

**THE APPLICATION OF APACHE CORPORATION, INC. TO AMEND TEMPORARY
FIELD RULES AND ADOPT ON A PERMANENT BASIS FOR THE SAND HILLS
(WICHITA ALBANY, S.) FIELD, CRANE COUNTY, TEXAS**

HEARD BY: Brian K. Fancher - Technical Examiner

HEARING DATE: September 23, 2011

APPEARANCES:

REPRESENTING:

APPLICANT:

Bill Spencer
Jim Clark, P.E.

Apache Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

On January 04, 2007, the Commission adopted temporary field rules for the Sand Hills (Wichita Albany, S.) Field in Docket No. 08-0249717. The temporary rules in effect are summarized below:

1. Designation of the field as the correlative interval from 4,700 feet to 5,765 feet as shown on the log of the J. B. Tubb A/C 1 Lease No. 313.
2. 330' - 660' well spacing for both oil and gas wells.
3. 160 acre oil units with 40 acre tolerance.
4. Allocation based on 100% acreage.

Apache Corporation ("Apache") seeks to amend Field Rule 3 to include optional forty (40) acre density units for oil wells and further seeks for the temporary Field Rules to be made permanent at this time. The rules were to remain temporary and effective until

July 23, 2008, or until Commission staff evaluation. The examiner recommends Field Rule 3 be amended and the temporary Field Rules be made permanent, as proposed by Apache.

DISCUSSION OF EVIDENCE

The Sand Hills (Wichita Albany, S.) Field was discovered in July 1996 at a depth of approximately 5,700 feet with the completion of the J.B. Tubb A/C "I" Lease, Well No. 1. Currently, there are three producing oil wells and one producing gas well listed on the September 2011 proration schedules, all of which are operated by Apache.

In February 2007, Apache completed the J. B. Tubb A/C 1 Lease, Well No. 332 with perforations in the lower Wichita Albany formation from 5,490 feet to 5,682 feet. Well testing performed on February 19, 2007, indicated a well potential of 97 BOPD and 117 MCFPD. Subsequently, on September 10, 2009, additional perforations were added from 4,822 feet to 5,204 feet, located in the upper portion of the field. Well testing performed on September 24, 2009, indicated a well potential of 19 BOPD, 1,206 MCFGPD, and 15 BWPD. Currently, the upper and lower portions of the formation produce concurrently.

In March 2008, Apache completed the J. B. Tubb A/C 1 Lease, Well No. 343 with perforations in the lower Wichita Albany formation from 5,530 feet to 5,788 feet. Well testing performed on March 08, 2009, indicated a well potential of 88 BOPD, 261 MCFGPD, and 463 BWPD. Posteriorly, on December 22, 2010, additional perforations were added from 4,716 feet to 5,245 feet, located in the upper portion of the subject field. Well testing performed on December 29, 2009 indicated a well potential of 16 BOPD, 735 MCFGPD, and 234 BWPD. Currently, the upper and lower portions of the formation produce concurrently.

Apache opined the temporary Field Rules in effect for the subject field are appropriate to further develop the hydrocarbons suspended in the field and placement of future well locations; however, Apache seeks to amend Field Rule 3 to include 40 acre optional units for oil wells completed in the subject field based upon results of oil drainage area calculations performed on recently completed wells in the subject field. Drainage area calculations, along with production curves for Well Nos. 332 and 343, were submitted by representatives of Apache in support of it's application. The estimated ultimate recovery for each well, combined with several other constituents that were concluded from wellbore specific log interpretations, ultimately indicated drainage areas of 37 acres and 92 acres for Well Nos. 332 and 343, respectfully. Apache further opined the incorporation of 40 acre optional density units for oil wells into the current temporary Field Rules and subsequent adoption of permanent Field Rules will provide for consistent development of the subject field.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. The Sand Hills (Wichita Albany, S.) Field was discovered in 1996. The field is an associated field with three oil wells and one gas well listed on the September 2011 proration schedules, all of which are operated by Apache.
3. In February 2007, Apache completed the J. B. Tubb A/C 1 Lease, Well No. 332 with perforations in the lower Wichita Albany formation from 5,490 feet to 5,682 feet.
 - a. Well testing performed on February 19, 2007, indicated a well potential of 97 BOPD and 117 MCFPD.
 - b. On September 10, 2009, additional perforations were added from 4,822 feet to 5,204 feet, located in the upper portion of the field.
 - c. Well testing performed on September 24, 2009, indicated a well potential of 19 BOPD, 1,206 MCFGPD, and 15 BWPD. Currently, the upper and lower sections of the formation produce concurrently.
4. In March 2008, Apache completed the J. B. Tubb A/C 1 Lease, Well No. 343 with perforations in the lower Wichita Albany formation from 5,530 feet to 5,788 feet.
 - a. Well testing performed on March 08, 2009, indicated a well potential of 88 BOPD, 261 MCFGPD, and 463 BWPD.
 - b. On December 22, 2010, additional perforations were added from 4,716 feet to 5,245 feet, located in the upper portion of the subject field.
 - c. Well testing performed on December 29, 2009 indicated a well potential of 16 BOPD, 735 MCFGPD, and 234 BWPD. Currently, the upper and lower sections of the formation produce concurrently.
4. The temporary Field Rules, as adopted in Final Order No. 08-0249717, effective January 23, 2007, are appropriate for the field and should be adopted as permanent Field Rules.
5. Optional forty (40) acre density units are appropriate for oil wells completed in the Sand Hills (Wichita Albany, S.) Field, will promote development of the field and provide flexibility for well locations, while protecting correlative rights.

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. Amendment and adoption of Field Rules on a permanent basis will prevent waste, protect correlative rights, and promote development in the Sand Hills (Wichita Albany, S.) Field.

RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends amendment and adoption of temporary field rules on a permanent basis for the Sand Hills (Wichita Albany, S.) Field, as proposed by Apache.

Respectfully submitted,

Brian K. Fancher
Technical Examiner