

THE APPLICATION OF CHESAPEAKE OPERATING INC. TO CONSIDER A NEW FIELD DESIGNATION AND FIELD RULES FOR THE PROPOSED LA ESCALERA (ATOKA) FIELD, PECOS COUNTY, TEXAS

Heard by: Richard D. Atkins, P.E. - Technical Examiner

Date of Hearing: August 5, 2008

Appearances:

Cary McGregor

Representing:

Chesapeake Operating Inc.

EXAMINER'S REPORT AND RECOMMENDATION

STATEMENT OF THE CASE

Chesapeake Operating Inc. requests that a new field designation called the La Escalera (Atoka) Field be approved for its University Lands 27-9 Lease, Well No. 1 (API No. 42-371-37746). Chesapeake requests that the following field rules be adopted for the new field:

1. Designation of the field as the correlative interval from 18,720 feet to 19,300 feet measured depth as shown on the log for the Chesapeake Operating Inc. - University Lands 27-9 Lease, Well No. 1 (API No. 42-371-37746), Pecos County, Texas;
2. 933'-1,867' well spacing;
3. 640 acre gas proration units with 10percent tolerance and a maximum diagonal of 8,500'; and
4. Allocation based on 75percent acreage and 25percent deliverability and suspension of the allocation formula.

There were no protests to this application and the examiner recommends approval of the new field designation and field rules.

DISCUSSION OF EVIDENCE

Chesapeake Operating Inc. completed its University Lands 27-9 Lease, Well No. 1, in August 2007 with perforations in the Atoka reservoir between 18,874 feet and 18,990

feet. On initial test, the well produced at a maximum rate of 5,411 MCFGPD with an average water yield of 8 barrels per MMCFG. Cumulative production through July 2008 is 698.6 MMCFG and 5.9 MBW.

A new field designation should be approved for the University Lands 27-9 Lease, Well No. 1. The nearest production is 2.5 miles southwest in the Puckett (Devonian) Field. The nearest comparable Atoka production is approximately 10.1 miles to the north in the Gomez (Atoka) Field. There are fourteen wellbores within a 2½ mile radius of the discovery well. Ten wells are shallow completions, one well produces from the Devonian formation and there are three dry holes. No well has ever produced from the Atoka formation within the 2.5 mile radius.

Chesapeake requests that the correlative interval from 18,720 feet to 19,300 feet measured depth as shown on the log for the Chesapeake Operating Inc. - University Lands 27-9 Lease, Well No. 1 (API No. 42-371-37746), Pecos County, Texas, be considered a single field known as the La Escalera (Atoka) Field. This interval includes the entire Atoka interval which is geo-pressured. The discovery well had an initial shut-in bottom-hole pressure of 15,386 psi, an initial shut-in tubing pressure of 12,791 psi and a bottomhole temperature of 269degree F.

Chesapeake provided drainage area calculations for the University Lands 27-9 Lease, Well No. 1, which support the requested 640 acre density. The well has a 7.0percent average porosity, a 40.0percent average water saturation and 47 feet of net pay. Volumetric calculations indicate 23.5 BCFG in the reservoir on a 640 acre tract. Using an estimated recovery factor of 10percent, the well should recover approximately 2.4 BCFG. In addition, the well is producing on a hyperbolic decline rate and decline curve analysis gives an estimated ultimate recovery of 3.1 BCFG. The average estimated gas recoveries result in a calculated drainage area for the well of approximately 631 acres.

Chesapeake requested the 933'-1,867' well spacing to provide greater flexibility in selecting future drilling locations. In addition, there are several other Atoka fields located in Pecos County that have similar well spacing and 640 acre gas units.

Chesapeake requests that a two factor allocation formula based on 75percent acreage and 25% deliverability be adopted for the field. Chesapeake also requests that the allocation formula be suspended, as there is a 100percent market for all the gas produced, and that the filing of P-15's and plats not be required, as long as the field is 100percent AOF.

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. Chesapeake Operating Inc. completed its University Lands 27-9 Lease, Well No. 1 in August 2007 with perforations in the Atoka reservoir between 18,874 feet and 18,990 feet. On initial test, the well produced at a maximum rate of 5,411 MCFGPD with an average water yield of 8 barrels per MMCFG.
3. The University Lands 27-9 Lease, Well No. 1 is entitled to a new field designation.
 - a. There are fourteen wellbores within a 2½ mile radius of the discovery well. However, no well has ever produced from the Atoka formation.
 - b. The nearest production is 2.5 miles southwest in the Puckett (Devonian) Field.
 - c. The nearest comparable Atoka production is approximately 10.1 miles to the north in the Gomez (Atoka) Field.
4. The correlative interval from 18,720 feet to 19,300 feet measured depth in the University Lands 27-9 Lease, Well No. 1, should be designated as the La Escalera (Atoka) Field.
5. Chesapeake provided drainage area calculations for the University Lands 27-9 Lease, Well No. 1, which support the requested 640 acre density. The average estimated gas recoveries result in a calculated drainage area for the well of approximately 631 acres.
6. Chesapeake requested the 933'-1,867' well spacing to provide greater flexibility in selecting future drilling locations.
7. Allocation based on 75percent acreage and 25percent deliverability will protect correlative rights. Suspending the allocation formula is appropriate, as there is a 100% market for all the gas produced.

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 field rules will prevent waste, protect correlative rights and promote the orderly development of the field.

RECOMMENDATION

Based on the above findings of fact and conclusions of law, the examiner recommends approval of the new field designation for the La Escalera (Atoka) Field, adoption of field rules and suspension of the allocation formula.

Respectfully submitted,

Richard D. Atkins, P.E.
Technical Examiner