THE APPLICATION OF DELTA EXPLORATION COMPANY, INC. TO CONSIDER AN MER AND INCREASED NET GOR FOR THE AEOLUS LEASE WELL NO. 1, NORIAN (Y2-B) FIELD, NEWTON COUNTY, TEXAS

**Heard by:** Donna K. Chandler on May 7 and 16, 2007

Appearances: Representing:

Mike McElroy John Miller Delta Exploration Company, Inc.

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

#### STATEMENT OF THE CASE

Delta Exploration Company, Inc. requests approval of an MER of 400 BOPD and increased net gas-oil ratio authority with a daily casinghead gas limit of 2,400 MCFD for the Aeolus No. 1 in the Norian (Y2-B) Field. Delta also requests that all overproduction for the well be canceled.

The application is unprotested and the examiner recommends approval of the requested MER of 1400BOPD, increased gas-oil ratio authority with a daily gas limit of 2,400 MCFD, and cancellation of overproduction for the Aeolus No. 1.

# **DISCUSSION OF EVIDENCE**

The Norian (Y2-B) Field was discovered in 1968 at a depth of approximately 7,100 feet. A total of seven wells have produced from the field but the Aeolus No. 1 is currently the only producing well. The top allowable in the field is 121 BOPD and 242 MCFD and the field operates under Statewide Rules.

The Aeolus No. 1 was completed by Delta Exploration Company in December 2006 with perforations in the Yegua between 7,020 and 7,028 feet. On initial test, the well produced at a rate of 168 BOPD, 1,300 MCFD and 0 BWPD, flowing through a 12/64" choke. This well is assigned a penalized allowable of 31 BOPD based on a gas-oil ratio of 7,738 cubic feet per barrel.

Delta tested the Aeolus No. 1 to determine rate sensitivity. The average test results are summarized as follows:

<u>choke</u>	<u>oil rate</u>	gas rate	gas-oil ratio
11/64"	199 BOPD	1,995 MCFD	10,129 cuft/bbl
12/64"	200 BOPD	1,936 MCFD	9,816 cuft/bbl
15/64"	293 BOPD	2,301 MCFD	8,042 cuft/bbl
16/64"	350 BOPD	2,342 MCFD	6,721 cuft/bbl

The testing indicated that the well produces most efficiently at higher rates. During the testing through the 14/64" choke, the well produced 419 BOPD once and over 370 BOPD on several days. Delta therefore requests an MER of 400 BOPD and an casinghead gas limit of 2,400 MCFD.

As of May 1, 2006, the Aeolus lease was overproduced approximately 9,000 BO and 158 MMCF of gas. It is requested that all 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 Norian (Y2-B) Field was discovered in 1968 at a depth of approximately 7,100 feet. A total of seven wells have produced from the field but the Aeolus No. 1 is currently the only producing well.
- 3. The top allowable in the field is 121 BOPD and 242 MCFD and the field operates under Statewide Rules.
- 4. The Aeolus No. 1 was completed in December 2006 with perforations in the Yegua between 7,020 and 7,028 feet.
- 5. On initial test, the well produced at a rate of 168 BOPD, 1,300 MCFD and 0 BWPD, flowing through a 12/64" choke. However, the well is assigned a penalized allowable of 31 BOPD.
- 6. The Aeolus No. 1 is rate sensitive and produces most efficiently at higher rates.
  - a. At a restricted rate of approximately 200 BOPD, the gas-oil ratio is over 10,000 cubic feet per barrel.
  - b. As the rate was increased during testing, the gas-oil ratio decreased to approximately 6,721 cubic feet per barrel.

- c. During testing through the 14/64" choke, the well produced 419 BOPD once and over 370 BOPD on several days.
- 7. Estimated overproduction for the Aeolus lease as of May 1, 2006 is approximately 8,000 BO and 158 MMCF.

### **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 an MER of 400 BOPD, net gas-oil ratio authority with a daily gas limit of 2,400 MCFD and cancellation of overproduction for the Aeolus No. 1 in the Norian (Y2-B) Field) Field will prevent waste and will not harm correlative rights.

## **RECOMMENDATION**

Based on the above findings and conclusions of law, the examiner recommends approval of an MER of 400 BOPD, net gas-oil ratio authority with a daily gas limit of 2,400 MCFD, and cancellation of overproduction for the Aeolus No. 1 in the Norian (Y2-B) Field.

Respectfully submitted,

Donna K. Chandler Technical Examiner