

OIL AND GAS DOCKET NO. 03-0271580

THE APPLICATION OF CAZA OPERATING, LLC TO CONSIDER A NEW FIELD DESIGNATION AND TO ADOPT TEMPORARY FIELD RULES FOR THE PROPOSED RED BULL (COOK MOUNTAIN) FIELD, WHARTON COUNTY, TEXAS

HEARD BY: Richard D. Atkins, P.E. - Technical Examiner

DATE OF HEARING: September 7, 2011

APPEARANCES: **REPRESENTING:**

APPLICANT:

Dale E. Miller

Caza Operating, LLC

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Caza Operating, LLC ("Caza") requests that a new field designation called the Red Bull (Cook Mountain) Field (ID No. 75177 500) be approved for its O. B. Ranch Lease, Well No. 1. Caza proposes that the following Temporary Field Rules be adopted for the new field, subject to review in 18 months:

1. Designation of the field as the correlative interval from 12,490 feet to 12,830 feet as shown on the log of the Caza Operating, LLC - O. B. Ranch Lease, Well No. 1 (API No. 42-481-35118);
2. 467'-1,200' well spacing;
3. 80 acre gas units;
4. Allocation based on 95% acres and 5% per well with AOF status.

Since there were returned Notices of Hearing, Caza published the Notice of Hearing in the *Wharton Journal-Spectator* for four consecutive weeks beginning on July 30, 2011. There were no protests to this application and the examiner recommends approval of the new field designation and Temporary Field Rules for the Red Bull (Cook Mountain) Field.

DISCUSSION OF EVIDENCE

Caza completed its O. B. Ranch Lease, Well No. 1, in November 2010 with perforations in the Cook Mountain formation between 12,494 feet and 12,826 feet. On

OIL AND GAS DOCKET NO. 03-0271580

initial test, the well produced flowing at a maximum rate of 2.5 MMCFGPD, 485 BOPD and 470 BWPD. Currently, Caza is the only operator in the new field. Cumulative production from the field through June 2011 is 151.0 MMCFG and 16.9 MBO.

A new field designation should be approved for the O. B. Ranch Lease, Well No. 1, as there is no comparable production within a 2.5 mile radius of the discovery well. Although six wells located in the 2.5 mile radius penetrated the Cook Mountain formation, none of the wells produced from or tested the interval. Caza requests that the correlative interval from 12,490 feet to 12,830 feet as shown on the log of the Caza Operating, LLC - O. B. Ranch Lease, Well No. 1 (API No. 42-481-35118), H. Griffith Survey, A-25, Wharton County, Texas, be designated as the Red Bull (Cook Mountain) Field. The interval includes the entire Cook Mountain formation, which contains three separate and distinct sand members.

From log analysis, Caza estimated an average porosity of 17%, an average saltwater saturation of 23% and a net pay thickness of 16 feet. Assuming a annual decline rate of 10% and 15% and an economic limit of 10 MCFGPD, Caza calculated the drainage areas for the discovery well to be 94 acres and 63 acres, respectively. Based on this analysis, Caza requests 467'-1,200' well spacing and a density of 80 acre gas units. Caza submitted a tabulation of over 130 fields in RRC District 3 that had similar Field Rules. The listing included three Cook Mountain fields.

Caza stated that the initial cost of drilling, completing and stimulating the wellbore in the three zones within the requested correlative interval is approximately \$4.7 million. Caza estimated that the additional cost to complete the wellbore in each of the reservoirs separately after depletion of reserves would be approximately \$165,800. In addition, the delay in the recovery of the reserves from each reservoir would result in the wells becoming less economic, thereby reducing the ultimate recovery.

The sands all have depletion drive as the primary drive mechanism. The three sands may prove to be productive in future wells, but separate completions in each sand would not be commercial. Caza also stated that producing all of the reservoirs simultaneously would reduce the abandonment rate for each zone and increase the ultimate recovery of hydrocarbons from all of the reservoirs. Assuming an economic limit of 10 MCFGPD and an exponential decline rate of 10% per year, Caza calculated the incremental reserves to be recovered for each additional reservoir completed in a wellbore to be 34,643 MCFG per zone, or a total of 103.9 MMCFG.

To satisfy state statutes, Caza requests that a two factor allocation formula based on 95% acres and 5% per well be adopted for the field. Caza also requests that the allocation formula be suspended, as there is a 100% market demand for all of the gas produced from the field. In addition, Caza requests the cancellation of any overproduction that may have accrued to wells in the proposed new field.

OIL AND GAS DOCKET NO. 03-0271580

FINDINGS OF FACT

1. Notice of this hearing was given to all persons entitled to notice at least ten days prior to the date of hearing.
2. The Notice of Hearing was published in the *Wharton Journal-Spectator* for four consecutive weeks beginning on July 30, 2011.
3. Caza completed its O. B. Ranch Lease, Well No. 1, in November 2010 with perforations in the Cook Mountain formation between 12,494 feet and 12,826 feet. On initial test, the well produced flowing at a maximum rate of 2.5 MMCFGPD, 485 BOPD and 470 BWPD.
4. The O. B. Ranch Lease, Well No. 1, is entitled to a new field designation, as there is no comparable production within a 2.5 mile radius of the discovery well.
5. The correlative interval from 12,490 feet to 12,830 feet as shown on the log of the Caza Operating, LLC - O. B. Ranch Lease, Well No. 1 (API No. 42-481-35118), H. Griffith Survey, A-25, Wharton County, Texas, should be designated as the Red Bull (Cook Mountain) Field. The interval includes the entire Cook Mountain formation, which contains three separate and distinct sand members.
6. Adoption of 467'-1,200' well spacing and a density of 80 acre gas units are appropriate for the field.
 - a. Assuming a annual decline rate of 10% and 15% and an economic limit of 10 MCFGPD, the calculated drainage areas for the discovery well are 94 acres and 63 acres, respectively.
 - b. Over 130 fields in RRC District 3, including three Cook Mountain fields, already have similar rules.
7. A two-factor allocation formula based on 95% acreage and 5% per well will protect correlative rights and satisfy statutory requirements.
8. Suspension of the allocation formula is appropriate, as there is a 100% market demand for any gas produced from the field.

OIL AND GAS DOCKET NO. 03-0271580

CONCLUSIONS OF LAW

1. Proper notice of this hearing was issued.
2. All things have been accomplished or have occurred to give the Commission jurisdiction in this matter.
3. Approval of the requested new field designation and adoption of Temporary Field Rules for the Red Bull (Cook Mountain) Field will prevent waste, protect correlative rights and promote the orderly development of the field.
4. Cancellation of any overproduction in the Red Bull (Cook Mountain) Field will not harm correlative rights or cause waste.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends that the Commission approve the new field designation and adopt Temporary Field Rules, subject to review in 18 months, for the proposed Red Bull (Cook Mountain) Field, as requested by Caza Operating, LLC.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner