RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL & GAS DOCKET NO. 06-0304006

THE APPLICATION OF BROOKS PETROLEUM COMPANY TO ADOPT PERMANENT FIELD RULES FOR THE WHELAN (PETTIT) FIELD, HARRISON COUNTY, TEXAS

HEARD BY: Paul Dubois – Technical Examiner
Jennifer Cook – Administrative Law Judge

HEARING DATE: May 15, 2017

CONFERENCE DATE: August 1, 2017

APPEARANCES:

APPLICANT:

Richard Atkins, P. E. — Brooks Petroleum Company

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Brooks Petroleum Company ("Brooks") requests the Commission adopt permanent field rules for the Whelan (Pettit) Field in Harrison County, Texas. The field is currently on Statewide Rules. Brooks requests permanent field rules be adopted as follows:

1. Establish a correlative interval from 7,198 feet to 7,353 feet in the Pettit Formation;

2. Establish 330-foot lease line spacing for vertical wells and 100-foot first/last take point spacing for horizontal wells;

3. Establish 160-acre standard proration units with optional 80-acre units; and

4. Establish salvage classification for all wells in the field, with no restrictions on oil or casinghead gas production.

Brooks is one of three operators of wells in the Whelan (Pettit) Field. The application was not protested. The Technical Examiner and Administrative Law Judge (collectively, "Examiners") recommend Brooks' application be granted and permanent field rules adopted.

DISCUSSION OF THE EVIDENCE

The Whelan (Pettit) Field was discovered on February 21, 1960 at a depth of 7,310 feet. Since 1960, seven wells have been completed in the field. Currently there are three wells producing in the field as indicated on the May 1, 2017 proration schedule. One well is operated by Brooks, one well is operated by Buffco Production, Inc., and one well is operated by Newman Corporation. The cumulative oil production from the field is 153,225 barrels of oil and 36,030 thousand cubic feet ("mcf") gas. The well is currently on statewide spacing and density rules.

The field exhibits the following reservoir properties: 10 percent porosity, 10 millidarcy permeability, 25 percent water saturation, 14-foot average net effective oil pay thickness, and 42.7° API oil gravity. The original reservoir pressure was 2,900 pounds per square inch gauge ("psig") and the current reservoir pressure is 1,000 psig. Brooks reports the proven oil acreage to be about 3,800 acres.

The proposed correlative interval from 7,198 feet to 7,353 feet as shown on the on the log of the Brooks Petroleum Company, Smith Trust Lease, Well No. 1 (API No. 42-203-35235), located in Section 313, J P McDaniel Survey, A-497, Harrison County, Texas, is delineated on the type log with high gamma ray signatures at the top and bottom of the interval.

In 2016 the three active wells produced 3,505 barrels of oil, or an average of about 3.2 barrels of oil per well per day. The field is in the late-primary stage of production with a depletion drive mechanism. The maximum oil allowable according to the 1947 yardstick is 101 barrels per well per day, and the maximum oil potential according to the May 1, 2017 proration schedule is 7 barrels per day. Brooks asserts a salvage classification is appropriate for this field.

There are several comparable fields that produce from the Pettit Formation in the area. Notably, the Lake Ferrell (Pettit, Upper) has special field rules that provide for 160-acre standard units, 80-acre optional units, 467-foot lease line spacing and no between well spacing limitation. The Whelan (Pettit, Up.) has special field rules that provide for 160-acre standard units, 933-foot lease line spacing and 1,867-foot between well spacing. Brooks provided evidence that was used to support the acreage provisions in the special field rule cases for those two fields. The reservoir characteristics of the Lake Ferrell (Pettit, Upper) and Whelan (Pettit, Up.) fields are comparable to the reservoir characteristics of the Whelan (Pettit) Field. The average drainage area calculated for wells in the Whelan (Pettit) and Whelan (Pettit, Up.) Fields is 97 acres and an estimated ultimate recovery of about 122,000 barrels.

Brooks stated its intention to continue to develop the field, including the addition of horizontal wells. Brooks requests the proposed field rules be adopted on a permanent basis to provide for the orderly drilling, completion, and operation of wells, and that the rules will prevent waste and protect correlative rights. The Examiners recommend the proposed permanent field rules be adopted as requested by Brooks for the Whelan (Pettit) Field.

FINDINGS OF FACT

1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of the hearing.

2. The Whelan (Pettit) Field was discovered on February 21, 1960 at a depth of 7,310 feet.

3. Seven wells have been completed in the field, and currently there are three producing wells in the field.

4. The cumulative oil production from the field is 153,225 barrels of oil and 36,030 thousand cubic feet ("mcf") gas.

5. The well is currently on statewide spacing and density rules.

6. The field exhibits 10 percent porosity, 10 millidarcy permeability, 25 percent water saturation, 14-foot average net effective oil pay thickness, and 42.7° API oil gravity. The original reservoir pressure was 2,900 pounds per square inch gauge ("psig") and the current reservoir pressure is 1,000 psig. Brooks reports the proven oil acreage to be about 3,800 acres.

7. In 2016 the three active wells produced 3,505 barrels of oil, or an average of about 3.2 barrels of oil per well per day.

    a. The field is in the late-primary stage of production with a depletion drive mechanism.

    b. The maximum oil allowable according to the 1947 yardstick is 101 barrels per well per day.

    c. The maximum oil potential according to the May 1, 2017 proration schedule is 7 barrels per day.

8. The proposed correlative interval from 7,198 feet to 7,353 feet as shown on the on the log of the Brooks Petroleum Company, Smith Trust Lease, Well No. 1 (API No. 42-203-35235), is delineated on the type log with high

gamma ray signatures at the top and bottom of the interval.

9. The average drainage area calculated for wells in the Whelan (Pettit) and Whelan (Pettit, Up.) Fields is 97 acres and the estimated ultimate recovery is about 122,000 barrels of oil.

10. At the hearing, the applicant agreed on the record that a Final Order in this case is to be effective when the Master Order is signed.

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 §§ 1.43 and 1.45.

3. The proposed field rules will prevent waste, protect correlative rights, and promote the orderly development of the field.

4. Pursuant to §2001.144(a)(4)(A), of the Texas Government Code, and the agreement of the applicant, this Final Order is effective when a Master Order relating to this Final Order is signed on August 1, 2017.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, The Examiners recommend the proposed permanent field rules be adopted as requested by Brooks for the Whelan (Pettit) Field, Harrison County, Texas, as set out in the attached Final Order.

Respectfully submitted,

Paul Dubois
Technical Examiner

Jennifer Cook
Administrative Law Judge