FORTY (40) acres may be assigned as tolerance acreage to the last well drilled on such lease or may be distributed among any group of wells located thereon, so long as the proration units resulting from the inclusion of such additional acreage meet the limitations prescribed by the Commission.

Additional acreage may be assigned to each horizontal drainhole oil well providing that the following formula is utilized to determine the proper assignment of acreage:

$$A = (L \times 0.14) + 160 \text{ acres}$$

Where: A = calculated area assignable, if available, to a horizontal drainhole for proration purposes rounded upward to the next whole number evenly divisible by 40 acres;

L = the horizontal drainhole distance measured in feet between the first take point and the last take point.

For the purpose of assigning additional acreage to a horizontal drainhole oil well pursuant to the formula above, 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 3c: 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 pooled unit for proration purposes. For oil or gas wells, operators shall be required to file, along with the Form P-15, a plat of the lease, pooled unit or property; provided that such plat shall not be required to show individual proration units. There is no maximum diagonal limitation in this field.

RULE 4a: The field shall be classified as associated-prorated. The daily allowable production of gas from individual wells completed in the 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 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 this field.

RULE 4b: The maximum daily oil allowable for a well in the field shall be determined by multiplying the 1965 Yardstick Allowable of 310 barrels of oil per day 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 proration purposes, exclusive of tolerance acreage. The daily oil allowable for a well in the field shall be adjusted in accordance with Statewide Rule 49(a) when applicable.

RULE 5: The daily oil allowable for a well in the field producing with a gas-oil ratio in excess of 5,000 cubic feet of gas per barrel of oil produced shall be allowed to produce only that volume of gas obtained by multiplying its maximum daily oil allowable by 5,000. The gas volume thus obtained shall be known as the daily gas limit for the well. The daily oil allowable for the well shall then be determined by dividing its daily gas limit by its producing gas-oil ratio in cubic feet per barrel.

RULE 6: For oil and gas wells, Stacked Lateral Wells within the correlative interval for the field that are drilled from different wellbores may be considered a single well for regulatory purposes, as provided below:

1. A horizontal drainhole well qualifies as a Stacked Lateral Well under the following conditions:
 - a) There are two or more horizontal drainhole wells on the same lease or pooled unit within the correlative interval for the field;
 - b) Horizontal drainholes are drilled from different surface locations;
 - c) Each point of a Stacked Lateral Well's horizontal drainhole shall be no more than 300 feet in a horizontal direction from any point along any other horizontal drainhole of that same Stacked Lateral Well. This distance is measured perpendicular to the orientation of the horizontal drainhole and can be illustrated by the projection of each horizontal drainhole in the Stacked Lateral Well into a common horizontal plane

- as seen on a location plat; and
- d) There shall be no maximum or minimum distance limitations between horizontal drainholes of a Stacked Lateral Well in a vertical direction.
2. A Stacked Lateral Well, including all surface locations and horizontal drainholes comprising such Stacked Lateral Well, shall be considered as a single well for density and allowable purposes.
3. Each surface location of a Stacked Lateral Well must be permitted separately and assigned an API number. In permitting a Stacked Lateral Well, the operator shall identify each surface location of such well with the designation "SL" in the well's lease name and also describe the well as a Stacked Lateral Well in the "Remarks" of the Form W-1 drilling permit application. The operator shall also identify on the plat any other existing, or applied for, horizontal drainholes comprising the Stacked Lateral Well being permitted.
4. To be a regular location, each horizontal drainhole of a Stacked Lateral Well must comply with (i) the field's minimum spacing distance as to any lease, pooled unit or property line, and (ii) the field's minimum between well spacing distance as to any different well, including all horizontal drainholes of any other Stacked Lateral Well, on the same lease or pooled unit in the field. Operators may seek exceptions to Rules 37 and 38 for Stacked Lateral Wells in accordance with the Commission's rules, or any applicable rule for this field.
5. Operators shall file separate completion forms for each surface location of the Stacked Lateral Well. Operators shall also file a certified as-drilled location plat for each surface location of a Stacked Lateral Well showing each horizontal drainhole from that surface location, confirming the well's qualification as a Stacked Lateral Well and showing the maximum distances in a horizontal direction between each horizontal drainhole of the Stacked Lateral Well.
6. In addition to the completion forms for each surface location of a Stacked Lateral Well, the operator must file a separate Form G-1 or Form W-2 for record purposes only for the Commission's Proration Department to build a fictitious "Record Well" for the Stacked Lateral Well. This Record Well will be identified with the words "SL Record" included in the lease name. This Record Well will be assigned an API number and Gas Well ID or Oil lease number and listed on the proration schedule with an allowable if applicable.
7. In addition to the Record Well, each surface location of a Stacked Lateral Well will be listed on the proration schedule, but no allowable shall be assigned for an individual surface location. Each surface location of a Stacked Lateral Well shall be required to have a separate G-10 or W-10 test and the sum of all horizontal drainhole test rates shall be reported as the test rate for the Record Well.

8. Operators shall report all production from horizontal drainholes included as a Stacked Lateral Well on Form PR to the Record Well. Production reported for a Record Well is the total production from the horizontal drainholes comprising the Stacked Lateral Well. Operators shall measure the production from each surface location of a Stacked Lateral Well. Operators may measure full well stream with the measurement adjusted for the allocation of condensate based on the gas to liquid ratio established by the most recent G-10 well test rate for that surface location. The gas and condensate production will be identified by individual API number and recorded and reported on the "Supplementary Attachment to Form PR".

9. If the field's 100% AOF status should be removed, the Commission's Proration Department shall assign a single gas allowable to each Record Well classified as a gas well. The Commission's Proration Department shall also assign a single oil allowable to each Record Well classified as an oil well. The assigned allowable may be produced from any one or all of the horizontal drainholes comprising the Stacked Lateral Well.

10. Operators shall file an individual Form W-3A Notice of Intention to Plug and Abandon and Form W-3 Well Plugging Report for each horizontal drainhole comprising the Stacked Lateral Well as required by Commission rules.

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

It is further **ORDERED** by the Railroad Commission of Texas that blanket authority for exception to Statewide Rule 10 is hereby approved for all wells in the KRS (Marble Falls), and Newark, East (Barnett Shale), Fields, Jack County, Texas.

For wells which are commingled in the two subject fields after the effective date of this order, commingled production shall be assigned to the KRS (Marble Falls) Field.

Furthermore, acreage assigned to wells on any leases for allocation of allowable shall not be assigned to any other well or wells projected to be completed or completed in the two subject 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, that such reformation does not violate other conservation regulations.

The operator of any well downhole commingled in the two subject fields shall file the appropriate drilling permit, completion forms, an abbreviated Statewide Rule 10 Data Sheet for Wells Subject to Fieldwide Statewide Rule 10 exception (See Attachment A) and shall file at the same time, the appropriate Commission required administrative Statewide Rule 10 exception downhole commingling fee.

It is further **ORDERED** by the Railroad Commission of Texas that the application of Brigadier Operating, LLC for suspension of the allocation formula in the KRS (Marble Falls) Field is approved. The allocation formula may be reinstated administratively if the market demand for gas in the KRS (Marble Falls) Field drops below 100% of deliverability. If the market demand for gas in the KRS (Marble Falls) Field drops below 100% of deliverability while the allocation formula is suspended, the operator shall immediately notify the Commission and the allocation formula shall be immediately reinstated.

Done this 25th day of March, 2014.

RAILROAD COMMISSION OF TEXAS

**(Order approved and signatures
affixed by Hearings Divisions'
Unprotested Master Order dated March
25, 2014)**

Attachment A

STATEWIDE RULE 10 EXCEPTION DATA SHEET

\$375.00 Fee Required
(Statewide Rule 78
effective 05/01/2012)

County _____

RRC District _____

Date _____

(1) Operator Name, Address, RRC ID No., Name & Phone No. of Contact Person

____ Does the applicant request to receive all Commission correspondence concerning the administrative review of this application VIA EMAIL ONLY? If yes, indicate email address _____

(2) API# _____ Lease name & well # _____

(3) Field Information. Indicate the following *for each field*:

- (a) Field name _____
- (b) Field number _____
- (c) Oil or gas _____
- (d) Spacing and density rules _____
- (e) Top allowable _____
- (f) Discovery date _____
- (g) Depth _____
- (h) Hydrogen sulfide status (Statewide Rule 36) _____

(4) Indicate an instance (operator, lease, well no., or docket #) wherein the Commission has granted a Statewide Rule 10 Exception for these same zones (If none, all operators in all of the zones must be notified of this application.) _____

(8) Are the Royalty and Working Interests identical with respect to all proposed combined zones in the well? _____

Filing instructions: File the original and any required attachments and fees with the Railroad Commission by hand delivery or mail to the following address:

RAILROAD COMMISSION OF TEXAS
ATTN: ENGINEERING UNIT
PO BOX 12967
AUSTIN TX 78711-2967