THE APPLICATION OF SAMSON LONE STAR, LLC TO CONSIDER INCREASED NET GOR AUTHORITY FOR THE DINO NO. 1H IN THE HUXLEY (FREDRICKSBURG) FIELD, SHELBY COUNTY, TEXAS

Heard by: Andres J. Trevino, P.E. on February 27, 2008

Appearances: Representing:

James M. Clark Samson Lone Star, LLC

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Samson Lone Star, LLC requests authority to produce its Dino No.1H under increased net gas-oil ratio authority with a daily gas limit of 1,500 MCFD. Samson also requests that all overproduction for the well be canceled.

This application was unprotested and the examiner recommends approval of increased net gas-oil ratio authority with a daily gas limit of 1,500 MCFD and cancellation of overproduction.

DISCUSSION OF EVIDENCE

The Huxley (Fredricksburg) Field was discovered in 1986 at a depth of 3,198 feet. The field had one vertical well until 2003 when the field was developed with multilateral horizontal wells. The allowable in the field for a vertical well is 84 BOPD, with a casinghead gas limit of 168 MCFD per well for a 40 acre unit. The Dino No.1H has an allowable of 504 BOPD and casinghead gas limit of 1,008 MCFD. The Huxley (Fredricksburg) Field has produced 157,000 BO and 1.8 BCF of gas and currently has nine horizontal wells.

The Dino No.1H was completed in August 2007 with three horizontal laterals approximately 4,500 feet in length. The measured depth of the laterals range from 3,826 feet to 8,517 feet. On initial test, the well produced at a rate of 75 BOPD, 1,539 MCF of gas and 165 BWPD flowing through a 20/64" choke with 1,100 psi flowing tubing pressure.

Samson flowed and tested the well at various rates. The testing demonstrates that the well is rate sensitive and produces at higher gas-oil ratios when restricted to rates near the current allowable of 1,008 MCFD. At a 20/64" choke, the well produced 1,590 MCFPD, 111 BOPD and 206 BWPD with a GOR of 14,360 cu.ft/bbl. At lower rates, the well produced 959 MCFPD, 46 BOPD and 115 BWPD with a GOR of 20,812 cu.ft/bbl. At the reduced rates, the well begins to load, as evidenced by decreasing oil production. The most stable production occurred at rates of about 1,590 MCFD, when the average gas-oil ratio was the lowest at approximately 14,360 cubic feet per barrel.

Restricting gas production from the well is not necessary to prevent waste.

The well has accumulated approximately 32,991 MCF of casinghead gas overproduction as of July 31, 2008. Samson Lone Star requests that this overage be canceled.

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 Dino No.1H is 504 BOPD and 1,008 MCFD. There are eight other producing horizontal oil wells and two horizontal gas wells in the field.
- 3. The Dino No.1H was completed in August 2007 and produced at a rate of 75 BOPD, 1,539 MCF of gas and 165 BWPD flowing through a 20/64" choke with 1,100 psi flowing tubing pressure. The well is a horizontal completion with three laterals approximately 4,500 feet each.
- 4. The Dino No.1H is rate sensitive and produces at higher gas-oil ratios when restricted to rates near the current allowable of 1,008 MCFD.
- 5. The most stable production occurred at rates of about 1,590 MCFD, when the average gas-oil ratio was the lowest at 14,360 cubic feet per barrel.
- 6. Restricting gas production from the well is not necessary to prevent waste.
- 7. The well has accumulated approximately 32,991 MCF of casinghead gas 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 1,500 MCFD for the Dino No. 1H in the Huxley (Fredricksburg) 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 the Dino No. 1H in the Huxley (Fredricksburg) Field be authorized to produce under net gasoil ratio authority with a daily gas limit of 1,500 MCFD and that all accumulated overproduction for this lease be canceled.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Examiner