

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.

CHESAPEAKE OPERATING, INC.'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 R. Catanach.

NOW, on this \_\_\_\_ day of December, 1997, the Division Director,  
having considered the testimony, the record and the recommendations 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 authorization to drill its proposed Salbar "16" Well No. 1 ("Salbar Well") at an unorthodox oil location 2456 feet from the North line and 1023 feet from the West line (Unit E) of Section 16, Township 24 South, Range 36 East, in the Southeast Shoe Bar-Strawn Pool to be dedicated to a standard 80-acre oil spacing and proration unit consisting of the S/2NW/4 of said Section 16.

(3) Chesapeake's requested unorthodox oil well location is 146 feet closer to the south boundary of the spacing unit than permitted by the pool rules which require wells to be located 330 feet from any outer boundary.

(4) Yates Petroleum Corporation ("Yates") is the working interest owner in the N/2SW/4 of Section 16 towards who the well encroaches and has objected to this application.

(5) Chesapeake's testimony established that prior to the hearing, it attempted to reach an agreement with Yates whereby in exchange for a waiver of objection by Yates, Chesapeake offered the following options:

(a) consent to allow Yates to drill a mirror location on its acreage and data from the Chesapeake well in exchange for data from the Yates well; or

(b) formation of a working interest unit covering the Yates N/2SW/4 and Chesapeake S/2NW/4 pursuant to a Joint Operating Agreement whereby Chesapeake would assign 40 % working interest in its tract in exchange for a 40 % working interest in the Yates tract.

(6) Yates has rejected the settlement options proposed by Chesapeake.

(7) Yates appeared at the hearing in opposition to the applicant and sought to have the requested location denied contending that Chesapeake should be required to drill at a standard well location in the NW/4 of said Section 16, or in the alternative, subject to a production penalty.

(8) In support of its application, Chesapeake presented the following 3-D seismic data:

- (a) a Strawn amplitude map which was generated to show the farthest reasonable limits of productive reservoir within the Strawn formation;
- (b) an east-west vertical seismic profile line 96 showing the profile of the Strawn formation parallel to the southern boundary of the spacing unit along a line 110 feet within the Yates tract;
- (c) a north-south vertical seismic profile trace 129 showing the profile of the Strawn formation through the proposed location and into the Yates' tract;
- (d) a net pay isopach showing the relative location and thickness of the Strawn reservoir within the Strawn formation;
- (e) an interpretation of the stratigraphic nature of this Strawn oil reservoir.

(9) Chesapeake's detailed 3-D seismic data, validated by correlation to log data, demonstrates that:

- (a) substantially all of the potentially productive portion of this Strawn reservoir is located within the Chesapeake's spacing unit;
- (b) only the slightest portion of this Strawn reservoir extends into the Yates' tract and is insufficient to provide any recoverable oil for Yates;
- (c) Chesapeake has successfully drilled ten Strawn oil wells in succession based upon locating each well at the point of greatest thickness as determined by 3-D seismic data;

(d) the greatest thickness of this Strawn mound is 80 feet, all of which is located a distance between 330 feet and the southern boundary of this spacing unit;

(e) any attempt to locate this well at a standard location will substantially increase the risk of drilling a dry hole;

(f) the optimum well location in this spacing unit is at an unorthodox oil well location.

(10) Chesapeake contends that in order to afford it a reasonable opportunity in the Strawn reservoir, it is necessary to locate the Salbar Well at its proposed unorthodox well location because:

(a) an exception from the special rules and regulations for this pool is necessary in order to recovery oil that otherwise might not be recovered;

(b) no penalty should be imposed because Yates's tract lacks any productive acreage from this Strawn reservoir;

(c) denial of the application will likely result in no well being drilled in the S/2NW/4 of Section 16.

(11) Yates seeks denial of the unorthodox location based upon its contention that:

(a) Chesapeake has standard locations which are better than the unorthodox well location; and

(b) the Division should never grant exceptions for well locations in pools spaced on 40 or 80 acre spacing.

(12) In support of its position, Yates presented only a top of Strawn time structure map which had not been converted to actual depths and therefore is unreliable and cannot be used to form any accurate opinion about the best structural location for a well in this Strawn reservoir.

(13) While Yates is in possession of 3-D seismic data for this area, Yates:

- (a) failed to present an isopach of the limits of the Strawn reservoir with the Strawn formation;
- (b) failed to present any seismic profile lines/traces to show the structure within the Strawn formation;
- (c) failed to present any seismic profile lines/traces to show the porosity limits of the Strawn reservoir within the Strawn formation;
- (d) failed to present any other seismic data;
- (e) failed to present a map to support its contention that Yates had 40 acres while Chesapeake had only 27 acres within this Strawn feature;
- (f) failed to adequately demonstrate how its correlative rights would be violated if the Division approved this application without a penalty.

#### **Division Decision**

(14) It is the Division's practice and policy to grant well location exceptions from special pool rules when there is substantial evidence to demonstrate to do so is necessary to prevent waste and/or protect correlative rights.

(15) Chesapeake has provided substantial geological evidence which demonstrates that it is possible to accurately estimate the potential productive limits of this Strawn reservoir and the orientation and location of this reservoir.

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(16) Chesapeake has provided substantial geological evidence which demonstrates that it is necessary to grant a well location exception for this well in order to prevent waste and in doing so, correlative right will not be impaired.

(17) The Yates' tract is non-productive of oil from this Strawn reservoir and therefore the Salbar Well location presents no reasonable probability of drainage of the Yates spacing unit. Accordingly, no penalty should be assessed against the Salbar Well's production from the Strawn reservoir.

(18) Yates' production penalty based upon the distance the subject well encroaches towards the south boundary is unreasonable and inequitable and should not be utilized in this case.

**IT IS THEREFORE ORDERED THAT:**

(1) The applicant, Chesapeake Operating, Inc. ("Chesapeake"), is hereby authorized to drill its proposed Salbar "16" Well No. 1 ("Salbar Well") at an unorthodox oil location 2456 feet from the North line and 1023 feet from the West line (Unit E) of Section 16, Township 24 South, Range 36 East, in the Southeast Shoe Bar-Strawn Pool to be dedicated to a standard 80-acre oil spacing and proration unit consisting of the S/2NW/4 of said Section 16.

(2) Jurisdiction of this cause is 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

**KELLAHIN AND KELLAHIN**

ATTORNEYS AT LAW

EL PATIO BUILDING

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W. THOMAS KELLAHIN\*

\*NEW MEXICO BOARD OF LEGAL SPECIALIZATION  
RECOGNIZED SPECIALIST IN THE AREA OF  
NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1981)

December 1, 1997

**VIA FACSIMILE**  
**(505) 827-8177**

Mr. David R. Catanach  
Hearing Examiner  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505


Re: NMOCD Case 11894  
Application of Chesapeake Operating, Inc.  
for an unorthodox oil well location,  
Lea County, New Mexico

Dear Mr. Catanach:

Subsequent to filing the referenced application, Mr. Stogner has advised that this well is within 1/2 mile of the current boundary of the Northeast Shoe Bar-Strawn Pool the S/2NW/4 of Section 16, T10S, R30E to the Salinas River well NW-1/4 of Section 16.

For your information, this unorthodox well location case is scheduled for hearing on Thursday, December 4, 1997 and will be opposed by Yates Petroleum Corporation.

Very truly yours,



W. Thomas Kellahin

ccx: William F. Carr, Esq.  
Attorney for Yates Petroleum Corporation  
ccx: Chesapeake Operating, Inc.  
Attn: Mike Hazlip

**KELLAHIN AND KELLAHIN**

ATTORNEYS AT LAW

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NATURAL RESOURCES-OIL AND GAS LAW

JASON KELLAHIN (RETIRED 1991)

December 15, 1997

**HAND DELIVERED**

Mr. David R. Catanach  
Hearing Examiner  
Oil Conservation Division  
2040 South Pacheco  
Santa Fe, New Mexico 87505

Re: NMOCD Case 11894  
Application of Chesapeake Operating, Inc.  
for an unorthodox oil well location  
Lea County, New Mexico

Dear Mr. Catanach:

In accordance with your request at the hearing held on December 4, 1997 in the referenced case, please find our proposed order on behalf of Chesapeake Operating, Inc.

I wish to advise you that Chesapeake's lease expires on February 1, 1998. Accordingly, Chesapeake would be most appreciative of an expedited decision in this matter.

Very truly yours,

A handwritten signature in black ink, appearing to read 'W. Kellahin', with a stylized, flowing script.

W. Thomas Kellahin

cc: William F. Carr, Esq.  
Attorney for Yates Petroleum Corporation  
cc: Chesapeake Operating, Inc.  
Attn: Mike Hazlip