

THE APPLICATION OF CABOT OIL & GAS CORPORATION FOR FIELD RULES FOR THE KACEE (CRUEL) FIELD, COLORADO COUNTY, TEXAS

Heard by: Margaret Allen, Technical Hearings Examiner

Procedural history

Application received: September 8, 2003

Hearing held: October 15, 2003

Appearances

Dale Miller

Representing

Cabot Oil & Gas Corporation

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Cabot Oil & Gas Corporation ("Cabot") is seeking to expand the designated interval for the Kacee (Cruel) Field to one between 11,050' and 11,910', as shown on the log of its E. P. Cooper Gas Unit 2 Lease Well No. 3. Because this includes multiple reservoirs, a two-factor allocation formula based 95% on deliverability and 5% per well, is also proposed.

DISCUSSION OF THE EVIDENCE

The Kacee (Cruel) Field was discovered in 1998 and has four active wells: three operated by Cabot and one by Samson Lone Star. The discovery well, the Walter Oil & Gas Corporation Kallina No. 1, was perforated from 11,872' to 11,948', and encountered an initial reservoir pressure of 9098 psi. It produced almost 4 BCF in 16 months and has been recompleted to another field. The cumulative production for the seven wells that have produced from the field at one time or another is 25 BCF.

The well with the lowest current producing rate, 100 MCF per day, is Cabot's E.P. Cooper Gas Unit 2 Well No. 3. This well was completed in March of 1999, with perforations from 11,770' to 11,890' and encountered a bottomhole pressure of 7077 psi. This well's cumulative production is 4.6 BCF and 28,000 BC, and the remaining reserves are estimated to be 100 MMCF. The current deliverabilities of the other wells in this field range from 170 to 1906 MCF per day.

Current field production is from the Cruel sandstone in the Wilcox series. There are several shallower Wilcox sandstones which could be recompleted in these wells. For example, the McVay D

sandstone occurs between 11,716' and 11,724' in the E.P. Cooper GU 2 Well No. 3, and Cabot estimates the reserves in this sand at 52 MMCF. Adding perforations in the McVay D would cost about \$24,000, and result in a commingled producing rate of 800 MCF/D. The cost of a separate completion in the

McVay D sand would be \$60,000, which is greater than the expected profit from the incremental reserves.

There are other prospective sandstones in the Wilcox Formation, between 11,050 and 11,910', shown on the log of the Cooper GU 2 Well No. 3. Expanding the correlative interval for the field will encourage the development of these smaller sandstones. Increasing the designated interval so that multiple sandstones may be perforated together will also lower the economic limit of each completion and recover more gas from the Wilcox. No cross flow will occur while the wells are being produced. All of the sandstones within the proposed interval have similar properties and any cross flow that did occur would not cause waste.

There are multiple reservoirs within the proposed correlative interval and state statutes require a two-factor allocation formula for such a field. One based 5% per well and 95% on deliverability will satisfy this requirement and is close to the current formula. The allocation formula is now suspended and Cabot requests that it continue to be suspended.

FINDINGS OF FACT

1. Notice of this hearing was given to all operators in the field on October 1, 2003.
2. The discovery well, the Walter Oil & Gas Corporation Kallina No. 1, was perforated from 11,872' to 11,948', and produced almost 4 BCF before being recompleted to another field.
3. Cumulative field production is 25 BCF from the seven wells that have ever been completed in this field.
4. The Cabot Oil & Gas E.P. Cooper Gas Unit 2 Well No. 3, has produced 4.6 BCF from perforations between 11,770' to 11,890'.
5. This well's current production is about 100 MCF/D and its remaining reserves from the current completion are estimated at 100 MMCF.
6. The McVay D sandstone, between 11,716' and 11,724' in the Cooper GU 2 Well No. 3, has estimated reserves of 52 MMCF.
7. Downhole commingling reserves from the small sandstones in the Wilcox will encourage their development and lower the economic limit of each sandstone.
8. Downhole commingling production from sandstones within the Wilcox interval between 11,050' and 11,912', as shown on the log of the Cabot Oil & Gas E.P. Cooper Gas Unit 2 Well No. 3, will prevent waste.
9. The proposed designated interval includes several sandstones that are not in natural communication and state statutes require a two-factor allocation formula for fields with multiple reservoirs.

10. Allocation based 5% per well and 95% on deliverability is close to the statewide allocation formula and will satisfy statutory requirements.

CONCLUSIONS OF LAW

1. Proper notice was given as required by statute.
2. All things have been done or occurred to give the Railroad Commission jurisdiction to resolve this matter.
3. The requested designated interval and allocation formula rules will prevent waste, protect correlative rights and promote orderly development of the field.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the requested field rules for the Kacee (Cruel) Field be approved.

Respectfully submitted,

Margaret Allen
Technical Hearings Examiner

Date of Commission Action: November 13, 2003.