RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

OIL AND GAS DOCKET NO. 03-0289967

IN THE MOSSY GROVE (GLEN ROSE) FIELD, WALKER AND MADISON COUNTIES, TEXAS

FINAL ORDER AMENDING THE TEMPORARY FIELD RULES FOR THE MOSSY GROVE (GLEN ROSE) FIELD WALKER AND MADISON COUNTIES, TEXAS

The Commission finds that after statutory notice in the above-numbered docket heard on July 23, November 18, and December 15, 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 Temporary Field Rules adopted in Oil & Gas Final Order No. 03-0216040 are hereby amended for the Mossy Grove (Glen Rose) Field, Walker and Madison Counties, Texas, and set are out in their entirety as follows:

RULE 1: The entire correlative interval from 11,522 feet to 13,020 feet, as shown on the log of the Humble Oil & Refining - M.B. McAdams Lease, Well No. 1 (now the Arrow Exploration Co., - Mossy Grove Gas Unit #1, Well No. 1), M.G. Casillas Survey (A-112), Walker County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Mossy Grove (Glen Rose) Field.

RULE 2: No well for oil shall hereafter be drilled nearer than FOUR HUNDRED SIXTY-SEVEN (467) feet to any property line, lease line or subdivision line. There is no between well spacing limitation for vertical or horizontal wells. 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 therefore shall be filed and will be acted upon in accordance with the provisions of Commission Statewide Rule 37 and 38, which applicable provisions of said rule 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 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. 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.
- 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 or any property line, lease line or subdivision line shall be a minimum of FOUR HUNDRED SIXTY-SEVEN (467) 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.

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:

- Two sides of the rectangle are parallel to the permitted drainhole and FIFTY (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 of 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, unitized tract or production sharing agreement 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 3: The acreage assigned to the individual 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 THREE HUNDRED TWENTY (320) acres. No proration unit shall consist of more than THREE HUNDRED TWENTY (320 acres, except as hereinafter provided. Tolerance acreage of TEN (10) percent shall be allowed for each proration unit so that an amount not to exceed a maximum of THREE HUNDRED FIFTY-TWO (352) acres may be assigned. 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. There is no maximum diagonal limitation in the Mossy Grove (Glen Rose) Field.

Notwithstanding the above, the acreage assigned to a horizontal well may contain more than THREE HUNDRED TWENTY (320) acres provided that the following formula is utilized to determine the proper assignment of acreage:

Formula: $A = [L \times 0.11488) \times 3.25] + 320$

Where: A = calculated area assignable, if available, to a horizontal well for proration purposes rounded upward to the next whole number

divisible by 40-acres;

L = horizontal drainhole displacement of the well measured in feet between the first and last take point of the horizontal well within the designated correlative interval, provided that L is at least 150 feet.

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. 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. There is no maximum diagonal requirement in this field.

- **RULE 4A:** The daily allowable production of gas from individual wells completed in a non-associated gas reservoir of 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 allowable, among the individual wells in the proportion that the acreage assigned such well for proration purposes bears to the summation of the acreage with respect to all proratable wells producing from the same reservoir;
- **RULE 4B:** The maximum daily oil allowable for a well in the field shall be determined by multiplying the applicable yardstick allowable 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:** 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 at least 2 different surface location;
 - c) Each point of a Stacked Lateral Well's horizontal drainhole shall be no more than 330 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** that these rules are temporary and effective until January 27, 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, may be modified or terminated.

Done this 27th day of January, 2015.

RAILROAD COMMISSION OF TEXAS

(Order approved and signatures affixed by OGC Unprotested Master Order dated January 27, 2015)