RAILROAD COMMISSION OF TEXAS HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0309478

APPLICATION OF BOAZ ENERGY II OPERATING, LLC (078032) TO CONSOLIDATE THE DAWSON (DEVONIAN) FIELD INTO THE PEAK VICTOR (DEVONIAN) FIELD, CRANE COUNTY, TEXAS, AND AMEND THE PEAK VICTOR (DEVONIAN) FIELD RULES

HEARD BY:

Robert Musick - Technical Hearings Examiner

Jennifer N. Cook - Administrative Law Judge

HEARING DATE:

May 16, 2018 and June 18, 2018

CONFERENCE DATE:

August 21, 2018

APPEARANCES:

REPRESENTING:

APPLICANT

Dale E. Miller G. Tyson McClead

Boaz Energy II Operating, LLC

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Boaz Energy II Operating, LLC ("Boaz") seeks to consolidate the Dawson (Devonian) Field into the Peak Victor (Devonian) Field, in Crane County, Texas and amend the Peak Victor (Devonian) Field Rules. Boaz is requesting to amend the field rules in the Peak Victor (Devonian) Field with changes being proposed to well spacing, reporting requirements, the allocation formula and the correlative interval.

Boaz is requesting to retain the 40-acre base drilling unit, but requests to add a 20-acre option and 20-acre tolerance acreage provision to the field rules. Also, Boaz requests to amend lease line spacing, between well spacing, the Form P-16 Commission reporting format, and an allocation formula of 100% per well to promote uniform development of the consolidated Field and accommodate horizontal drilling activities, reduce waste and protect correlative rights. Boaz is requesting to retain a maximum efficiency rate ("MER") and a Net Gas-Oil Ratio ("GOR") developed for the Peak Victor (Devonian) Field to efficiently recover petroleum hydrocarbons in the hydrocarbon reservoir.

Notice of the application was sent to all operators with active wells in the two respective fields: the Peak Victor (Devonian) Field and Dawson (Devonian) Field, Crane County, Texas. The application is unprotested and no protesting party appeared at the hearing. The Technical Examiner and Administrative Law Judge (collectively, "Examiners") recommend approval of the consolidation of the Dawson (Devonian) Field into the Peak Victor (Devonian) Field and amend the field rules.

DISCUSSION OF THE EVIDENCE

Description of the Fields:

Boaz requests to consolidate the Dawson (Devonian) Field (23543666) into the Peak Victor (Devonian) Field (69922300) and amend the field rules to promote horizontal well exploration and reduce waste. The two existing fields are summarized below:

The Peak Victor (Devonian) Field

The Peak Victor (Devonian) Field was discovered on October 9, 1988 at a depth of 5,540 feet in the Devonian formation. Cumulative production records from 1988 through November 2017, indicate 1.1 million barrels of oil ("MMBO") and 8.3 billion cubic feet ("BCF") of gas have been recovered from 23 wells located in the field. The field is currently governed by the Statewide Rules along with field rules for spacing and allocation. A summary of the Peak Victor (Devonian) Field requirements are:

- o 467 feet lease line spacing;
- 1,200 feet between well spacing;
- 40-acre base units for oil and gas;
- 2- acre tolerance provision for gas;
- No maximum diagonal length;
- 100% acreage per well allowable allocation formula;
- GOR authority with a daily casinghead gas limit of 2,000 thousand cubic feet per day ("MCF/Day") per well; and
- MER of 200 barrels of oil per day ("BOPD") per well.

The Dawson (Devonian) Field

The Dawson (Devonian) Field was discovered in 1955 at a depth of 5,168 feet in the Devonian formation. On February 25, 1976, a gas field was established in the Devonian formation at a depth of 5,120 feet. Currently, no active oil or gas wells are in the field.

Cumulative production records from 1955 to August 1994 indicate 2.16 MMBO and 3.48 million cubic feet ("MMCF") of gas have been produced from the Dawson (Devonian) Field. A summary of the Dawson (Devonian) Field requirements are:

- 550 feet lease line spacing for oil and gas wells;
- Between well spacing for oil wells are 1,110 feet and 1,100 feet for gas wells;
- 40-acre base units for oil and gas;
- 20-acre tolerance acreage requirement;

- o 2,100 feet diagonal maximum length; and
- o 75% acreage and 25% per well allowable allocation formula.

Hearing Requests:

A letter from Boaz dated February 14, 2018, was received by the Commission requesting a hearing. A Notice of Hearing was issued by the Commission on April 9, 2018 to all parties entitled to notice at least ten days prior to the date of the hearing. A hearing was held on May 16, 2018 and June 18, 2018 to consider the requests by Boaz to consolidate the Dawson (Devonian) Field (23543666) into the Peak Victor (Devonian) Field (69922300) and amend the field rules to provide for the orderly development, prevent waste and protect correlative rights. Boaz requested the following:

- o Establish a correlative interval for the field;
- o Amend the lease line spacing to 330 feet;
- Amend between-well-spacing density to 660 feet;
- Retain 40-acre base drilling unit and proration unit for oil and gas;
- o Add a 20-acre tolerance acreage for oil and gas for the last well drilled on the lease;
- Add optional proration units of 20 acres;
- Establish a no diagonal maximum length requirement;
- Add Form P-16, Acreage Designation to file a report with the Commission:
- Retain the MER allowable of 200 BOPD per well;
- Retain the Net GOR of 2000 MCF/Day for each well; and
- o Amend the allocation formula to 100% per well.

Applicant's Evidence in the Hearing

Boaz identified the correlative interval for the proposed consolidated Peak Victor (Devonian) Field from 4,635 feet deep to about 5,656 feet, contains both Permian and Devonian age rock consisting of the Wichita or Lower Basal Permian and the Devonian formation from approximately 4,635 feet (upper contact of the Lower Basal Permian or Wichita formation) to 5,656 feet (lower contact of the Devonian formation) as shown on the Compensated Neutron-Litho-Density type log of the Dawson "78" Lease Well No. 1, located 2450' FNL & 2310' FEL of Section 78, Blk X, CCSD & RGNG RR Survey, A-400, Crane County, Texas.

The drilling unit in the consolidated field will remain at 40-acres, but Boaz is requesting an optional acreage of 20-acres, tolerance acreage of 20-acres, and no diagonal maximum length requirement. Also, rule modifications of lease line spacing, between well spacing, and the use of Form P16 is being requested to accommodate horizontal wells in the field and reduce potential waste. Recoverable oil in the Peak Victor (Devonian) Field has an estimated ultimate recovery ("EUR") of 1.5 MMBO and for the Dawson (Devonian) Field has an EUR of 2.2 MMBO. The newly consolidated Peak Victor (Devonian) Field will have an EUR of 3.7 MMBO.

Boaz is requesting to retain the GOR authority associated with the Peak Victor (Devonian) Field with a casinghead gas limit of 2,000 MCF/Day per well, established by Docket 08-0272701, Conference date 12/13/2011. Boaz is also requesting to retain the MER of 200 BOPD per well, associated with the Peak Victor (Devonian) Field established by Docket 08-0270698, Conference date 7/11/2011. Based on the production graphs from the Peak Victor (Devonian) and the Dawson (Devonian) Fields, the MER and GOR appear to be appropriate for the consolidated Peak Victor (Devonian) Field.

Examiners Analysis

The Technical Examiner and Administrative Law Judge (collectively, "Examiners") recommend approval of the consolidation of the Dawson (Devonian) Field into the Peak Victor (Devonian) Field. The requested rule amendments will increase recovery of resources and prevent waste and establish a correlative interval for the Peak Victor (Devonian) Field, which will protect correlative rights.

Pursuant to § 2001.144 (a)(4)(A) of the Texas Government Code and the agreement of the applicant, this Final Order is final and effective when a Master Order relating to the Final Order is presented at Commission conference and signed by the Commissioners.

FINDINGS OF FACT

- 1. Notice of this hearing was given to all operators with active wells in the two respective fields: the Peak Victor (Devonian) Field, and Dawson (Devonian) Field, Crane County, Texas. The application is unprotested.
- 2. The Peak Victor (Devonian) Field (69922300) is in Crane County, Texas. The Peak Victor (Devonian) Field was discovered on October 9, 1988. The Peak Victor (Devonian) Field is currently governed by Statewide Rules along with Field Rules for GOR and MER. A summary of the current Peak Victor (Devonian) Field requirements are:
 - 467 feet lease line spacing;
 - 1,200 feet between well spacing;
 - 40-acre base units for oil and gas;
 - 12- acre tolerance provision for gas;
 - No maximum diagonal length;
 - 100% acreage per well allowable allocation formula:
 - GOR authority with a casinghead gas limit of 2,000 MCF/Day per well;
 - MER of 200 BOPD per well.
- 3. The Dawson (Devonian) Field (23543666) is in Crane County, Texas. The Dawson (Devonian) Field was discovered in 1955 and designated at a formal conference held on February 7, 1955. The Field historically has produced from the Devonian formation found at a depth of 5,168 feet, but currently no oil or gas wells are producing in the field. The Dawson (Devonian) Field is currently governed by Statewide Rules along with field rules addressing spacing and allowance requirements. A summary of the Dawson (Devonian) Field requirements are:

- Lease line spacing for oil and gas wells are 550 feet;
- Between well spacing for oil wells are 1,110 feet and gas wells are 1,100 feet;
- o 40-acre base units for oil and gas;
- o 20-acre tolerance acreage requirement;
- Diagonal maximum length is 2,100 feet; and
- o 75% acreage and 25% per well allowable allocation formula.
- 4. Cumulative production records from 1988 to November 2017 for the Peak Victor (Devonian) Field, indicate 1.1 MMBO and 8.3 BCF of gas has been recovered in the field;
- Historical records from 1955 to August 1994 indicate 2.16 MMBO and 3.48 million cubic feet MMCF of gas have been produced from the Dawson (Devonian) Field, but currently, no active oil or gas wells are in the field.
- 6. A letter from Boaz dated February 14, 2018 was received by the Commission requesting a hearing. A hearing was held on May 16, 2018 and June 18, 2018 to consider the requests by Boaz to consolidate the Dawson (Devonian) Field into the Peak Victor (Devonian) Field and amend the field rules. Boaz requested the following in the hearing:
 - o Establish a correlative interval for the Field;
 - Amend the lease line spacing to 330 feet and between-well-spacing density to 660 feet;
 - Retain 40-acre base drilling unit and proration unit for oil and gas;
 - Add a 20-acre tolerance acreage for oil and gas for the last well drilled on the lease;
 - Add optional proration units of 20 acres;
 - Establish a no diagonal maximum length requirement;
 - Add Form P-16, Acreage Designation to file a report with the Commission;
 - Retain the MER allowable of 200 BOPD per well;
 - Retain the Net GOR of 2000 MCF/Day for each well; and
 - Amend the allocation formula to 100% per well.
- 7. The proposed correlative interval for the Peak Victor (Devonian) Field is both Permian and Devonian age rock consisting of the Wichita or Lower Basal Permian and the Devonian formation from approximately 4,635 feet (upper contact of the Lower Basal Permian or Wichita formation) to 5,656 feet (lower contact of the Devonian formation), as shown on the Compensated Neutron-Litho-Density type log of the Dawson "78" Lease Well No. 1, located 2450' FNL & 2310' FEL of Section 78, Blk X, CCSD & RGNG RR Survey, A-400, Crane County, Texas.
- 8. Boaz is requesting to retain the GOR authority associated with the Peak Victor (Devonian)

Field with a casinghead gas limit of 2,000 MCF/Day per well, established by Docket 08-0272701, Conference Date 12/13/2011.

- 9. Boaz is requesting to retain the MER of 200 BOPD, associated with the Peak Victor (Devonian) Field established by Docket 08-0270698, Conference Date 7/11/2011.
- 10. Recoverable oil in the Peak Victor (Devonian) Field has an estimated ultimate recovery ("EUR") of 1.5 MMBO and for the Dawson (Devonian) Field has an EUR of 2.2 MMBO. The newly consolidated field will have a total EUR of 3.7 MMBO.
- 11. The consolidated field and the amended field rules will promote orderly development, reduce potential waste, and protective correlative rights.
- 12. At the hearing, Boaz agreed on the record that the Final Order in this case is to be final and effective when the Master Order relating to the Final Order is signed.

CONCLUSIONS OF LAW

- 1. Resolution of the subject application is a matter committed to the jurisdiction of the Railroad Commission of Texas. Tex. Nat. Res. Code § 81.051.
- 2. All notice requirements have been satisfied. 16 Tex. Admin. Code § 1.42.
- 3. The requested amendment to the Field Rules will prevent waste and protect correlative rights.
- 4. Pursuant to § 2001.144 (a)(4)(A) of the Texas Government Code and the agreement of the applicant, the Final Order is final and effective when a Master Order relating to the Final Order is presented at Commission conference and signed by the Commissioners.

EXAMINER'S RECOMMENDATION

Based on the above findings of facts and conclusions of law, the examiners recommend consolidating the Dawson (Devonian) Field into the Peak Victor (Devonian) Field and amending the permanent field rules for the Peak Victor (Devonian) Field, as proposed by Boaz.

Respectfully submitted,

Robert Musick

Technical Hearings Examiner

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Administrative Law Judge