

CAMPBELL, CARR, BERGE
& SHERIDAN, P.A.
LAWYERS

MICHAEL B. CAMPBELL
WILLIAM F. CARR
BRADFORD C. BERGE
MARK F. SHERIDAN
MICHAEL H. FELDEWERT
ANTHONY F. MEDEIROS
PAUL R. OWEN

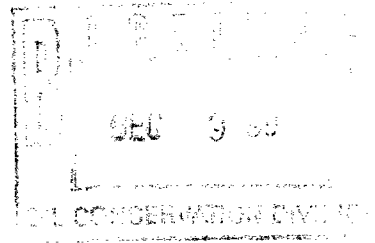
JACK M. CAMPBELL
OF COUNSEL

JEFFERSON PLACE
SUITE 1 - 110 NORTH GUADALUPE
POST OFFICE BOX 2208
SANTA FE, NEW MEXICO 87504-2208
TELEPHONE: (505) 988-4421
FACSIMILE: (505) 983-6043
E-MAIL: ccbspa@ix.netcom.com

December 29, 1997

HAND-DELIVERED

Mr. David R. Catanach, Hearing Examiner
Oil Conservation Division
New Mexico Department of Energy,
Minerals and Natural Resources
2040 South Pacheco Street
Santa Fe, New Mexico 87501



Re: ***Oil Conservation Division Case No. 11894:
Application of Chesapeake Operating, Inc. for an Unorthodox Oil Well
Location, Lea County, New Mexico***

Dear Mr. Catanach:

Pursuant to your request, enclosed for your consideration are two proposed Orders submitted on behalf of Yates Petroleum Corporation. As you will see, one denies the application and the other approves the well location and imposes a production penalty.

If you need anything further from Yates Petroleum Corporation to proceed with your consideration of this matter, please advise.

Very truly yours,

Handwritten signature of William F. Carr.

WILLIAM F. CARR

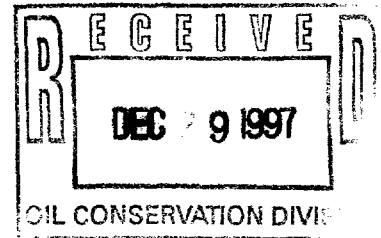
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Enclosures

cc: W. Thomas Kellahin, Esq. (w/enclosures)
Randy Patterson (w/enclosures)
Mike Hayes (w/enclosures)

Option One: Denial of Application

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. 11894

ORDER NO. R-_____

APPLICATION OF CHESAPEAKE OPERATING,
INC. FOR AN UNORTHODOX
OIL WELL LOCATION,
LEA COUNTY, NEW MEXICO.

YATES PETROLEUM CORPORATION'S
PROPOSED ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on December 4, 1997, at Santa Fe, New Mexico, before Examiner David Catanach.

NOW, on this ____ day of December, 1997, the Division Director, having considered the testimony, the record, and the recommendation of the Examiner, and being fully advised in the premises,

FINDS THAT:

(1) Due public notice having been given as required by law, the Division has jurisdiction of this cause and the subject matter thereof.

(2) The applicant, Chesapeake Operating, Inc. ("Chesapeake"), seeks approval to drill its Salbar "16" Well No. 1 at an unorthodox oil well location 2456 feet from the North line and 1028 feet from the West line (Unit E) of Section 16, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, to test the Strawn formation, Undesignated

Northeast Shoe Bar-Strawn Pool. The S/2 NW/4 of Section 16 is to be dedicated to the subject well forming a standard 80-acre oil spacing and proration unit.

(3) By Order No. R-10848 entered on July 31, 1997, the Division granted the application of Chesapeake for Temporary Special Pool Rules and Regulations for the Northeast Shoe Bar-Strawn Pool which provide for 80-acre spacing and proration units with wells to be located no closer than 330 feet to any quarter-quarter section line. In granting this application, the Division found that:

- "(8) The technical evidence presented by the applicant [Chesapeake] at the time of hearing indicates that production from the Chambers "7" Well No. 1 is characteristic of other Strawn oil production in the general area ... all of which produce from localized highly porous algal reef mounds within the Strawn formation. Chesapeake's evidence further indicates that the Strawn formation encountered in the above-described well is of high permeability and is capable of draining an area in excess of 40 acres.
- (9) The proposed **330-foot set back requirement is a departure from the established set-back requirements for 80-acre pools** which restricts well locations to an area of 150 feet radius of the center of either quarter-quarter section or lot that comprise a single 80-acre unit...

FINDING: The 330-foot set-back request with the limitation of one well per proration unit would serve to provide the operators in the subject pool maximum flexibility in locating wells at more favorable positions on the reef mound or mounds in the immediate area."

These temporary pool rules are to be reopened at a Division Examiner hearing in February, 1999.

(4) The proposed well location is 184 feet from the southern boundary of the Chesapeake spacing unit which is 146 feet closer to the South line of the dedicated spacing and proration unit than permitted by the Temporary Special Pool Rules and Regulations for the Northeast Shoe Bar-Strawn Pool and 326 feet closer than the established requirements for 80-acre pools. As such, this location encroaches on the SW/4 of Section 16 which is

operated by Yates Petroleum Corporation ("Yates").

(5) Yates appeared at the hearing and presented evidence in opposition to the application of Chesapeake.

(6) Chesapeake's evidence includes a Strawn Net Isopach Map that was prepared from 3-D seismic data which shows that the Strawn reservoir which Chesapeake hopes to produce with its proposed Salbar "16" Well No. 1 is confined to the S/2 NW/4 of said Section 16. However, this map also shows there is a standard location available to Chesapeake in the S/2 NW/4 of Section 16 which is within the 80-foot contour line on this seismic interpretation and therefore in the thickest part of the reservoir (Chesapeake Exhibit No.1).

(7) Yates presented a Structure Map prepared from 3-D seismic data which showed that the standard location within the 80-foot contour on Chesapeake Exhibit No.1 in the S/2 NW/4 of Section 16 is also structurally high to the unorthodox location being sought by Chesapeake for the Salbar "16" Well No. 1 (Yates Exhibit No.1).

(8) The Temporary Special Pool Rules and Regulations for the Northeast Shoe Bar-Strawn Pool, adopted at the request of Chesapeake Oil Company, provide operators in the pool maximum flexibility in locating wells at more favorable positions on the reef mounds in this pool.

(9) The Temporary Special Pool Rules and Regulations for the Northeast Shoe Bar-Strawn Pool permit a Strawn well to be drilled by Chesapeake within the 80-foot contour on its Strawn Net Isopach Map at a location which is structurally high to the unorthodox location it now proposes. Accordingly, Chesapeake's requested unorthodox Strawn well location is an unnecessary intentional encroachment on Yates and should be **denied**.

IT IS THEREFORE ORDERED THAT:

(1) The application of Chesapeake Operating, Inc. for an unorthodox oil well location for its Salbar "16" Well No. 1 to be drilled 2456 feet from the North line and 1028 feet from the West line of Section 16, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico is hereby **denied**.

Case No. 11894
Order No. R-_____
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(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

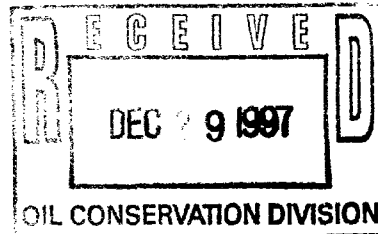
WILLIAM J. LEMAY
Director

S E A L

Option Two: Imposition of a Production Penalty

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. 11894

ORDER NO. R-_____

APPLICATION OF CHESAPEAKE OPERATING,
INC. FOR AN UNORTHODOX
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- "(8) The technical evidence presented by the applicant [Chesapeake] at the time of hearing indicates that production from the Chambers "7" Well No. 1 is characteristic of other Strawn oil production in the general area ... all of which produce from localized highly porous algal reef mounds within the Strawn formation. Chesapeake's evidence further indicates that the Strawn formation encountered in the above-described well is of high permeability and is capable of draining an area in excess of 40 acres.
- (9) The proposed **330-foot set back requirement is a departure from the established set-back requirements for 80-acre pools** which restricts well locations to an area of 150 feet radius of the center of either quarter-quarter section or lot that comprise a single 80-acre unit...

FINDING: The 330-foot set-back request with the limitation of one well per proration unit would serve to provide the operators in the subject pool maximum flexibility in locating wells at more favorable positions on the reef mound or mounds in the immediate area."

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(4) The proposed well location is 184 feet from the southern boundary of the Chesapeake spacing unit which is 146 feet closer to the South line of the dedicated spacing and proration unit than permitted by the Temporary Special Pool Rules and Regulations for the Northeast Shoe Bar-Strawn Pool and 326 feet closer than permitted by the established requirements for 80-acre pools. As such, this location encroaches on the SW/4 of Section

16 which is operated by Yates Petroleum Corporation ("Yates").

(5) Yates appeared at the hearing and presented evidence in opposition to the application of Chesapeake.

(6) Chesapeake's evidence includes a Strawn Net Isopach Map that was prepared from 3-D seismic data which shows that the Strawn reservoir which Chesapeake hopes to produce with its proposed Salbar "16" Well No. 1 is confined to the S/2 NW/4 of said Section 16. However, this map also shows there is a standard location available to Chesapeake in the S/2 NW/4 of Section 16 which is within the 80-foot contour line on this seismic interpretation and therefore in the thickest part of the reservoir (Chesapeake Exhibit No.1).

(7) Yates testified that the interpretation of the limits of small Strawn reservoirs from 3-D seismic data could be affected by the type of analysis performed and further testified that Chesapeake's proposed unorthodox location would gain an advantage on the offsetting Yates property in the SW/4 of Section 16.

(8) The parties agree that this Strawn reservoir can be effectively drained by one well.

(9) The evidence and testimony presented in this case indicates that the 3-D seismic data presented by the applicant is insufficient to make a reliable determination as to the extent and location of the targeted Strawn structure, however, 3-D seismic data indicates that:

- a) the Strawn structure is very limited in size; and
- b) a portion of the Strawn structure is located on Yates' acreage in the SW/4 of Section 16.

(10) Yates testified that in order to protect its correlative rights, the proposed Salbar "16" Well No. 1 should be assessed a production penalty of either:

- a) 60% (40% allowable) being the percentage of the acres in this Strawn reservoir under the SW/4 of Section 16 which is operated by Yates, or,

in the alternative,

- b) 44% (56% allowable) being the footage encroachment from a standard location towards the offsetting Yates operated tract (146 feet closer than a standard 330 foot set back).

(11) Yates recommended that the 60% penalty based on the number of acres in this reservoir under each tract be utilized. Yates testified that since the temporary rules for the pool already represent a departure from the established set back requirements for 80-acre pools, the use of a penalty based on these temporary rules would not effectively offset the advantage gained on Yates by Chesapeake's proposed unorthodox location.

(12) Since a standard location is available to Chesapeake from which the reserves under its tract can be produced, if it drills this well at the proposed unorthodox location it will be intentionally encroaching on Yates. To protect the correlative rights of Yates, a production penalty should be imposed on the Salbar "16" Well No. 1.

(13) The production penalty imposed on the Salbar "16" Well No. 1 should be based upon the number of productive acres in this Strawn reservoir under the Chesapeake tracts.

(14) It appears that only 40% of the reservoir is contained within the applicant's proposed proration unit. The Salbar "16" Well No. 1 should therefore be assessed a production penalty of 60% (40% allowable).

(15) Yates requested that any production penalty assessed in this case be applied to the number of days in each production month.

(16) The application of a penalty to the number of days in each production month will eliminate unnecessary well tests, will avoid inaccuracies that may occur in the utilization of other methods for the imposition of production penalties and should be approved.

(17) The production penalty on the Salbar "16" Well No. 1 should be applied to the number of days in each production month.

(18) Approval of the proposed unorthodox location, subject to the above-described production penalty, will afford the applicant the opportunity to produce its just and equitable

share of the oil in the affected pool and will otherwise prevent waste and protect correlative right.

IT IS THEREFORE ORDERED THAT:

(1) The applicant, Chesapeake Operating, Inc. is hereby authorized to drill its Salbar "16" Well No. 1 at an unorthodox oil well location 2456 feet from the North line and 1028 feet from the West line of Section 16, Township 16 South, Range 36 East, NMPM, Lea County, New Mexico, to test the Strawn formation, Undesignated Northeast Shoe Bar-Strawn Pool.

(2) The S/2 NW/4 of Section 16 shall be dedicated to the subject well forming a standard 80-acre oil spacing and proration unit for said pool.

(3) The Salbar "16" Well No. 1 is hereby assessed a production penalty of 60% (40% allowable). The production penalty shall be applied to the number of producing days in each production month.

(4) 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

WILLIAM J. LEMAY
Director

S E A L