THE APPLICATION OF CHESAPEAKE OPERATING, INC. TO EXPAND THE CORRELATIVE INTERVAL FOR THE ALLISON-BRITT (12350) FIELD AND ADOPT A TWO FACTOR ALLOCATION FORMULA FOR THE FIELD, WHEELER COUNTY, TEXAS

**Heard by:** Andres J. Trevino, P.E. on February 20, 2007

Appearances: Representing:

Bill G. Spencer Chesapeake Operating, Inc.

Cary McGregor

Steve Towns Dominion Oklahoma Texas E&P

## **EXAMINER'S REPORT AND RECOMMENDATION**

# STATEMENT OF THE CASE

The Allison-Britt (12350) Field was discovered in 1979 as an associated field. Chesapeake Operating, Inc. requests that the correlative interval for the field be established and expanded to include additional marginally productive sands. Chesapeake proposes that the field be defined as the correlative interval between 11,860 feet and 15,182 feet as shown on the log of the CIG Exploration's, Grayson Well No. 1-32 (Dry hole). Chesapeake also requests that a two factor allocation formula be adopted for the field which provides for allocation based on 95% deliverability and 5% per well.

This application was unprotested and the examiner recommends approval of Chesapeake's request to amend the correlative interval for the field and adopt a two factor allocation formula.

## **DISCUSSION OF THE EVIDENCE**

The Allison-Britt (12350) Field is an associated field in which Chesapeake is one of eight operators in the field. There are 60 gas wells and 2 oil wells on the proration schedules of which there are 59 producing gas wells and 1 producing oil well. The average

production from each gas well is 229 MCFD and 6.6 BCPD and the average production from the only oil well is 0.8 BOPD and 0 MCFD. Cumulative production from the field is 35 BCF of gas and 1.25 million BO.

There is no current correlative interval established for the field. Chesapeake requests that the field be expanded to include additional Des Moines, Cherokee and Atoka Granite Wash sands. The base of the Marmaton is found at 11,860 feet and the top of the 13 Finger Lime is found at 15,182 feet in the CIG Exploration's, Grayson Well No. 1-32. There is no Commission designated field for any of these sands in the immediate area.

Chesapeake estimates that an additional 137 MMCF of gas will be recovered as a result of commingling the additional Granite Wash sand members. The combined economic limit of each wellbore can be lowered by eliminating the cost of separate completions in each zone. Additionally, most zones would not be economic to produce as separate completions. The sands in the lower portion of the proposed correlative interval are the Atoka Granite Wash sands which are of poorer quality reservoir sands that require massive two stage fracture stimulation procedures to become economical. The field is experiencing recent increase in completions due to favorable natural gas prices and satisfactory results from new fracture stimulation techniques.

Because the proposed designated interval contains multiple sands, a two factor allocation is required by statue. The allocation will be based on 95% deliverability and 5% per well. The Allison-Britt (12350) field's allocation formula is currently suspended and the field produces at 100% AOF.

# **FINDINGS OF FACT**

- 1. Notice of this hearing was given to all operators of wells in the Allison-Britt (12350) Field at least ten days prior to the date of hearing.
- 2. The Allison-Britt (12350) Field is an associated field which was discovered in 1979. Chesapeake is the majority operator of all active wells in the field.
- 3. There are 59 producing gas wells and 1 producing oil well in the field and cumulative production from field is 35 BCF of gas and 1.25 million BO.
- 4. The proposed correlative interval for the field is from 11,860 feet and 15,182 feet as shown on the log of the CIG Exploration's, Grayson Well No. 1-32. This interval includes the Granite Wash interval from the base of the Marmaton to the top of the 13 Finger Lime.
- 5. Expansion of the correlative interval for the field to include the Des Moines, Cherokee and Atoka Granite Wash sands will maximize ultimate recovery by lowering the economic limit of the combined zones. Most zones would not be economic to produce as separate completions.

- 6. Water analysis report for water from Chesapeake's Elmore Well No. 32-5 indicates a low potential for scale deposition.
- 7. Expansion of the correlative interval for the field will not cause waste because the interval includes only Wilcox sands which have similar reservoir and fluid properties.
- 8. Allocation based on 95% deliverability and 5% per well is a reasonable allocation formula which satisfies statutory requirements. The field is currently AOF status.

# CONCLUSIONS OF LAW

- 1. Proper notice of this hearing was given to all persons legally entitled to notice.
- 2. All things have occurred or been accomplished to give the Railroad Commission jurisdiction in this matter.
- Expanding the designated interval for the Allison-Britt (12350) Field as proposed by Chesapeake Operating, Inc. is necessary to prevent waste and protect correlative rights.

## **EXAMINER'S RECOMMENDATION**

Based on the above findings and conclusions, the examiner recommends that the correlative interval for the Allison-Britt (12350) Field be established to include the Allison-Britt 12,350 Sand, Des Moines, Cherokee and the Atoka Granite Wash Sands and adopt a two factor allocation formula. It is recommended that the allocation formula for the field remain suspended.

Respectfully submitted,

Andres J. Trevino, P.E. Technical Hearings Examiner