

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. 10855*  
*Order No. R-9921-A*

**APPLICATION OF MERIDIAN OIL INC. TO AMEND DIVISION ORDER NO.  
R-9921, SAN JUAN COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on October 21, 1993, at Santa Fe, New Mexico, before Examiner Michael E. Stogner.

NOW, on this 2<sup>nd</sup> day of November, 1993, 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) On July 9, 1993 the Division issued Order No. R-9921 in Case 10735, which authorized Meridian Oil, Inc. ("Meridian") to downhole commingle conventional Pictured Cliffs gas production with gas production from the Basin-Fruitland Coal (Gas) Pool within the wellbore of the following three wells:

- (a) its existing Huerfano Unit Well No. 46 located 1650 feet from the South and West lines (Unit K) of Section 23, Township 26 North, Range 9 West, NMPM, San Juan County, New Mexico;
- (b) its existing Huerfano Unit Well No. 59 located 890 feet from the North line and 1750 feet from the East line (Unit B) of Section 26, Township 26 North, Range 9 West, NMPM, San Juan County, New Mexico; and,

(c) its proposed Huerfano Unit Well No. 549 to be drilled 1190 feet from the North line and 890 feet from the East line (Unit A) of Section 33, Township 27 North, Range 10 West, NMPM, San Juan County, New Mexico.

(3) Said Order also provided for an administrative procedure for obtaining approval to downhole commingle additional wells within its Huerfano Unit, located in portions of Townships 25, 26 and 27 North, Ranges 9, 10 and 11 West, NMPM, San Juan County, New Mexico.

(4) An additional provision was included in Order No. R-9921 which adopted an allocation formula proposed by Meridian but which also established economic limitations on downhole commingling of the production from these two zones that provided:

"...in the event total gas production from both pools in a well exceeds 300 MCF per Day, downhole commingling will not be allowed in the effected well until combined production drops below 300 MCF/Day."

(5) At this time Meridian requests that this matter be reviewed and to consider an alternate economic limit based upon the relationship of costs to rate and estimated ultimate gas recovery from either the Pictured Cliffs formation or the Basin Fruitland Coal Gas Pool.

(6) At the time of the hearing Meridian's legal representative requested that the records in the following matters be incorporated into this case:

Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, San Juan County.	Case No. 10721	Order No. R-9920
Application of Meridian Oil, Inc. for downhole commingling, San Juan County.	Case No. 10722	Order No. R-9920
Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, San Juan County.	Case No. 10723	Order No. R-9920

Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, San Juan County.	Case No. 10724	Order No. R-9920
Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, San Juan County.	Case No. 10725	Order No. R-9920
Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, Rio Arriba County.	Case No. 10745	Order No. R-10002
Application of Meridian Oil, Inc. for an unorthodox gas well location, non-standard gas proration units, and downhole commingling, Rio Arriba County.	Case No. 10754	Order No. R-10002
Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, San Juan County.	Reopened Case No. 10721	Order No. R-9920-A
Application of Meridian Oil, Inc. for downhole commingling, San Juan County.	Reopened Case No. 10722	Order No. R-9920-A
Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, San Juan County.	Reopened Case No. 10723	Order No. R-9920-A
Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, San Juan County.	Reopened Case No. 10724	Order No. R-9920-A
Application of Meridian Oil, Inc. for an unorthodox gas well location and downhole commingling, San Juan County.	Reopened Case No. 10725	Order No. R-9920-A

(7) In that the issues in this matter are almost identical as to those in the above-described cases and that no operator or interested party appeared in opposition to this application, an order approving Meridian's request should be issued and said Order No. R-9921 should be amended to include such factors as described in Finding Paragraph No. (5) above.

IT IS THEREFORE ORDERED THAT:

(1) The application of Meridian Oil Inc. to amend Division Order R-9921 to include additional factors in the Economic Limit provisions of said order based upon the relationship of costs to rate and estimated ultimate gas recovery from either the Pictured Cliffs formation or the Basin Fruitland Coal Gas Pool is hereby approved.

(2) The proviso included as a part of Decretory Paragraph No. (1) on page 8 of said Order R-9921 being one in the same is hereby amended to read as follows:

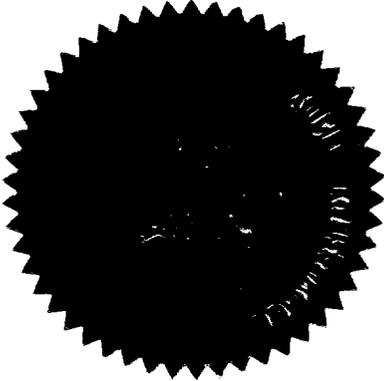
"PROVIDED HOWEVER, in the event the Economic Limit plotted for production from either pool in a well is less than the curve for the dual completion case as plotted on Exhibit "B" [being a plot of costs compared to both maximum average daily producing rate against pipeline pressure ("Initial Rate") and an estimated ultimate gas recovery ("EUR")] attached hereto and made a part hereof, then and in that event, downhole commingling shall be allowed in the effected well. In the event the Economic Limit plotted for production from both pools in a well initially exceeds the curve for the dual completion case, then downhole commingling shall not be allowed in the well until such time as the Economic Limit in that well for production from either pool drops below the dual completion curve plotted on Exhibit "B"."

(3) Decretory Paragraph No. (3) on page 8 being one in the same shall be changed to read in its entirety as follows:

"(3) The operator shall consult with the Supervisor of the Aztec Office of the Division to insure the validity and accuracy of the initial test on each well. Further, as part of the procedure for obtaining authorization to produce the subject well as a downhole commingled well, the operator shall submit to the Supervisor of the Aztec Office of the Division a sworn certificate verifying the cost, the Initial Rate and the EUR for that well. The Supervisor of the Aztec Office of the Division shall approve the downhole commingling and authorize the operator to produce the well if

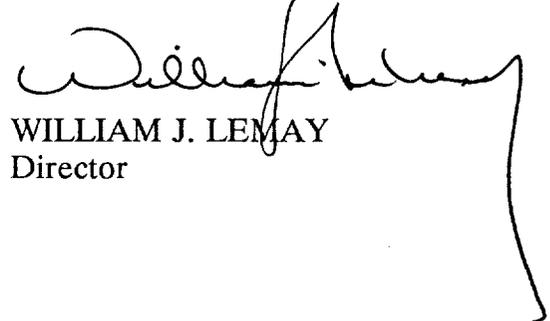
the Economic Limit for production from either pool in that well is less than the curve for the dual completion case as plotted on Exhibit "B". In the event the well initially fails to qualify for downhole commingling, the well can still qualify at some future date if and when the Economic Limit in that well for production from either pool drops below the dual completion case curve plotted on Exhibit "B".

- (4) Exhibit "B" attached hereto shall be made a part of said Order No. R-9921.
- (5) Jurisdiction of this cause is hereby retained for the entry of such further orders as the Division may deem necessary.



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STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

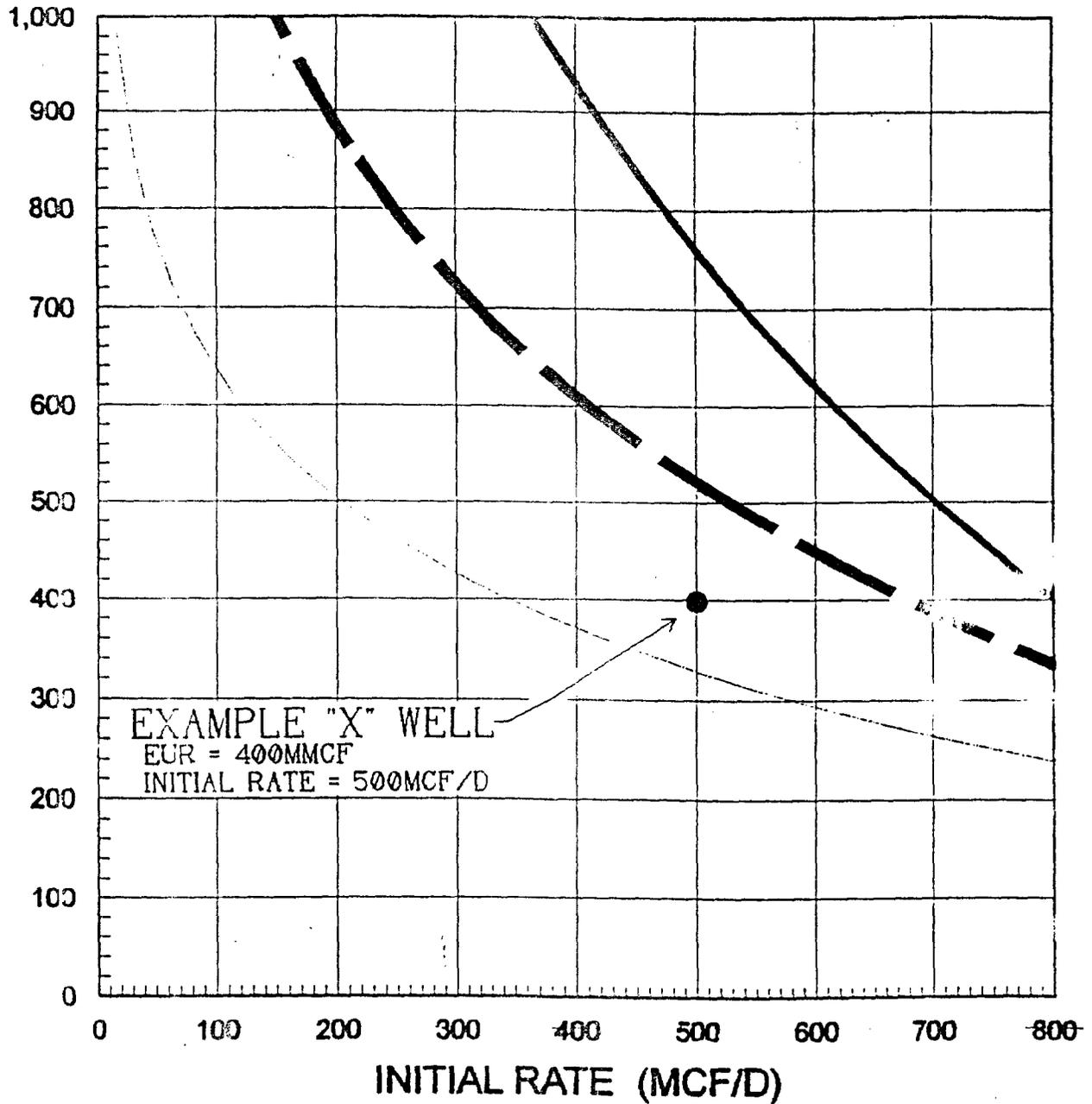


WILLIAM J. LEMAY  
Director

# PICTURED CLIFFS / FRUITLAND COAL

## ECONOMIC EVALUATION COMPLETION TECHNIQUE SENSITIVITY

EUR (MMCF)



SINGLE    DUAL    COMMINGLE  
 15% ROR   15% ROR   15% ROR

—    - - -    . . .

INITIAL RATE VS EUR