

THE APPLICATION OF BURLINGTON RES O & G -PERMIAN TO CONSIDER FIELD CONSOLIDATION OF THE KEYSTONE, SOUTH AND KEYSTONE, SOUTH (WICHITA ALBANY) FIELDS, WINKLER COUNTY, TEXAS

Heard by: Donna K. Chandler, Technical Hearings Examiner

Hearing Date: April 18, 2001

Appearances:

George Neale
Blain Lewis

Representing:

CrownQuest Operating LLP

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Burlington Res. O & G - Permian is the P-4 operator of all wells in the Keystone, South and Keystone, South (Wichita Albany) Fields. CrownQuest Operating LLC is the contract operator for Burlington in the two fields. Burlington and CrownQuest request that the Keystone, South (Wichita Albany) Field be consolidated into the Keystone, South Field and that the existing rules for the Keystone, South Field be made applicable to the consolidated field.

It is also requested that the Keystone Cattle Company Lease in the Keystone, South (Wichita Albany) Field be consolidated with the Keystone Cattle Co. Lease in the Keystone, South Field. Both leases cover the same 7,261.25 acres and the ownership in the two leases is identical. The Keystone Cattle Company lease in the Keystone, South Field has entity for density authority which should continue after the leases are consolidated.

This application was unopposed and the examiner recommends approval of the field consolidation and lease consolidation.

DISCUSSION OF THE EVIDENCE

The Keystone, South Field was discovered in 1958 at a depth of 6,470 feet. Burlington Res. O & G - Permian is the only operator in the field. The Keystone Cattle Co. lease is currently under waterflood with 12 producing wells and 5 injection wells. Burlington also operates three other producing wells in the field. The field operates under rules providing for 330' - 660' well spacing and 20 acre density.

The Keystone, South (Wichita Albany) Field was discovered in 1990 at a depth of approximately 7,118 feet. Burlington operates all of the wells in this field, all on the Keystone Cattle Company lease. This field operates under Statewide Rules.

The Keystone, South Field produces from the Clearfork. Average porosity is 10% and average water saturation is 25%. The original reservoir pressure was 3,040 psia and the current pressure is 350 psia. Current production is 180 BOPD, 290 MCFD and 290 BWPD. Cumulative production from the field is 3.1 million BO. The field has been under waterflood since the early 1960's and current injection is 3,000 BWPD. Waterflood response has been negligible mainly due to the lenticular nature of the reservoir and the lack of reservoir continuity between wells.

The Keystone, South Field had initially been developed on 40 acre density. The original 26 wells drilled on this density produced an average of 96,000 BO. Between 1990 and 1992, 12 infill wells were drilled on 20 acre density. These infill wells have produced an average of 90,000 BO, indicating that the greater well density increased ultimate recovery from the field.

The Wichita Albany has 10% average porosity and 25% average water saturation. Original reservoir pressure was 3,022 psia and current pressure in this reservoir is also 350 psia. Current production is 110 BOPD, 320 MCFD and 280 BWPD. Cumulative production is 602,000 BO.

Burlington plans to initiate waterflooding in the Keystone, South (Wichita Albany) Field while continuing injection into the Clearfork. Burlington believes that the Wichita Albany can be most effectively waterflooded if the two fields are consolidated. Several wells have already been granted exception to Rule 10 to commingle in the two fields. Burlington plans to drill 12 additional wells on 20 acre density. These wells can be used in the waterflood of both the Clearfork and Wichita Albany.

The designated interval for the Keystone, South Field is from 6,218 feet to 6,654 feet as shown on the log of the Keystone Cattle Company No. 379. Burlington proposes that the interval for the consolidated field be designated as the correlative interval from 6,210 feet to 7,269 feet as shown on the log of the Keystone Cattle Company No. 417.

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice and there were no protests.
2. The Keystone, South Field was discovered in 1958 at a depth of 6,470 feet. The field operates under rules providing for 330' - 660' well spacing and 20 acre density.
3. The Keystone, South (Wichita Albany) Field was discovered in 1990 at a depth of approximately 7,118 feet. This field operates under Statewide Rules.

4. Burlington Res. O & G - Permian is the only operator in both fields.
5. CrownQuest Operating LLC is the contract operator for all of Burlington's wells in both fields.
6. The Keystone, South Field has been waterflooded since the early 1960's, with little response due to the lenticular nature of the reservoir and the lack of reservoir continuity between wells.
7. Burlington plans to initiate waterflooding in the Keystone, South (Wichita Albany) Field while continuing injection into the Clearfork in the Keystone, South Field.
8. The proposed consolidation will maximize ultimate recovery from the two fields.
 - a. The reservoirs have similar rock properties and similar pressures.
 - b. Numerous Rule 10 exceptions have already been approved in the two fields.
 - c. Consolidation of the fields will allow the use of wellbores to waterflood both the Clearfork and Wichita Albany.
9. The Keystone Cattle Company lease in the Keystone, South Field, lease No. 03427, and the Keystone Cattle Company lease in the Keystone, South (Wichita Albany) Field, lease No. 32721, consist of the same acreage and have identical ownership.

CONCLUSIONS OF LAW

1. Proper notice was given as required by all applicable codes and regulatory statutes.
2. All things have occurred and been accomplished to give the Commission jurisdiction to decide this matter.
3. The proposed field consolidation and lease consolidation will prevent waste and protect correlative rights.

EXAMINER'S RECOMMENDATION

Based on the above findings and conclusions, the examiner recommends that the Keystone, South (Wichita Albany) Field be consolidated into the Keystone, South Field and that Rule 1 for the Keystone, South Field be amended to reflect the consolidated interval. The examiner further recommends that the Keystone Cattle Company leases in the two fields be consolidated.

Respectfully submitted,

Donna K. Chandler
Technical Hearings Examiner