THE APPLICATION OF NEWFIELD EXPLORATION COMPANY TO CONSIDER A NEW FIELD DESIGNATION AND FIELD RULES FOR THE PROPOSED VIEJOS LOCOS (FRIO LWR) FIELD, KENEDY COUNTY, TEXAS

**Heard by:** Richard D. Atkins, P.E. - Technical Examiner

**Date of Hearing:** July 9, 2008

Appearances: Representing:

Dale E. Miller Newfield Exploration Company

# **EXAMINER'S REPORT AND RECOMMENDATION**

### STATEMENT OF THE CASE

Newfield Exploration Company requests that a new field designation called the Viejos Locos (Frio Lwr) Field be approved for its East, Mrs. S. K. "B" Lease Well No. 94 (API No. 42-261-31465). Newfield requests that the following field rules be adopted for the new field:

- Designation of the field as the correlative interval from 15,755 feet to 17,250 feet measured depth as shown on the log for the Newfield Exploration Company East, Mrs. S. K. "B" Lease Well No. 94 (API No. 42-261-31465), Kenedy County, Texas;
- 2. Allocation based on 95% deliverability and 5% per well.

There were no protests to this application and the examiner recommends approval of the new field designation and field rules.

#### **DISCUSSION OF EVIDENCE**

Newfield Exploration Company completed its East, Mrs. S. K. "B" Lease Well No. 94 in April 2008 with perforations in four lower Frio sands between 15,800 feet and 17,248 feet. On initial test, the well produced at a maximum rate of 5,070 MCFGPD and 246 BCPD.

The new field designation should be approved for the East, Mrs. S. K. "B" Lease Well No. 94. The nearest comparable Frio sand production is approximately 1.5 miles to the northwest in the Sarita, East (Lower Frio Cons.) Field. There are thirty eight wellbores within a 2½ mile radius of the No. 94 well. Eighteen wells are shallow completions, eight

wells are locations only or status unknown, five wells penetrated the producing depth of the subject wellbore but are not perforated within 100 feet of vertical separation of the completed interval and seven wells that have perforations within 100 feet of vertical separation of the completed interval. However, no well has ever produced from this fault block of Frio sands.

Newfield requests that the entire correlative interval between 15,755 feet to 17,250 feet measured depth as shown on the log for the Newfield Exploration Company - East, Mrs. S. K. "B" Lease Well No. 94 be considered a single field known as the Viejos Locos (Frio Lwr) Field. This interval includes four lower Frio sand reservoirs that are geopressured. Newfield submitted a structural cross section showing that the subject well is located in a highly faulted area and the Frio sands contained in the Sarita, East (Lower Frio Cons.) Field are not present in the subject well. In addition, the East, Mrs. S. K. "B" Lease Well No. 83 had an initial bottom-hole pressure of 13,813 psi on March 17, 2007, while the subject well had an initial bottom-hole pressure of 14,807 psi on April 13, 2008. Therefore, Newfield believes the proposed discovery well is not in pressure or fluid communication with any wells within the 2-1/2 mile radius.

Newfield Exploration Company is requesting the expanded correlative interval as result of the high initial drilling and completion costs and the limited reserves contributed by each of the individual reservoirs. The initial cost of drilling, completing and stimulating the wellbore in all possible zones within the requested correlative interval is approximately \$16 MM. Newfield estimated that the additional cost to complete the wellbore in each of the reservoirs separately after depletion of reserves would be approximately \$2 MM. In addition, the delay in the recovery of the reserves from each reservoir would result in the wells becoming less economic, thereby reducing the ultimate recovery.

Newfield also stated that producing all of the Frio reservoirs simultaneously would reduce the abandonment rate for each zone and increase the ultimate recovery of hydrocarbons from all of the reservoirs. Assuming an initial completion in four zones, an economic limit of 40 MCFPD and an exponential decline rate of 15% per year, Newfield calculated the incremental reserves to be recovered at approximately 89,838 MCFG per reservoir for a total of 269,507 MCFG per well.

Newfield also requests that a two factor allocation formula based on 95% deliverability and 5% per well be adopted for the field.

## FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.

- 2. Newfield Exploration Company completed its East, Mrs. S. K. "B" Lease Well No. 94 in April 2008 with perforations in four lower Frio sands between 15,800 feet and 17,248 feet.
- 3. The East, Mrs. S. K. "B" Lease Well No. 94 is entitled to a new field designation.
  - a. There are thirty eight wellbores within a 2½ mile radius of the No. 94 well. However, no well has ever produced from this fault block of Frio sands.
  - b. The nearest comparable Frio sand production is approximately 1.5 miles to the northwest in the Sarita, East (Lower Frio Cons.) Field.
  - c. Newfield submitted a structural cross section showing that the subject well is located in a highly faulted area and the Frio sands contained in the Sarita, East (Lower Frio Cons.) Field are not present in the subject well.
  - d. Based on bottomhole pressure data, Newfield believes the proposed discovery well is not in pressure or fluid communication with any wells within the 2-1/2 mile radius.
- 4. The entire correlative interval from 15,755 feet to 17,250 feet measured depth in the East, Mrs. S. K. "B" Lease Well No. 94 should be designated as the Viejos Locos (Frio Lwr) Field.
- Newfield estimated that the additional cost to complete a well in each of the reservoirs separately after depletion of reserves would be approximately \$2 MM. In addition, the delay in the recovery of the reserves from each reservoir would result in the wells becoming less economic, thereby reducing the ultimate recovery.
- 6. Assuming an initial completion in four zones, an economic limit of 40 MCFPD and an exponential decline rate of 15% per year, Newfield calculated the incremental reserves to be recovered at approximately 89,838 MCFG per reservoir for a total of 269,507 MCFG per well.
- 7. Allocation based on 95% deliverability and 5% per well will protect correlative rights.

### **CONCLUSIONS OF LAW**

1. Proper notice of this hearing was issued.

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- 2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
- 3. Approval of the requested new field designation and adoption of field rules will prevent waste, protect correlative rights and promote the orderly development of the field.

# **RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiner recommends approval of the new field designation and adoption of field rules for the Viejos Locos (Frio Lwr) Field.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner