RAILROAD COMMISSION OF TEXAS OFFICE OF GENERAL COUNSEL HEARINGS SECTION

OIL AND GAS DOCKET NO. 06-0262000 IN THE CARTHAGE (HAYNESVILLE SHALE) FIELD, HARRISON, NACOGDOCHES, PANOLA, RUSK AND SHELBY COUNTIES, TEXAS

FINAL ORDER

APPROVING THE APPLICATION OF DEVON ENERGY PRODUCTION CO., LP FOR A NEW FIELD DESIGNATION AND ADOPTING TEMPORARY FIELD RULES FOR THE CARTHAGE (HAYNESVILLE SHALE) FIELD AND CONSOLIDATING VARIOUS BOSSIER AND HAYNESVILLE SHALE FIELDS INTO THE CARTHAGE (HAYNESVILLE SHALE) FIELD HARRISON, NACOGDOCHES, PANOLA, RUSK AND SHELBY COUNTIES, TEXAS

The Commission finds that after statutory notice in the above-numbered docket heard on July 28 and September 1, 2009, the presiding examiner has 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 proposal for decision, the findings of fact and conclusions of law contained therein, and any exceptions and replies thereto, hereby adopts as its own Findings of Fact Nos. 1 through 22, with the exception of Nos. 7, 9, 20, 21 and 22, and Conclusions of Law Nos. 1 through 11, with the exception of Nos. 3, 10 and 11, and incorporates said findings of fact and conclusions of law as if fully set out and separately stated herein. The Commission adopts the following substitute Findings of Fact and Conclusions of Law:

Substitute Findings of Fact:

- 7. Devon did not present sufficient evidence to demonstrate that a density of 640 acres with optional 40 acre density should be adopted on a permanent basis in the proposed Carthage (Haynesville Shale) Field. A density of 640 acres with optional 40 acre units should be adopted on a temporary basis.
- 9. For purposes of assignment of additional acreage pursuant to Rule 86, the distance between the first and last take-point in a horizontal well should be used.
- 20. The proposed box rule will allow operators reasonable minor deviations from the wellbore track that has been permitted.

Substitute Conclusions of Law:

- 3. Approval of the requested new field designation and adoption of temporary field rules prescribing 330 foot lease line spacing, no minimum between well spacing, and standard density of 640 acres with optional 40 acre units will prevent waste, protect correlative rights and promote the orderly development of the field.
- 10. The proposed "box rule" will prevent waste and protect correlative rights.

Therefore, it is **ORDERED** by the Railroad Commission of Texas that the application of Devon Energy Production Co., LP for a new field designation for its Hull Unit A Lease, Well No. 102, is hereby approved. The new field shall be known as the Carthage (Haynesville Shale) Field (RRC Field No. 16032 300), Harrison, Nacogdoches, Panola, Rusk and Shelby Counties, Texas.

It is further **ORDERED** that the following Field Rules are hereby adopted for the Carthage (Haynesville Shale) Field, Harrison, Nacogdoches, Panola, Rusk and Shelby Counties, Texas:

RULE 1: The entire correlative interval from 9,568 feet to 11,089 feet as shown on the log of the Devon Energy Production Co., LP - Hull Unit A Lease, Well No. 102 (API No. 42-365-36749), Panola County, Texas, shall be designated as a single reservoir for proration purposes and be designated as the Carthage (Haynesville Shale) Field.

RULE 2: No well for gas shall hereafter be drilled nearer than THREE HUNDRED THIRTY (330) feet to any property line, lease line, or subdivision line. There is no 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 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. All take points in a horizontal drainhole well shall be a minimum of THREE HUNDRED THIRTY (330) feet from any property line, lease line, or subdivision line. A permit or an amended permit is required for all take points closer to the property line, lease line, or subdivision line than the lease line spacing distance, including any perforations added in the vertical portion or the curve of a horizontal drainhole well.

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 of the nearest property line, lease line or subdivision line measured perpendicular from the wellbore.

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.

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 3: The acreage assigned to an individual gas well shall be known as a proration unit. The standard drilling and proration units are established hereby to be SIX HUNDRED FORTY (640) acres. No proration unit shall consist of more than SIX HUNDRED FORTY (640) acres; provided that, tolerance acreage of ten (10) percent shall be allowed for each standard proration unit so that an amount not to exceed a maximum of SEVEN HUNDRED FOUR (704) acres may be assigned. Each proration unit containing less than SIX HUNDRED FORTY (640) 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 allowed.

An operator, at his option, shall be permitted to form optional drilling and proration units of FORTY (40) acres. A proportional acreage allowable credit will be given for a well on a fractional proration unit. There is no maximum diagonal limitation in this field.

For the determination of acreage credit in this field, operators shall file for each 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. When the allocation formula in this field is suspended, operators in this field shall not be required to file plats with the Form P-15. When the allocation formula is in effect in this field, 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. Provided further, that if the acreage assigned to any well has been pooled, the operator shall furnish the Commission with such proof as it may require as evidence that interests in and under such proration unit have been so pooled. Operators in this field are exempt from the requirements of Rule 86(f)(4) entitled Proration Unit Plat; however operators must, for each horizontal drainhole, file a plat showing the as-drilled path, penetration point, terminus and, if applicable, perforations or external casing packer, for that horizontal drainhole and, for wells treated as stacked laterals, operators must file the plats required by paragraph number 6 of Rule 5. All plats referred to in this paragraph may be either a surveyor's plat or a certified plat, at the operator's option.

For the purpose of assigning additional acreage to a horizontal well pursuant to 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 4:** 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 locations on the same lease or pooled unit;
 - c) There shall be no more than 250 feet between the surface locations of horizontal drainholes qualifying as a Stacked Lateral Well.
 - d) 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
 - e) 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.

RULE 5: 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:

FIVE percent (5%) of the field's total allowable shall be allocated equally among all the individual proratable wells producing from the field.

NINETY FIVE percent (95%) 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 this field.

It is further **ORDERED** by the Railroad Commission of Texas that the application of Devon Energy Production Co., LP for suspension of the allocation formula in the Carthage (Haynesville Shale) Field is approved. The allocation formula may be reinstated administratively if the market demand for gas in the Carthage (Haynesville Shale) Field drops below 100% of deliverability. If the market demand for gas in the Carthage (Haynesville Shale) 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.

It is further **ORDERED** that a hearing will be held on or before January 1, 2012, to consider whether these Field Rules should be made permanent, modified or rescinded.

It is further **ORDERED** by the Railroad Commission of Texas that the following fields are consolidated into the Carthage (Haynesville Shale) Field (RRC Field No. 16032 300), Harrison, Nacogdoches, Panola, Rusk and Shelby Counties, Texas:

FIELD NAME	<u>FIELD NUMBER</u>
Shelbyville Deep (Haynesville)	82907 500
Center (Haynesville)	16697 300
Carthage, E. (Bossier)	16033 500
Waskom (Haynesville)	95369 260
Naconiche Creek (Haynesville)	64300 280
Naconiche Creek (Bossier)	64300 100
Bossierville (Bossier Shale)	10758 500
Beckville (Haynesville)	06448 600
Carthage, North (Bossier Shale)	16034 200

Wells in the subject fields shall be transferred into the Carthage (Haynesville Shale) Field without requiring new drilling permits.

Each exception to the examiners' proposal for decision not expressly granted herein is overruled. All requested findings of fact and conclusions of law which are not expressly adopted herein are denied. All pending motions and requests for relief not previously granted or granted herein are denied.

This order will not be final and effective until 20 days after a party is notified of the Commission's order. A party is presumed to have been notified of the Commission's order three days after the date on which the notice is actually mailed. If a timely motion for rehearing is filed by any party at interest, this order shall not become final and effective until such motion is overruled, or if such motion is granted, this order shall be subject to further action by the Commission. Pursuant to TEX. GOV'T CODE §2001.146(e), the time allotted for Commission action on a motion for rehearing in this case prior to its being overruled by operation of law, is hereby extended until 90 days from the date the parties are notified of the order.

Done this 15th day of December, 2009.

RAILROAD COMMISSION OF TEXAS

Chairman Victor G. Carrillo

Commissioner Elizabeth A. Jones

Commissioner Michael L. Williams

ATTEST:

Secretary