

RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL & GAS DOCKET NO. 06-0302855

THE APPLICATION OF BUFFCO PRODUCTION INC. TO AMEND FIELD RULES FOR THE WILLOW SPRINGS, SE (TRAVIS PEAK) FIELD, GREGG COUNTY, TEXAS

HEARD BY:

Peggy Laird, P.G. - Technical Examiner

Jennifer Cook - Administrative Law Judge

HEARING DATE:

January 30, 2017

CONFERENCE DATE: April 4, 2017

APPEARANCES:

REPRESENTING:

APPLICANT:

George C. Neale Rick Johnston, P.E. Buffco Production Inc.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Buffco Production Inc. ("Buffco") seeks to amend the existing field rules for the Willow Springs, SE (Travis Peak) Field (the "Field"). The Field was discovered and had temporary field rules adopted in 1969. The temporary field rules were adopted as permanent in 1971. Buffco requests the following field rules be amended and adopted for the Field:

- Designate a correlative interval from 7,350 feet to 7,552 feet as shown on the 1. log of the Southern Union Production - KM Kelly Oil Unit No. 1 Well (API No. 42-183-00251), Gregg County, Texas;
- Establish lease line spacing of 467 feet and between well spacing of 1,200 feet; 2.
- 3. Continuation of 160-acre proration units, and adoption of 40-acre optional units; and
- 4. Adopt a two-factor allocation formula based on 60% per well, and 40% acreage.

The application was not protested. The Administrative Law Judge and Technical Examiner (collectively, "Examiners") recommend that the permanent field rules be amended and adopted for the Willow Springs, SE (Travis Peak) Field, as requested by Buffco.

DISCUSSION OF THE EVIDENCE

The Field was discovered in July 1969 with the Southern Union - KM Kelly No. 1 Well. Temporary field rules were adopted for the field on November 17, 1969 in Oil and Gas Docket No. 6-59,642. Those temporary field rules were as follows: Rule 1 - Spacing of 933/1,867 feet; Rule 2 - Density of 160-acre oil units; Rule 3 - Allocation formula of 100% acreage; and Rule 4 - Surface casing set at 1,000 feet. The temporary field rules were adopted as permanent in April 20, 1971 in Oil and Gas Docket No. 6-60,740. The Field is currently operating with a top allowable of 353 barrels of oil per day ("BOPD"). There are currently five active wells in the Field, four of which are operated by Buffco.

Since discovery, cumulative production from the Field through September 2016 is 621,020 barrels of oil, and 4.83 billion cubic feet of gas. Based on log data from the wells in the Field, and the initial potential data from the discovery well, Buffco determined reservoir characteristics as follows: porosity of approximately 11%, water saturation of 25%, tank oil gravity of 45°, gas gravity of 0.75, reservoir temperature of 155°, an approximate reservoir pressure of 3,500 psi, and an oil formation volume factor $B_{\rm o}$ of 1.4. The producing gas to oil ratio ("GOR") is in the range of 10,000:1. The reservoir is a solution gas drive reservoir, and shows volumetric depletion.

The existing field rules call for 160-acre base proration units. Buffco wishes to continue the 160-acre units, and requests the adoption of 40-acre optional units. Buffco performed drainage area calculations on two wells in the Field, one of which is located at the far north of the existing Field, and the other is located near the south of the existing Field. Both drainage calculations showed that forty acres would be a suitable optional unit size. The amendment to spacing, which calls for a change from 933/1,867 feet to 467/1,200 feet, would allow for additional development through the drilling of vertical infill wells, and is consistent with the 40-acre option.

Buffco also requests that the allocation formula be amended to reflect 60% per well, and 40% acreage. A comparison of the existing allocation formula, which is based on 100% acreage, with the requested allocation formula, indicates that it would be more economically justifiable to drill new vertical infill wells on forty acres with the amended allocation formula.

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. No protests were received.
- 2. The Willow Springs, SE (Travis Peak) Field was discovered in July 1969.
 - a. Buffco operates four of the five wells in the Field.
 - b. Cumulative production from the Field through September 2016 was 621,020 barrels of oil, and 4.83 BCF of gas.
- 3. Buffco requests the field rules be amended to allow for infill wells.
- 4. The producing reservoir is a solution gas drive reservoir, and has the following characteristics: porosity of approximately 11%, water saturation of 25%, tank oil

gravity of 45° , gas gravity of 0.75, reservoir temperature of 155° , an approximate reservoir pressure of 3,500 psi, and an oil formation volume factor B_0 of 1.4.

- 5. The revised spacing and density rules are reasonable for further development of the field.
- 6. The revised allocation formula allows for economically justifiable vertical infill wells, and is reasonable for further development of the Field.
- 7. At the hearing, the applicant agreed on the record that the 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 § 3.9.
- 3. The proposed field rules will reduce 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, the Final Order is effective when a Master Order relating to the Final Order is signed on April 4, 2017.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend that the Commission amend and adopt permanent field rules for the Willow Springs, SE (Travis Peak) Field, as requested by Buffco Production Inc.

Respectfully submitted,

Peggy Laird, P.G.

Technical Examiner

Jennifer Cook

Administrative Law Judge