



RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL & GAS DOCKET NO. 08-0303319

THE APPLICATION OF CHEVRON MIDCONTINENT, L.P. TO CONSIDER A NET GAS-OIL RATIO AND CANCEL OVERPRODUCTION FOR THE PARKER, J.E. -E-LEASE, WELL NO. 5, ANDREWS (WOLFCAMP-PENN) FIELD, ANDREWS COUNTY, TEXAS

HEARD BY: Paul Dubois – Technical Examiner
Ryan M. Lammert – Administrative Law Judge

HEARING DATE: May 8, 2017

CONFERENCE DATE: August 1 , 2017

APPEARANCES:

APPLICANT:

Brian Sullivan, P.E.
Beth Bradford
Andrew Vaught

REPRESENTING:

Chevron Midcontinent, L.P.

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Chevron Midcontinent, L.P. ("Chevron") seeks a net gas-oil ratio and to cancel overproduction for its Parker, J.E. -E- Lease (No. 00246), Well No. 5 (API No. 42-003-04344), in the Andrews (Wolfcamp-Penn) Field, Andrews County, Texas. Chevron requests authority to produce 800 thousand cubic feet ("mcf") gas per day from the subject well. Chevron also requests tha the Commission cancel any accrued overproduction. The application was not protested. The Administrative Law Judge and Technical Examiner ("Examiners") recommend Chevron's application be granted.

DISCUSSION OF THE EVIDENCE

The Parker, J.E. -E- Lease (No. 00246), Well No. 5 (API No. 42-003-04344) is located near the southeastern boundary of Chevron's Southwest Andrews Unit, which is an active waterflood. The nearest waterflood injection well was about 1,700 feet to the west-southwest; that well was plugged in 2009. The Parker Well No. 5 is not located on the unit itself, and is not a part of the Unit. The Parker Well No. 5 is currently perforated

in and producing from an approximately 1,100-foot interval through the Wolfcamp and Pennsylvanian-aged Formations. The current top allowable for the field is 157 barrels of oil per day, corresponding to a daily gas limit of 314 mcf of casinghead gas per day.

The reservoir has an average porosity of 8 percent. However, log analysis indicates the Parker Well No. 5 exhibits more porosity than other nearby wells. In addition, the log of the Parker Well No. 5 exhibits no indication of gas-bearing zones. Chevron asserts there is no gas cap in the reservoir. The reservoir produces from a solution-gas drive mechanism. The solution gas-oil ratio is about 730 standard cubic feet of gas per barrel of oil.

The reservoir demonstrates an average permeability of 1.1 millidarcies. The initial water saturation was 28 percent, and the irreducible oil saturation is 25 percent. There is about 189 feet of net effective pay. The well produces about 40 barrels of 39° API oil per day with a 94 percent water cut (about 650 barrels of water). The initial reservoir pressure was 3,880 pounds per square inch gauge ("psig").

The well has exhibited noisy production (variable oil, gas and water rates) since about 2013. The well was switched from a rod pump to electric submersible pump ("esp") in 2014. Since then, Chevron has experienced difficulty maintaining pump operation. Specifically, the pump must be set at a low rate to meet the existing production limits, but at low frequencies the pump does not move enough fluid to keep from overheating, which causes the pump to shut down. There were more than 100 high-temperature shut-downs over the last six months.

Chevron conducted production tests in March and April 2017. These tests demonstrated that the well produced more efficiently at higher oil production rates. When the oil production rate was reduced to meet the existing production limits, the gas-oil ratio increased. Chevron asserts that the well can produce efficiently at an 800 mcf gas per day ratio.

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 Parker, J.E. -E- Lease (No. 00246), Well No. 5 (API No. 42-003-04344) is located near the southeastern boundary of Chevron's Southwest Andrews Unit, which is an active waterflood, but the well is not located on the Unit.
3. The Parker Well No. 5 is currently perforated in and producing from an approximately 1,100-foot interval through the Wolfcamp and Pennsylvanian-aged Formations.
4. The reservoir has an average porosity of 8 percent, but the Parker Well No. 5 exhibits more porosity than other nearby wells.
5. There is no gas cap in the reservoir. The reservoir produces from a solution-gas

drive mechanism. The solution gas-oil ratio is about 730 standard cubic feet of gas per barrel of oil.

6. The current top allowable for the field is 157 barrels of oil per day, corresponding to a daily gas limit of 314 mcf of casinghead gas.
7. The currently well produces about 40 barrels of oil per day with a 94 percent water cut.
8. Restricting production to meet daily limits causes the pump system to shut down and results in erratic and inefficient production.
9. Production tests in conducted in March and April 2017 demonstrated that the well produced more efficiently at higher oil production rates.
10. The well can produce efficiently at an 800 mcf gas per day ratio.
11. 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. Approval of the application will prevent waste and protect correlative rights.
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

The Examiners recommend approval of the application of Chevron Midcontinent, L.P. to consider a net gas-oil ratio and cancel overproduction for the Parker, J.E. -E- Lease, Well No. 5, Andrews (Wolfcamp-Penn) Field, Andrews County, Texas.

Respectfully submitted,



Paul Dubois
Technical Examiner



Ryan M. Lammert
Administrative Law Judge