OIL AND GAS DOCKET NO. 06-0259033

THE APPLICATION OF CABOT OIL & GAS CORPORATION TO AMEND THE FIELD RULES FOR THE MINDEN (TRAVIS PEAK CONS.) FIELD, RUSK AND PANOLA COUNTIES, TEXAS

Heard by: Richard D. Atkins, P.E.

Date of Hearing: October 16, 2008

Appearances: Representing:

Dale E. Miller Cabot Oil & Gas Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Field rules for the Minden (Travis Peak Cons.) Field were adopted in Final Order No. 06-0245877, effective March 28, 2006, as amended. The rules in effect for the field are summarized as follows:

- 1. Correlative interval from 7,408 feet to 9,218 feet as shown on the log of the El Paso Production Company Wylie Lease, Well No. 5;
- 2. 467'/933' well spacing;
- 3. 640 acre gas units with optional 40 acre density; 160 acre oil units with optional 40 acre density;
- 4. Gas allocation based 75% on deliverability and 25% on acreage with the gas allocation suspended; Oil allocation based 75% on potential and 25% on acreage.

Cabot Oil & Gas Corporation requests that the field rules be amended to provide for 330'/660' well spacing with no minimum spacing between horizontal and vertical wells, 20 acre optional oil and gas units and that the gas allocation formula in the field remain suspended. Cabot also requests that the oil allowable be corrected to show the 1965 Yardstick Allowable of 435 BOPD for a 160 acre oil unit at a depth of 9,218 feet.

After the call of the hearing, Cabot amended its request to 467'/660' well spacing with no minimum spacing between horizontal and vertical wells to avoid a protest from El Paso Corporation. This application was then unprotested and the examiner recommends that the field rules for the Minden (Travis Peak Cons.) Field be amended as proposed by

Cabot.

DISCUSSION OF EVIDENCE

The Minden (Travis Peak Cons.) Field was established effective March 28, 2006 by Final Order No. 06-0245877. This order consolidated 62 Travis Peak Fields and the designated interval for the field is over 1,800 feet. The field is classified as an associated gas field and there are currently 67 gas wells and 47 oil wells listed on the proration schedules. The cumulative production through July 2008 for the gas field is 39.6 BCFG with 699.8 MBC and for the oil field is 3.6 MMBO with 28.5 BCFG.

The reservoir in the Minden (Travis Peak Cons.) Field is tight and is composed of lenticular sand porosity developments. The Travis Peak sands have an average porosity of 15%, an average water saturation of 30% and an average thickness of 7 feet. The primary drive mechanism is a gas expansion drive. Cabot estimated a gas recovery factor of 92% and an oil recovery factor of 15%.

Cabot analyzed sixty gas wells in the field. An excellent gas well will recover approximately 3.7 BCFG and 51.2 MBC, while an average gas well will recover approximately 65.8 MMCFG and 1.4 MBC. A volumetric calculation showed that there was 3.8 BCFG recoverable under a 640 acre unit and 118.5 MMCFG recoverable under a 20 acre unit. Cabot also provided drainage area calculations for the sixty wells. The drainage areas range from less than one acre up to a maximum of 1,146 acres. However, fifteen of the sixty wells will drain less than 20 acres.

Accordingly, Cabot analyzed seventy three oil wells in the field. An excellent oil well will recover approximately 75.5 MBO and 216.8 MMCFG, while an average oil well will recover approximately 9.3 MBO and 78.1 MMCFG. A volumetric calculation showed that there was 89.3 MBO recoverable under a 160 acre unit and 11.2 MBO recoverable under a 20 acre unit. Cabot also provided drainage area calculations for the seventy three wells. The drainage areas range from less than one acre up to a maximum of 353 acres. However, twenty two of the wells will drain less than 20 acres.

The proposed 467'/660' well spacing with no minimum spacing between horizontal and vertical wells and 20 acre optional oil and gas units will allow for future development in the Minden (Travis Peak Cons.) Field. In addition, Cabot is proposing to drill horizontal wells in the field to recover additional hydrocarbons within the Travis Peak formation. No minimum well spacing between horizontal and vertical wells will provide operators in the field the additional flexibility needed to drill horizontal wells at optimum locations without requiring Rule 37 Exceptions as a result of the vertical well locations.

Cabot also requests that the gas allocation formula remain suspended as there is a 100% market for all the gas produced from the field.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all persons entitled to notice and no protests were received.
- 2. The Minden (Travis Peak Cons.) Field was formed effective March 28, 2006 as a result of the consolidation of 62 fields.
- 3. The field is classified as an associated gas field and there are currently 67 gas wells and 47 oil wells listed on the proration schedules.
- 4. The reservoir in the Minden (Travis Peak Cons.) Field is tight and is composed of lenticular sand porosity developments. The Travis Peak sands have an average porosity of 15%, an average water saturation of 30% and an average thickness of 7 feet.
- 5. The primary drive mechanism is a gas expansion drive. Cabot estimated a gas recovery factor of 92% and an oil recovery factor of 15%.
- 6. Cabot provided drainage area calculations for sixty gas wells. The drainage areas range from less than one acre up to a maximum of 1,146 acres. However, fifteen of the sixty wells will drain less than 20 acres.
- 7. Cabot also provided drainage area calculations for seventy three oil wells. The drainage areas range from less than one acre up to a maximum of 353 acres. However, twenty two of the wells will drain less than 20 acres.
- 8. The proposed 467'/660' well spacing with no minimum spacing between horizontal and vertical wells and 20 acre optional oil and gas units will allow for future development in the Minden (Travis Peak Cons.) Field.
- 9. Suspension of the allocation formula in the field is appropriate because there is a market for any gas produced from the field.

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.
- 3. Amending the field rules for the Minden (Travis Peak Cons.) Field as proposed by Cabot 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 the field rules for the Minden (Travis Peak Cons.) Field be amended as proposed by Cabot Oil & Gas Corporation and that the allocation formula in the field remain suspended.

Respectfully submitted,

Richard D. Atkins, P.E. Technical Examiner