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# RAILROAD COMMISSION OF TEXAS

## HEARINGS DIVISION

OIL AND GAS DOCKET NO. 10-0284788

THE APPLICATION OF CONOCOPHILLIPS COMPANY TO CONSIDER A NET GAS-OIL RATIO AUTHORITY FOR THE HITCHLAND (MORROW, LOWER) FIELD, HANSFORD **COUNTY, TEXAS** 

Paul Dubois - Technical Examiner Heard by:

Michael Crnich - Legal Examiner

**Hearing Date:** December 10, 2013

Representing: Appearances:

> Jamie Nielson **Greg Cloud**

ConocoPhillips Company

### **EXAMINER'S REPORT AND RECOMMENDATION**

## STATEMENT OF THE CASE

ConocoPhillips Company (Conoco) requests authority to produce wells in the Hitchland (Morrow, Lower) Field, under increased net gas-to-oil ratio (GOR) authority with a daily gas limit of 375 MCFPD. Conoco also requests that all overproduction for the field be canceled effective the date of the Final Order in this matter. This application was unprotested and the examiners recommend approval of increased net gas-oil ratio authority with a daily gas limit of 375 MCFPD and cancellation of overproduction.

## **DISCUSSION OF EVIDENCE**

Conoco is the only operator in the Hitchland (Morrow, Lower) Field in Hansford County, Texas. The field was discovered in 2008 at a depth of 7,050 feet. There are four active oil wells in two leases carried on the current proration schedule. The top oil allowable is 121 BOPD and the daily casinghead gas limit at a standard 2,000 GOR is 242 MCFPD. The current proration schedule indicates the Lee Q Lease Well No. 2 has a potential of 8.4 BOPD. The well currently produces about 5 BOPD and 350 MCFPD. Thus the well carries a penalized oil allowable of 4 BOPD because gas production exceeds the daily gas limit of 242 MCFPD.

On initial completion the three wells on the Lee Q Lease exhibited varied production, from 25 to 450 BOPD, 126 to 574 MCFPD, and GOR ranging from 887 to 5,040 SCF/Bbl. The Hitchland (Morrow, Lower) Field is a solution gas drive pressure depletion reservoir. The Lee Q Lease has produced about 63 MBO and 857 MMCFG. Oil production has declined; gas production has not declined as steeply. Thus the GOR has increased over time, which appears to be due to the pressure depletion of a volatile oil.

The Lee Q Lease Well No. 2 was tested on four decreasing choke sizes from 64/64ths to 14/64ths from October 15, 2013 through November 3, 2013. The well produced most efficiently on the largest choke at 5 BOPD, 354 MCFPD and an average GOR of 68,864 SCF/Bbl. Decreasing the choke sizes increased the GOR and restricted oil production. No water was produced during the test. Based on this test data, Conoco is requesting that it be allowed to produce wells in the field at the most efficient choke (64 64ths) at a daily gas limit of 375 MCFPD. Conoco believes this test data is representative of other wells that may be drilled in the future, and requests that the daily gas limit apply to the field.

In July 2011, Form W-10 test data for the Lee Q Well No. 1 indicated a GOR in excess of 100 MCFPD, thus classifying this well as a gas well according to statute. Accordingly, the casinghead gas limit for the well was cancelled and the lease began to accrue overproduction of gas. However, the produced gas value reported on the Form W-10 for the Lee Q No. 1 well was clearly in error, as the number far exceeds the gas production for the entire lease for that month. In July 2013 the matter was corrected. As of August 2013 the Lee Q Lease carries an accumulated overproduction of 95,734 MCFG. The overproduction is currently being worked off, and Conoco requests that the overage be cancelled.

#### 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 hearing.
- 2. The Hitchland (Morrow, Lower) Field in Hansford County, Texas, was discovered in 2008 at a depth of 7,050 feet.
- 3. On initial completion the three wells on the Lee Q Lease exhibited varied production, from 25 to 450 BOPD, 126 to 574 MCFPD, and GOR ranging from 887 to 5,040 SCF/Bbl.
- 4. The Hitchland (Morrow, Lower) Field is a solution gas drive pressure depletion reservoir, and the GOR has increased over time.

- 5. The Lee Q Lease Well No. 2 was tested on four decreasing choke sizes from 64/64ths to 14/64ths from October 15, 2013 through November 3, 2013.
- 6. The well produced most efficiently on the largest choke at 5 BOPD, 354 MCFPD and an average GOR of 68,864 SCF/Bbl.
- 7. Decreasing the choke sizes increased the GOR and restricted oil production. No water was produced during the test.
- 8. Conoco requests authority to produce wells in the field at a daily gas limit of 375 MCFPD.

## **CONCLUSIONS OF LAW**

- 1. Notice of this hearing was given as specified in the provisions of all regulatory codes.
- 2. All things have occurred or been accomplished to give the Commission jurisdiction in this matter.
- Approval of increased net gas-oil ratio authority with a casinghead gas limit of 375 MCFD for the Hitchland (Morrow, Lower) Field and cancellation of overproduction will prevent waste and will not harm correlative rights.

#### RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that authority be granted to produce wells in the Hitchland (Morrow, Lower) Field at a daily gas limit of 375 MCF/D and that all accumulated overproduction for this field be canceled as of the effective date of the Final Order in this matter.

Respectfully submitted,

Paul Dubois

Technical Examiner

Michael Crnich

Legal Examiner