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RAILROAD COMMISSION OF TEXAS

HEARINGS DIVISION

OIL AND GAS DOCKET NO. 08-0317446

APPLICATION OF BLACKBEARD OPERATING, LLC (073056) TO ADOPT PERMANENT FIELD RULES IN THE MONAHANS, NORTH FIELD, WINKLER **COUNTY, TEXAS**

HEARD BY:

John L. Moore – Technical Examiner

Kristi M. Reeve – Administrative Law Judge

HEARING DATE:

March 13, 2019

RECORD CLOSED:

March 25, 2019

CONFERENCE DATE:

June 18, 2019

APPEARANCES:

REPRESENTING:

Dale E. Miller, Graduate Engineer G. Tyson McClead, Graduate Engineer

Blackbeard Operating, LLC

EXAMINERS' REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Blackbeard Operating, LLC ("Blackbeard") seeks to adopt permanent field rules for the Monahans, North Field ("Field"), Winkler County, Texas. In addition, Blackbeard seeks blanket Statewide Rule 10 ("SWR 10") authority to downhole commingle production from the Field with the overlaying Monahans, North (Clearfork) Field. The respective fields are designated in different stratigraphic sections of the Clearfork formation.

Blackbeard requests the following permanent field rules be adopted for the Field:

Rule 1: Designate a correlative interval from 5,988 feet to 6,539 feet, the lower Clearfork formation, as shown on the Borehole Compensated Sonic Log of the Amoco Production Company, Sealy Smith A Lease Well No. A-

- 51, located in Section 53, Blk A of the G&MMB&A Survey, Winkler County. Texas:
- Rule 2: Establish lease line spacing of 330 feet and between well spacing of 330 feet, with no spacing requirement between a vertical and horizontal well;
- Rule 3: 40-acre base units with optional 10-acre density, 10-acre tolerance provision for the last well on the lease, the filing of Form P-16 to designate the number of acres to be assigned to individual wells with a plat of the entire lease, no requirement to file individual well proration unit plats and no maximum diagonal limitation, however an operator may file individual proration plats at their option:
- Rule 4: Field Maximum Efficient Rate ("MER") for a top Oil Allowable of 250 barrels of oil per day ("BOPD") and unlimited Daily Gas Limit per well;
- Rule 5: 100% Acreage Allocation.

The subject Field is designated in the "lower" Clearfork reservoir, while the Monahans, North (Clearfork) Field is designated in the "upper" Clearfork reservoir. The Monahans, North (Clearfork) Field stratigraphically overlays, is contiguous with, and occupies the same areal extent of the Field. The subject Field was discovered in 1944, while the upper Monahans, North (Clearfork) Field was discovered in 1987. Permanent field rules similar to those requested by Blackbeard were previously adopted for the Monahans, North (Clearfork) Field in Final Order No. 08-0308621. Given that both fields produce from the Clearfork formation and are considered compatible, by adopting the requested permanent field rules and the blanket SWR 10 exception authority, the production economic limit for both fields is lowered, thereby resulting in more hydrocarbon recovery and the prevention of waste.

Notice was provided to the other operator in the two fields, Apache Corporation ("Apache"). The application is unprotested. The Technical Examiner and Administrative Law Judge ("Examiners") recommend the requested permanent field rules and the blanket SWR 10 authority to be adopted as proposed by Blackbeard.

DISCUSSION OF THE EVIDENCE

The Field is approximately 13 miles southeast of Kermit and was discovered on March 12, 1944 at a depth of 6,248 feet. It is currently operated under Statewide Rules with 467'/1,200' lease/well spacing, 40-acre base units, a Field top well allowable of 91 BOPD, and an unlimited net gas oil ratio.

There have been 16 oil wells and 8 gas wells completed in the Field. The March 2019 proration schedule shows there is one remaining oil well operated by Apache Corp. producing 1 BOPD. Blackbeard's Sealy-Smith Foundation, the A-172 Well, initial potential tested at 227 bopd, and has not reported any production. The Field has produced 986,128 barrels of oil, 7.14 billion cubic feet of casinghead gas ("BCFG"),

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29,095 barrels of condensate and 8.47 BCFG from March 1944 through December 2018. Blackbeard plans to drill additional wells in the Field.

Blackbeard presented reservoir characteristics as follows: average porosity of 11%, average water saturation of 45%, average net effective oil pay thickness is 220 feet, and a formation volume factor of 1.41 reservoir barrel per stock-tank barrel ("rbbl/STB"). The reservoir is in the late primary stage of depletion. Based on the reservoir information, the volumetric oil content was calculated by Blackbeard. The recoverable oil in place ("ROIP") underlying a 40-acre unit is estimated to be 528,000 STB, and the ROIP underlaying a 10-acre unit is estimated to be 132,000 STB.

The existing field rules call for 40-acre base proration units. Blackbeard wishes to continue the 40-acre units and requests the adoption of 10-acre optional units. Based on the respective cumulative production from three wells and the reservoir characteristics, Blackbeard provided drainage area calculations in the Field that range from 0.02 to 4.35 acres, thereby justifying the optional acreage provision. The requested spacing of 330/330 feet will accommodate the proposed 10-acre optional units. The proposed rules will provide for the orderly drilling, completion, and operation of wells which will prevent waste and protect correlative rights.

In addition to requesting the adoption of permanent field rules, Blackbeard requests Blanket SWR 10 exception authority to downhole commingle production from the Field with the Monahans, North (Clearfork) Field. The subject Field is designated in the 'lower' Clearfork reservoir while the Monahans, North (Clearfork) Field is designated in the 'upper' Clearfork reservoir. The Monahans, North (Clearfork) Field stratigraphically overlays, is contiguous with, and occupies the same areal extent of the Field. The subject Field was discovered in 1944, while the upper Monahans, North (Clearfork) Field was discovered in 1987. Permanent field rules similar to those requested by Blackbeard for the subject Field were previously adopted for the Monahans, North (Clearfork) Field in Final Order No. 08-0308621.

Given that both fields produce from the Clearfork formation, by adopting the requested permanent field rules and the SWR 10 exception authority, the production economic limit for both fields is lowered, thereby resulting in more hydrocarbon recovery, a more orderly and efficient field development, and the prevention of waste. Under SWR 10 authority, production is limited to the top allowable of the lower top allowable field to protect mineral interest owners' correlative rights. In this case, adopting similar field rules for both commingled fields, the protection of correlative rights is served.

FINDINGS OF FACT

1. Notice of this hearing was given to all parties entitled to notice at least ten days prior to the date of the hearing. No protests were received.

- 2. The Monahans, North Field was discovered on March 12,1944.
- 3. The Monahans, North Field is currently governed by Statewide Field Rules with an unlimited gas-oil ratio.
- 4. The Monahans, North Field is being actively developed with more new wells planned by Blackbeard.
- 5. The Monahans, North (Clearfork) Field stratigraphically overlays, is contiguous with, and occupies the same areal extent of the Monahans, North Field. Permanent field rules similar to those requested by Blackbeard were previously adopted for the Monahans, North (Clearfork) Field in Final Order No. 08-0308621.
- 6. The proposed spacing and density rules for Monahans, North Field are reasonable for further development of the field.
- 7. Adopting the requested permanent field rules and the blanket SWR 10 exception authority, the production economic limit for the Monahans, North Field and the Monahans, North (Clearfork) Field is lowered, thereby resulting in more hydrocarbon recovery, more orderly and efficient field development, and the prevention of waste.
- 8. At the hearing, the applicant agreed on the record that the Final Order in this case is to be effective when the Master 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 proposed permanent field rules and SWR 10 authority will reduce waste and promote orderly development of the Monahans, North Field and the Monahans, North (Clearfork) Field.
- 4. Pursuant to §2001.144(a)(4)(A), of the Texas Government Code, and the agreement of the applicant, this Final Order is effective when a Master Order relating to this Final Order is signed on June 18, 2019.

EXAMINERS' RECOMMENDATION

Based on the above findings of fact and conclusions of law, the Examiners recommend the Commission adopt permanent field rules for the Monahans, North Field and blanket SWR 10 authority to downhole commingle the Monahans, North Field with the Monahans, North (Clearfork) Field, as proposed by Blackbeard.

Respectfully submitted,

ohn L. Moore

Technical Examiner

Kristi M. Reeve

Administrative Law Judge