



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 7B-0291843

THE APPLICATION OF NORTH TEXAS OIL & GAS, LLC TO AMEND FIELD RULES FOR THE SWENSON (CADDO) FIELD, THROCKMORTON AND HASKELL COUNTIES, TEXAS.

HEARD BY: Paul Dubois – Technical Examiner
Terry Johnson – Hearings Examiner

HEARING DATE: October 7, 2014

CONFERENCE DATE: January 27, 2015

APPEARANCES:

Bill Spencer
Frank Muser

REPRESENTING:

North Texas Oil & Gas

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

North Texas Oil & Gas, LLC (North Texas) requests the Swenson (Caddo) Field Rules be amended to facilitate the development of the field with horizontal wells. The application is not protested. The Examiners recommend the field rules be amended as requested by NTOG.

DISCUSSION OF EVIDENCE

The Swenson (Caddo) Field was created by the consolidation of 17 fields in Oil & Gas Docket No. 7B-0212650 on July 30, 1996, at which time the current field rules were adopted. The current field rules are summarized as follows:

- A correlative interval from 4,875 feet to 5,250 feet as shown on the log of the TLC -95- Well No. 1 (API No. 42-447-35598), Throckmorton County, Texas;

- 330-foot lease line spacing and 933-foot between well spacing;
- 80-acre standard proration units with 40-acre optional units; and,
- Oil well allowable daily production rates based on 95 percent acreage and 5 percent per well.

Using the same type well log, North Texas requests to amend the correlative interval to 4,876 feet to 5,165 feet. The current correlative interval extends to a depth of 5,250 feet, the bottom 85 feet of which appears to be primarily shale based on the gamma ray curve. North Texas believes the proposed interval from 4,876 feet to 5,165 feet more accurately represents the productive interval in the Caddo Formation.

There have been at least 115 wells completed in the field, many of which have been plugged.¹ The October 1, 2014 proration schedule indicates 30 producing wells are currently carried in the Swenson (Caddo) Field. Three of the wells on the proration schedule are operated by North Texas. Cumulative production in the field is about 1.7 million barrels of oil. The field is in the early stages of development with horizontal wells. Since July 2012, about 41 permits for horizontal wells have been approved, about 16 of which were issued to North Texas.

North Texas provided drainage area calculations for three vertical wells in the field. Input parameters for the calculations were as follows:

- Oil gravity ranged from 36.9° API to 42.3° API;
- Formation volume factor ranged from about 1.24 to 1.30;
- Porosity ranged from 5 percent to 7 percent;
- Water saturation ranged from 29 percent to 40 percent; and,
- Net pay thickness ranged from 31 to 55 feet.

North Texas determined that for these three wells the drainage areas ranged from 46 to 79 acres. With 8 percent recovery rates, the wells will produce from about 27,000 to 54,000 barrels of oil. North Texas believes the current field density provisions of 80 acre standard proration units and 40 acre optional units are appropriate.

The horizontal wells completed in the field have an average lateral length of about

¹ Exh. No. 2.

4,200 feet. The current producing horizontal wells demonstrate ultimate production estimates of about 30.6 barrels of oil per foot of lateral length. North Texas' request for dual lease line spacing provisions with 100-foot spacing for the first and last take points will allow for an additional 460 feet of lateral per well, corresponding to an additional 14,100 barrels of oil per well.

FINDINGS OF FACT

1. Notice of this application and hearing was provided to all persons entitled to notice at least ten (10) days prior to the date of the hearing.
2. The Swenson (Caddo) Field was created by the consolidation of 17 fields in Oil & Gas Docket No. 7B-0212650 on July 30, 1996.
3. The current correlative interval extends to a depth of 5,250 feet, the bottom 85 feet of which appears to be primarily shale based on the gamma ray curve.
4. The proposed correlative interval from 4,876 feet to 5,165 feet more accurately represents the productive interval of the field.
5. There have been at least 115 wells completed in the field, many of which have been plugged
6. Currently there are 30 producing wells are currently carried in the Swenson (Caddo) Field.
7. Cumulative production in the field is about 1.7 million barrels of oil.
8. The field is in the early stages of development with horizontal wells.
9. Since July 2012, about 41 permits for horizontal wells have been approved, about 16 of which were issued to North Texas.
10. Vertical wells in the field exhibit drainage areas ranging from 46 to 79 acres.
11. The horizontal wells completed in the field have an average lateral length of about 4,200 feet.
12. The current producing horizontal wells demonstrate ultimate production estimates of about 30.6 barrels of oil per foot of lateral length.

13. Dual lease line spacing provisions with 100-foot spacing for the first and last take points will allow for an additional 460 feet of lateral per well, corresponding to an additional 14,100 barrels of oil per well.

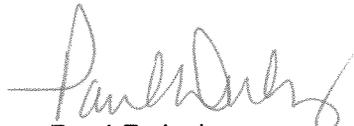
CONCLUSIONS OF LAW

1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051
2. All notice requirements have been satisfied. 16 Tex. Admin. Code § 1.45
3. The proposed field rules for the Swenson (Caddo) Field will prevent waste and promote the orderly development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiners recommend the field rules for the Swenson (Caddo) Field be amended as requested by North Texas Oil & Gas, LLC.

Respectfully submitted,


Paul Dubois
Technical Examiner


Terry Johnson
Hearings Examiner