

**STATE OF NEW MEXICO
ENERGY, MINERALS, AND NATURAL RESOURCES DEPARTMENT
OIL CONSERVATION DIVISION**

**IN THE MATTER OF THE HEARING
CALLED BY THE OIL CONSERVATION
DIVISION FOR THE PURPOSE OF
CONSIDERING:**

**CASE NO. 12448 (Reopened)
Order No. R-11432-A**

**APPLICATION OF CHESAPEAKE OPERATING, INC. TO REOPEN CASE
12448 AND AMEND DIVISION ORDER NO. R-11432 WHICH PROVIDED FOR
AN UNORTHODOX GAS WELL LOCATION, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on October 19 and November 16, 2000, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this *24th* day of November, 2000, the Division Director, having considered the testimony, the record, and the recommendations of the Examiner,

FINDS THAT:

- (1) Due public notice has been given and the Division has jurisdiction of this case and its subject matter.
- (2) By Order No. R-11432 issued in Case No. 12448 on August 3, 2000, the Division authorized Chesapeake Operating, Inc. ("Chesapeake") to complete and produce its Boyce "15" Well No. 3 (API No. 30-025-35006) at an unorthodox surface location 2310 feet from the North line and 341 feet from the East line (Unit H), and at an unorthodox bottomhole location 2382 feet from the North line and 430 feet from the East line (Unit H) of Section 15, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, in the Morrow formation, Townsend-Morrow Gas Pool. The E/2 of Section 15 was to be dedicated to the well forming a standard 320-acre gas spacing and proration unit.
- (3) Chesapeake seeks approval for an unorthodox gas well location for its Boyce "15" Well No. 3 in the Atoka formation, North Shoe Bar-Atoka Gas Pool, Lea County, New Mexico. Chesapeake further seeks authority to simultaneously dedicate the E/2 of Section 15 in the North Shoe Bar-Atoka Gas Pool to the Boyce "15" Well No. 3 and to its existing Boyce "15" Well No. 1 (API No. 30-025-34591) located at a standard

gas well location 800 feet from the North line and 660 feet from the East line (Unit A) of Section 15.

(4) Chesapeake appeared at the hearing through legal counsel and requested that the Division incorporate the hearing transcript and exhibits presented in Case No. 12482, heard by the Division on September 7, 2000, in the immediate case.

(5) By Order No. R-11460, entered in Case No. 12482 on September 28, 2000, the Division denied the application of Chesapeake to: i) contract the lower vertical limits of the North Shoe Bar-Atoka Gas Pool to exclude the "Brunson" interval; ii) redesignate the North Shoe Bar-Atoka Gas Pool as the North Shoe Bar Upper-Atoka Gas Pool; and iii) create a new gas pool for the production of gas from the "Brunson" interval, this pool to be designated the North Shoe Bar Lower-Atoka Gas Pool.

(6) The North Shoe Bar-Atoka Gas Pool currently comprises the following described area:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM

Section 2: Lots 9, 10, 15 and 16, SE/4

Section 10: E/2

Section 11: All

Section 15: E/2

(7) The North Shoe Bar-Atoka Gas Pool is currently governed by Division Rule 104.C.(2), which states, in part:

- (a) the initial well on a 320-acre unit shall be located no closer than 660 feet to the outer boundary of the quarter section on which the well is located and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary; and
- (b) only one infill well on a 320-acre unit shall be allowed provided that the well is located in the quarter section of the 320-acre unit not containing the initial well and is no closer than 660 feet to the outer boundary of the quarter section and no closer than 10 feet to any quarter-quarter section line or subdivision inner boundary.

(8) The Boyce "15" Well No. 3 is unorthodox with respect to the setback requirements for the North Shoe Bar-Atoka Gas Pool. In addition, the applicant seeks an exception to Rule No. 104.C.(2)(b) to allow it to simultaneously produce the Boyce "15" Wells No. 1 and 3, which are both located within the NE/4 of Section 15, in the North Shoe Bar-Atoka Gas Pool.

(9) Division records demonstrate that the Boyce "15" Well No. 3 is actually located at a bottomhole location 2410 feet from the North line and 443 feet from the East line (Unit H) of Section 15 at a depth of approximately 11,800 feet.

(10) The applicant's geologic evidence and testimony demonstrate that:

- (a) the "Brunson" interval is located at the base of the Atoka formation and is the main producing section within the North Shoe Bar-Atoka Gas Pool;
- (b) in addition to the "Brunson" interval, there are other pay sections within the Upper-Atoka formation that are productive within this pool;
- (c) the "Brunson" interval is not in communication with other pay sections in the North Shoe Bar-Atoka Gas Pool;
- (d) there are two separate "Brunson" interval producing pods within the North Shoe Bar-Atoka Gas Pool. These producing pods are contiguous and generally trend in a northwest-southeast direction through Sections 10 and 11. With the exception of Section 2, the "Brunson" interval appears to be present throughout the North Shoe Bar-Atoka Gas Pool; and
- (e) the western-most "Brunson" interval producing pod extends southward beyond the current pool boundaries into portions of Section 14, Township 16 South, Range 35 East.

(11) The applicant presented further evidence that demonstrates:

- (a) within the present boundaries of the North Shoe Bar-Atoka Gas Pool, there are currently five producing wells. Of the five producing wells, four produce exclusively from the "Brunson" interval, and one produces exclusively from the Upper-Atoka interval;
 - (b) there are several wells that have recently been drilled to the Atoka formation in Sections 14 and 15, namely the Boyce "15" Well No. 1, the Boyce "15" Well No. 3, and the David H. Arrington Oil & Gas Inc. ("Arrington") Mayfly "14" State Com Well No. 5 (**API No. 30-025-34815**) located in Unit D of Section 14;
 - (c) the Boyce "15" Well No. 1 has been completed in the North Shoe Bar-Atoka Gas Pool and is producing only from Upper-Atoka pay section. The "Brunson" interval was tested in this well and is marginally productive;
 - (d) the Boyce "15" Well No. 3 was originally permitted and drilled as a Northwest Shoe Bar-Strawn Pool test, but has been completed in the Townsend-Morrow Gas Pool. The well is currently producing at marginal economic rates from the Townsend-Morrow Gas Pool, but has the potential to recover significant gas reserves from the Atoka "Brunson" interval; and
 - (e) Division records indicate that the Mayfly "14" State Com Well No. 5 has been completed in the Northwest Shoe Bar-Strawn Pool; however, this well may have been completed in both the Strawn formation and the Atoka "Brunson" interval.
- (12) The evidence presented in this case demonstrates that:
- (a) there are gas reserves within the "Brunson" interval underlying the E/2 of Section 15 that cannot be accessed by the Boyce "15" Well No. 1;

- (b) the "Brunson" interval can be accessed by the Boyce "15" Well No. 3, which will be abandoned in the Townsend-Morrow Gas Pool in the near future due to marginal gas production;
- (c) the E/2 of Section 15 may be experiencing drainage from the offset Arrington Mayfly "14" State Com Well No. 5;
- (d) Arrington has signed a waiver of objection to the application;
- (e) TMBR/Sharp Drilling, Inc., an offset operator, entered an appearance in this case but presented no evidence or testimony in opposition to the application; and
- (f) no other offset operator or interest owner appeared at the hearing in opposition to the application.

(13) Approval of the application will afford the applicant the opportunity to produce its gas reserves within the Atoka "Brunson" interval underlying the E/2 of Section 15, will allow the applicant to utilize an existing wellbore to recover these gas reserves, thereby preventing the drilling of unnecessary wells, will allow the increased recovery of gas from the North Shoe Bar-Atoka Gas Pool within the E/2 of Section 15, thereby preventing waste, and will not violate correlative rights.

(14) The applicant should be required to produce only from the Upper Atoka pay section of the North Shoe Bar-Atoka Gas Pool within the Boyce "15" Well No. 1, and produce only from the "Brunson" interval of the North Shoe Bar-Atoka Gas Pool within the Boyce "15" Well No. 3.

(15) The applicant should not be allowed to drill or recomplete additional infill wells within the E/2 of Section 15 in the North Shoe Bar-Atoka Gas Pool until such time as production operations permanently cease in the Atoka formation in either the Boyce "15" Well No. 1 or the Boyce "15" Well No. 3.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Chesapeake Operating, Inc, is hereby authorized to complete and produce its Boyce "15" Well No. 3 (**API No. 30-025-35006**) at an unorthodox surface location 2310 feet from the North line and 341 feet from the East line (Unit H) and at an unorthodox bottomhole location 2410 feet from the North line and 443 feet from the East line (Unit H) of Section 15, Township 16 South, Range 35 East, NMPM, Lea County, New Mexico, in the Atoka formation, North Shoe Bar-Atoka Gas Pool.

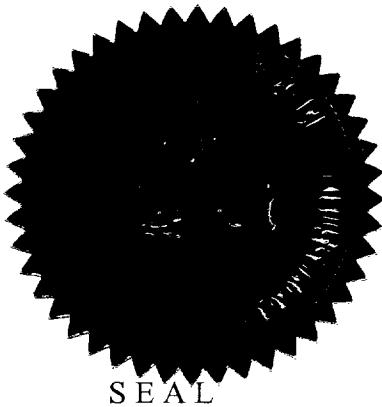
(2) The applicant is further authorized to simultaneously dedicate the E/2 of Section 15 in the North Shoe Bar-Atoka Gas Pool to the Boyce "15" Well No. 3 and to its existing Boyce "15" Well No. 1 (**API No. 30-025-34591**) located at a standard gas well location 800 feet from the North line and 660 feet from the East line (Unit A) of Section 15.

(3) The applicant shall produce only from the Upper Atoka pay section of the North Shoe Bar-Atoka Gas Pool within the Boyce "15" Well No. 1 and produce only from the "Brunson" interval of the North Shoe Bar-Atoka Gas Pool within the Boyce "15" Well No. 3.

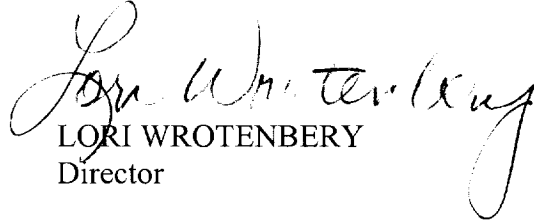
(4) The applicant shall not drill or recomplete additional infill wells within the E/2 of Section 15 in the North Shoe Bar-Atoka Gas Pool until such time as production operations permanently cease in the Atoka formation in either the Boyce "15" Well No. 1 or the Boyce "15" Well No. 3.

(5) Jurisdiction is hereby retained for the entry of such further orders as the Division may deem necessary.

DONE at Santa Fe, New Mexico, on the day and year hereinabove designated.



STATE OF NEW MEXICO
OIL CONSERVATION DIVISION


LORI WROTENBERY
Director