

**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. 12482
ORDER NO. R-11460**

**APPLICATION OF CHESAPEAKE OPERATING, INC. FOR POOL CREATION
AND POOL CONTRACTION, LEA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This case came on for hearing at 8:15 a.m. on September 7, 2000, at Santa Fe, New Mexico, before Examiner David R. Catanach.

NOW, on this 28th day of September, 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) The applicant, Chesapeake Operating, Inc. ("Chesapeake"), seeks an order contracting the lower vertical limits of the North Shoe Bar-Atoka Gas Pool to exclude the "Brunson" interval and to re-designate this pool as the North Shoe Bar-Upper Atoka Gas Pool. The applicant further seeks the creation of a new pool for the production of gas from the "Brunson" interval to be designated the North Shoe Bar-Lower Atoka Gas Pool.

(3) Yates Petroleum Corporation, an operator within the North Shoe Bar-Atoka Gas Pool, appeared at the hearing through legal counsel.

(4) Division records indicate that the North Shoe Bar-Atoka Gas Pool currently comprises the following described acreage in Lea County, New Mexico:

TOWNSHIP 16 SOUTH, RANGE 35 EAST, NMPM

Section 2:	Lots 9, 10, 15 and 16, SE/4
Section 10:	E/2
Section 11:	All

(5) The vertical limits of the North Shoe Bar-Atoka Gas Pool currently comprise the entire Atoka formation.

(6) The applicant presented geologic evidence that demonstrates:

- (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 and 15, Township 16 South, Range 35 East.

(7) 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 Chesapeake Boyce "15" Well No. 1 (**API No. 30-025-34591**) located in Unit A of Section 15, the Chesapeake Boyce "15" Well No. 3 (**API No. 30-025-35006**) located in Unit H of Section 15, and the David H. Arrington Oil & Gas Inc. 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 from Upper-Atoka pay section. The "Brunson" interval was tested and is marginally productive in this well;
 - (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. This well has the potential to produce from the "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.
- (8) The applicant seeks approval of the application for the following reasons:
- (a) due to the non-continuous nature and location of the "Brunson" interval, as well as the Upper-Atoka pay sections within this pool, all producing intervals may not be accessible through a given wellbore;
 - (b) the gas reserves within these separate Atoka pay sections are sufficient to economically justify drilling stand-alone wells to access either the Upper-Atoka or "Brunson" interval pay sections;

- (c) approval of the application will provide the operators in the pool the opportunity to drill additional wells to access all of the Atoka pay sections;
 - (d) the North Shoe Bar-Atoka Gas Pool is currently governed by Division Rule No. 104.C.(2), which precludes the drilling of more than two wells on a standard 320-acre spacing unit and also precludes the drilling of two wells within the same quarter section on a standard 320-acre unit; and
 - (e) approval of the application will allow Chesapeake to simultaneously produce its Boyce "15" Wells No. 1 and 3 from the Upper-Atoka and "Brunson" intervals, respectively.
- (9) The applicant presented no isopach maps to show the extent and location of the Upper-Atoka pay sections within the North Shoe Bar-Atoka Gas Pool.
- (10) The applicant presented no specific proposal with regards to pool boundaries for the proposed North Shoe Bar-Upper Atoka and North Shoe Bar-Lower Atoka Gas Pools.
- (11) The applicant testified that approval of the application will provide the operators in the pool the opportunity to drill additional wells to access the various Atoka pay sections; however, the applicant further testified that it has no plans at this point to drill additional wells in this pool.
- (12) The evidence presented is not sufficient to demonstrate that the inability to access multiple Atoka pay sections within a given wellbore in the North Shoe Bar-Atoka Gas Pool affects any wells other than the Boyce "15" Wells No. 1 and 3.
- (13) The evidence further demonstrates that approval of the application will merely allow Chesapeake to simultaneously produce its Boyce "15" Well No. 1 from the Upper-Atoka section and its Boyce "15" Well No. 3 from the "Brunson" interval.
- (14) Segregation of the North Shoe Bar-Atoka Gas Pool into upper and lower producing pools does not appear to be the best method to accomplish the relief sought by Chesapeake.

(15) In view of the evidence presented in this case, it is likely that Chesapeake can obtain an exception to Division Rule No. 104 to allow it to simultaneously produce its Boyce "15" Wells No. 1 and 3 from the North Shoe Bar-Atoka Gas Pool.

(16) The application should be denied.

IT IS THEREFORE ORDERED THAT:

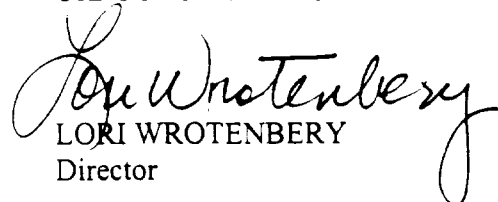
(1) The application of Chesapeake Operating, Inc. to contract the lower vertical limits of the North Shoe Bar-Atoka Gas Pool to exclude the "Brunson" interval, to re-designate this pool as the North Shoe Bar-Upper Atoka Gas Pool and to create a new pool for the production of gas from the "Brunson" interval, this pool to be designated the North Shoe Bar-Lower Atoka Gas Pool, Lea County, New Mexico, is hereby denied.

(2) 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

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