



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0287582

THE APPLICATION OF TEMA OIL AND GAS COMPANY TO AMEND FIELD RULES FOR THE SAND BAR (BONE SPRING) FIELD, WARD, WINKLER, CULBERSON, REEVES AND LOVING COUNTIES, TEXAS

HEARD BY: Karl Caldwell - Technical Examiner
Laura Miles-Valdez - Legal Examiner

HEARING DATE: April 30, 2014

APPEARANCES:

REPRESENTING:

APPLICANT:

Richard Atkins, P.E.
Dale Miller

Tema Oil and Gas Company

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field Rules for the Sandbar (Bone Spring) Field were amended in Final Order No. 08-0284789, effective November 12, 2013. The current Field Rules in effect for the field are summarized as follows:

1. Designation of the field as the correlative interval from 8,007 feet to 11,067 feet as shown on the log of the Anadarko E&P Onshore LLC - Sandbar 54-2-39 Lease, Well No. 1 (API No. 42-301-31431);
2. 467'-0' lease line spacing with special provisions for "take points", 200' lease line spacing for the first and last take points, 50' "box" rule and "off-lease" penetration point for horizontal drainhole wells;
3. 320 acre units with optional 40 acre density, a table for the assignment of additional acreage to horizontal drainhole wells and the filing of Form P-15 without proration unit plats;

4. Allocation based on 95% acreage and 5% per well with AOF status and oil wells have unlimited net gas-oil ratio authority;
5. Special provisions for an exception to Statewide Rule 13(b)(5)(a), which requires producing a flowing oil well through tubing;
6. Special provisions for an exception to Statewide Rule 51(a), which requires 10 days for the filing of paperwork related to the completing of oil wells.

The field also has a special provision that wells with a gas-oil ratio of 3,000 cubic feet per barrel or higher be permanently classified as gas wells, effective the date of first production for each well.

Tema Oil and Gas Company ("Tema") requests that the Field Rules be amended to include a stacked lateral rule.

The application is unopposed and the examiners recommend that the Field Rules for the Sandbar (Bone Spring) Field in Ward, Winkler, Culberson, Reeves, and Loving Counties, Texas be amended, as proposed by Tema.

DISCUSSION OF EVIDENCE

The Sandbar (Bone Spring) Field was discovered on September 15, 2010 at an average depth of 8,900 feet. The field is classified as associated-100% AOF. The field operates under Field Rules that provide for 467'-0' well spacing and 320 acre units with optional 40 acre density. There are currently 40 producing oil wells and 32 producing gas wells listed on the oil and gas proration schedules. Cumulative production from the field through January 2014 is 1,588,996 BO, 1,097,417 bbl of condensate, and 27.5 BCFG.

The subject field is being developed with horizontal drainhole wells and Tema requests that the Field Rules be amended to include provisions for stacked laterals. Several fields in the area with horizontal well development have already adopted horizontal stacked lateral field rules. The correlative interval for Sandbar (Bone Spring) Field is a total of 3,067 feet thick and Tema states that multiple lateral wells are necessary to drain the entire correlative interval effectively.

Tema proposes the following stacked lateral rules for the Sandbar (Bone Spring) Field:

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 drainholes 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. Where one drainhole of a Stacked Lateral is longer than that of another drainhole of the Stacked Lateral, the 300 feet maximum shall be measured between the longer lateral and a projection of the shorter lateral along the same path as the existing lateral; 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.
- a). All points between the first Take Point and the Last Take Point on all drainholes of a Stacked Lateral Well, including all Take Points on any horizontal drainhole that is longer than the Record Well, must fall within a box with a surface area equal to the number of acres to be assigned to the Stacked Lateral Well for allowable purposes. Two sides of the box will be formed by the two horizontal laterals that are the farthest apart in a horizontal direction, which shall be no greater than the 300 foot requirement in item 1 above.
 - b). For the purpose of assigning additional acreage to the Stacked Lateral Well pursuant to the table in Field Rule 3b: above, the horizontal drainhole displacement shall be calculated based on the distance from the first take point to the last take point in the horizontal drainhole for the Record Well, regardless of the horizontal drainhole displacement of other horizontal drainholes of the Stacked Lateral Well.
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 completions 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. The 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.

Tema also requests that the gas allocation formula remain suspended, as there is a 100% market demand for all of the gas produced from the field.

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 protests were received.
2. The Sandbar (Bone Spring) Field was discovered in September 2010 at an average depth of 8,900 feet.
 - a. The field is classified as associated-100% AOF.
 - b. There are currently 40 producing oil wells and 32 producing gas wells in the subject field.
 - c. The field is actively being developed with horizontal drainhole wells.
3. Including a field rule provision for stacked laterals is appropriate for the Sandbar (Bone Spring) Field.
 - a. The correlative interval for the field is over 3,000 feet thick.

- b. Multiple laterals are required to effectively drain the correlative interval for the subject field.
- 4. Continued suspension of the allocation formula is appropriate, as there is a 100% market demand for all of the gas produced from the field.


CONCLUSIONS OF LAW

- 1. Proper notice was issued as required by all applicable statutes and regulatory codes.
- 2. All things have occurred and been accomplished to give the Commission jurisdiction in this matter.
- 3. Amending the field rules for the Sandbar (Bone Spring) Field will prevent waste and will promote development of the field.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend that the Commission amend the Field Rules for the Sandbar (Bone Spring) Field as requested by Tema Oil and Gas Company.

Respectfully submitted,


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Technical Examiner


Laura Miles-Valdez
Legal Examiner