THE APPLICATION OF COG OPERATING, LLC TO CONSIDER INCREASED NET GOR AUTHORITY FOR THE UNIV 3 VINCENT 24 LEASE, WELL NO. 16 IN THE SHEEP MOUNTAIN (CONSOLIDATED) FIELD, UPTON COUNTY, TEXAS

**Heard by:** Andres J. Trevino, P.E. on October 2, 2009

Appearances: Representing:

Greg Cloud COG Operating, LLC

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

## STATEMENT OF THE CASE

COG Operating, LLC requests authority to produce its Univ 3 Vincent 24, Well No. 16 under increased net gas-oil ratio authority with a daily gas limit of 2,200 MCFD.

This application was unprotested and the examiner recommends approval of increased net gas-oil ratio authority with a daily gas limit of 2,200 MCFD.

#### DISCUSSION OF EVIDENCE

The Sheep Mountain (Consolidated) Field was formed with the consolidation of the field in 2006 at a depth of 9,684 feet. The allowable in the field is 471 BOPD, with a casinghead gas limit of 942 MCFD per well for a 160 acre unit. The Sheep Mountain (Consolidated) Field has produced 528,963 BO and currently has 41 oil wells and three other operators in the field.

The Univ 3 Vincent 24, Well No. 16 was completed in October 2009 with five set of perforations between 9,462 to 10,426 feet. On initial test, the well produced at a rate of 120 BOPD, 2,400 MCF of gas and 50 BWPD flowing through a 14/64" choke with 1,800 psi flowing tubing pressure.

COG Operating tested the well at various rates. The results of the testing are summarized below:

Avg. Oil Rate	Avg.Gas Rate	Avg. FTP	Avg. GOR
61 BOPD	1,987 MCFD	1,522 psi	32,574 cuft/bbl
41 BOPD	1,526 MCFD	1,350 psi	50,825 cuft/bbl
15 BOPD	770 MCFD	1,563 psi	55,275 cuft/bbl
11 BOPD	371 MCFD	1,767 psi	52,799 cuft/bbl
22 BOPD	936 MCFD	1,418 psi	48,093 cuft/bbl
6 BOPD	269 MCFD	1,728 psi	67,627 cuft/bbl
	61 BOPD 41 BOPD 15 BOPD 11 BOPD 22 BOPD	61 BOPD 1,987 MCFD 41 BOPD 1,526 MCFD 15 BOPD 770 MCFD 11 BOPD 371 MCFD 22 BOPD 936 MCFD	61 BOPD 1,987 MCFD 1,522 psi 41 BOPD 1,526 MCFD 1,350 psi 15 BOPD 770 MCFD 1,563 psi 11 BOPD 371 MCFD 1,767 psi 22 BOPD 936 MCFD 1,418 psi

The testing demonstrates that the well is rate sensitive and produces more efficiently at higher rates than at restricted rates. The Sheep Mountain (Consolidated) Field produces from a thick (3,920 foot) interval with numerous individual porosity developments as opposed to a single zone with a gas cap. Each zone contributes various quantities of oil and gas. Restricting gas production from the well is not necessary to prevent waste. There is no overproduction on this lease.

# 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 top allowable for the Univ 3 Vincent 24, Well No. 16 is 471 BOPD and 942 MCFD. There are 41 oil wells and three other operators in the field.
- 3. The Univ 3 Vincent 24, Well No. 16 was completed in October 2009 and produced at a rate of 120 BOPD, 2,400 MCF of gas and 50 BWPD flowing through a 14/64" choke with 1,800 psi flowing tubing pressure.
- 4. The Univ 3 Vincent 24, Well No. 16 is rate sensitive and produces and produces more efficiently at higher rates than at restricted rates.
- 5. The most efficient production occurred at rates of about 1,987 MCFD, when the average gas-oil ratio was the lowest at 32,574 cubic feet per barrel.
- 6. The Sheep Mountain (Consolidated) Field produces from a thick (3,920 foot) interval with numerous individual porosity developments as opposed to a single zone with a gas cap. Each zone contributes various quantities of oil and gas.
- 7. Restricting gas production from the well is not necessary to prevent waste.
- 8. The lease has no overproduction.

# **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.
- 3. Approval of increased net gas-oil ratio authority with a casinghead gas limit of 2,200 MCFD for the Univ 3 Vincent 24, Well No. 16 in the Sheep Mountain (Consolidated) Field will prevent waste and will not harm correlative rights.

#### RECOMMENDATION

Based on the above findings and conclusions of law, the examiner recommends that the Univ 3 Vincent 24, Well No. 16 in the Sheep Mountain (Consolidated) Field be authorized to produce under net gas-oil ratio authority with a daily gas limit of 2,200 MCFD.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Examiner