OIL AND GAS DOCKET NO. 06-0265974

THE APPLICATION OF SAMSON LONE STAR, LLC TO AMEND FIELD RULE NO. 2 FOR THE CARTHAGE (COTTON VALLEY) FIELD, HARRISON, PANOLA AND SHELBY COUNTIES. TEXAS

OIL AND GAS DOCKET NO. 06-0265975

THE APPLICATION OF SAMSON LONE STAR, LLC TO AMEND FIELD RULE NO. 2 FOR THE BETHANY (COTTON VALLEY) FIELD, HARRISON AND PANOLA COUNTIES, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

DATE OF HEARING: August 23, 2010

APPEARANCES: REPRESENTING:

APPLICANT:

James M. Clark Samson Lone Star, LLC

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field Rules for the Carthage (Cotton Valley) Field were originally adopted in Final Order No. 6-67,311, effective June 27, 1977, as amended. The Field Rules currently in effect for the field are summarized as follows:

- Designation of the field as the correlative interval from 7,940 feet to 9,630 feet as shown on the log of the Exxon Corporation W. R. Banks Lease, Well No. 3;
- 2. 467'-933' well spacing;
- 3. 320 acre gas units with optional 40 acre density;
- 4. Allocation based on 100% acreage.

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Samson Lone Star, LLC ("Samson") requests that Field Rule No. 2 be amended to provide for no minimum well spacing between horizontal and vertical wells. The allocation formula is suspended and Samson requests that the allocation formula remain suspended.

Field Rules for the Bethany (Cotton Valley) Field were originally adopted in Final Order No. 6-73,954, effective January 1, 1980, as amended. The Field Rules currently in effect for the field are summarized as follows:

- 1. Designation of the field as the correlative interval from 8,427 feet to 9,762 feet as shown on the log of the Samson Lone Star, LLC L. P. Burton Estate Lease, Well No. 1;
- 2. 467'-1,320' well spacing;
- 3. 640 acre gas units with optional 80 acre density;
- 4. Allocation based on 95% acreage and 5% deliverability.

Samson requests that Field Rule No. 2 be amended to provide for 467'-933' well spacing with no minimum well spacing between horizontal and vertical wells. The allocation formula is suspended and Samson requests that the allocation formula remain suspended.

This application was unprotested and the examiner recommends that Field Rule No. 2 for the Carthage (Cotton Valley) and Bethany (Cotton Valley) Fields be amended, as proposed by Samson.

DISCUSSION OF EVIDENCE

The Carthage (Cotton Valley) Field was discovered in May 1968 at a depth of 9,500 feet. The field is classified as an associated gas field and there are a total of 3,141 producing gas wells carried on the proration schedule. Through February 2010, the field has produced 4.4 TCFG and 31.2 MMBC.

The Bethany (Cotton Valley) Field was discovered in October 1969 at a depth of 9,500 feet. The field is classified as an associated gas field and there are 95 producing gas wells carried on the proration schedule. Through July 2010, the field has produced 66.4 BCFG and 243.9 MBC.

The reservoir in both Cotton Valley fields is tight and composed of lenticular sand porosity developments. The primary drive mechanism is a gas expansion drive. Samson is proposing to drill horizontal wells in both fields to recover additional hydrocarbons within the Cotton Valley formation.

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Samson is proposing 467'-933' well spacing for the Bethany (Cotton Valley) Field, so the field will have the same well spacing as the Carthage (Cotton Valley) Field. In addition, Samson is requesting no minimum spacing requirements between vertical and horizontal wells for both fields. There are already nine Cotton Valley fields that have no minimum spacing requirements between vertical and horizontal wells. These fields include the Blocker (Cotton Valley), Minden (Cotton Valley) and Woodlawn (Cotton Valley) Fields. No minimum well spacing between horizontal and vertical wells will provide operators in the two fields the additional flexibility needed to drill horizontal wells at optimum locations without requiring Statewide Rule 37 Exceptions as a result of the vertical well locations. Of the 76 recently drilled horizontal wells in the Carthage (Cotton Valley) Field, 54% or 41 wells, have required Statewide Rule 37 exceptions due to the existing vertical wells.

The allocation formulas in both fields have been suspended and Samson requests that the allocation formulas remain suspended.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
- 2. The Carthage (Cotton Valley) Field was discovered in May 1968 at a depth of 9,500 feet. The field is classified as an associated gas field and there are a total of 3,141 producing gas wells carried on the proration schedule.
- 3. The Bethany (Cotton Valley) Field was discovered in October 1969 at a depth of 9,500 feet. The field is classified as an associated gas field and there are 95 producing gas wells carried on the proration schedule.
- 4. Well spacing of 467'-933' is appropriate for the Bethany (Cotton Valley) Field, so the field will have the same well spacing as the Carthage (Cotton Valley) Field.
- 5. The Carthage (Cotton Valley) and Bethany (Cotton Valley) Fields are undergoing horizontal well infill drilling development.
- The reservoir in both Cotton Valley fields is tight and composed of lenticular sand porosity developments. The primary drive mechanism is a gas expansion drive.
- 7. There are already nine Cotton Valley fields that have no minimum spacing requirements between vertical and horizontal wells. These fields include the Blocker (Cotton Valley), Minden (Cotton Valley) and Woodlawn (Cotton Valley) Fields.
- 8. No minimum well spacing between horizontal and vertical wells will provide

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operators in the two fields the additional flexibility needed to drill horizontal wells at optimum locations without requiring Statewide Rule 37 Exceptions as a result of the vertical well locations.

- 9. Of the 76 recently drilled horizontal wells in the Carthage (Cotton Valley) Field, 54% or 41 wells, have required Statewide Rule 37 exceptions due to the existing vertical wells.
- Continued suspension of the allocation formulas is appropriate, as there is a 100% market for all the gas produced from the Carthage (Cotton Valley) and Bethany (Cotton Valley) Fields.

CONCLUSIONS OF LAW

- 1. Proper notice of this hearing was issued.
- 2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
- 3. Amending Field Rule No. 2 for the Carthage (Cotton Valley) and Bethany (Cotton Valley) Fields is necessary to prevent waste, protect correlative rights and promote development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission amend Field Rule No. 2 for the Carthage (Cotton Valley) and Bethany (Cotton Valley) Fields and that the allocation formulas remain suspended, as proposed by Samson Lone Star, LLC.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner