## THE APPLICATION OF COBRA OIL & GAS CORPORATION TO ADOPT FIELD RULES FOR THE RAMAN (FUSSELMAN) FIELD, HOWARD COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

DATE OF HEARING: November 4, 2009

### APPEARANCES: REPRESENTING:

Dick Schmidt

Cobra Oil & Gas Corporation

## EXAMINER'S REPORT AND RECOMMENDATION

#### STATEMENT OF THE CASE

Temporary Field Rules for the Raman (Fusselman) Field were adopted in Final Order No. 8-86,422, effective November 18, 1985. The rules are summarized as follows:

- 1. 660'-1,320' well spacing;
- 2. 80 acre oil units with a maximum diagonal of 3,250 feet;
- 3. 100% acres allocation;

The temporary Field Rules were rescinded in May 1987 and, as a result, the field is currently on Statewide Rules.

Cobra Oil & Gas Corporation ("Cobra") requests that field rules be adopted to provide for a correlative interval, 467'-1,200' well spacing, 80 acre oil units with a maximum diagonal of 3,250 feet and 100% acres allocation.

This application was unprotested and the examiner recommends that Field Rules for the Raman (Fusselman) Field be adopted as proposed by Cobra.

### OIL AND GAS DOCKET NO. 08-0263239

### **DISCUSSION OF EVIDENCE**

The Raman (Fusselman) Field was discovered in July 1984 at an average depth of 10,476 feet. The field is currently under Statewide Rules and contains three plugged wells with one producing well carried on the proration schedule. Cobra is currently the only operator and has drilled a second well that is not on the proration schedule. Cumulative production from the field through September 2009 is 232.8 MBO and 19.2 MMCFG.

Cobra requests that the correlative interval from 10,468 feet to 10,487 feet as shown on the log of the AA Energy Corporation - McNew Lease, Well No. 1 (API No. 42-227-33384), be designated as a single reservoir for proration purposes and be designated as the Raman (Fusselman) Field. The field is composed of a single porosity zone contained within the Fusselman formation. The zone has an average matrix porosity of 7%, an average water saturation of 25%, an average net pay of 8 feet and an estimated recovery factor of 43%. Declining fluid rates and low water cuts indicate solution gas drive as the primary drive mechanism for the reservoir.

Cobra provided drainage area calculations for the three plugged wells and one producing well in the field. The drainage areas range from 4 acres up to a maximum of 76 acres. The average drainage area was calculated to be approximately 47 acres. Cobra will be actively developing the field by drilling infill wells that are located based on a 3-D seismic survey. As a result, Cobra requests that Field Rules be adopted to provide for 467'-1,200' well spacing, 80 acre oil units and allocation based on 100% acres.

## FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
- 2. The Raman (Fusselman) Field was discovered in July 1984 at an average depth of 10,476 feet.
- 3. Temporary Field Rules for the Raman (Fusselman) Field were adopted in Final Order No. 8-86,422, effective November 18, 1985. The rules provide for 660'-1,320' well spacing, 80 acre oil units with a maximum diagonal of 3,250 feet and 100% acres allocation.
- 4. The temporary Field Rules were rescinded in May 1987 and, as a result, the field is currently on Statewide Rules.
- 5. The field contains three plugged wells with one producing well carried on the proration schedule. Cobra is currently the only operator and has drilled a second well that is not on the proration schedule.

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- Cobra requests that the correlative interval from 10,468 feet to 10,487 feet as shown on the log of the AA Energy Corporation - McNew Lease, Well No. 1 (API No. 42-227-33384), be designated as a single reservoir for proration purposes and be designated as the Raman (Fusselman) Field.
- 7. The field is composed of a single porosity zone contained within the Fusselman formation. The zone has an average matrix porosity of 7%, an average water saturation of 25%, an average net pay of 8 feet and an estimated recovery factor of 43%.
- 8. Declining fluid rates and low water cuts indicate solution gas drive as the primary drive mechanism for the reservoir.
- 9. Cobra provided drainage area calculations for the three plugged wells and one producing well in the field. The drainage areas range from 4 acres up to a maximum of 76 acres. The average drainage area was calculated to be approximately 47 acres.
- 10. Cobra will be actively developing the field by drilling infill wells that are located based on a 3-D seismic survey. As a result, Cobra requests that Field Rules be adopted to provide for 467'-1,200' well spacing, 80 acre oil units and allocation based on 100% acres.

# CONCLUSIONS OF LAW

- 1. Proper notice of this hearing was issued.
- 2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
- Adopting Field Rules for the Raman (Fusselman) Field as proposed by Cobra Oil & Gas Corporation is necessary to prevent waste, protect correlative rights and promote development of the field.

# **RECOMMENDATION**

Based on the above findings of fact and conclusions of law, the examiner recommends that Field Rules for the Raman (Fusselman) Field be adopted, as proposed by Cobra Oil & Gas Corporation.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner