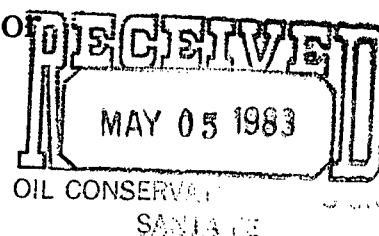




# United States Department of the Interior

BUREAU OF LAND MANAGEMENT  
505 Marquette Avenue, NW, Suite 815  
Albuquerque, New Mexico 87102



MAY 03 1983

Mr. W. Perry Pearce  
Oil Conservation Division  
State of New Mexico  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Dear Mr. Pearce:

This jurisdictional agency concurs in part, in the recommendation of the State of New Mexico, Case No. 7746, Order No. R-7200, dated February 3, 1983, that the Pictured Cliffs formation underlying the described lands in subject order in Rio Arriba and Sandoval Counties, New Mexico, be designated as a Section 107 tight formation.

We recommend that certain areas be included and other areas be deleted as outlined in the following paragraphs.

According to Mr. McCord's testimony, the boundaries of the Five Lakes Canyon Tight Gas Area are based on acreage position, not on engineering or geologic parameters. However, earlier in his testimony Mr. McCord does refer to boundaries. He describes the northeast edge as bounded by the extensively developed South Blanco Pictured Cliffs field. This boundary is reasonable except where parts of the Lindrith Federal Unit are excluded. It is recommended that sections 26-35 and  $S\frac{1}{2}$  section 36, T. 24 N., R. 3 W., be included in the tight gas area. The Federal interest would not be served by arbitrarily excluding Federal units.

Mr. McCord describes the Pictured Cliffs as "nearshore bars aligned north-west-southeast" and also says that the "nearshore bars within the proposed area are extremely lenticular, ribbon-like deposits with a very limited southwest-northeast areal extent." In view of this limited areal extent, it is unreasonable to include virtually untested areas which are several miles southwest from the edge of the main trend.

The applicant did not supply us with isopach maps or other information which would delineate the natural edge of the Ballard Pictured Cliffs field. However, electric logs of wells drilled through the Pictured Cliffs south of the developed portion of the field were studied in section 19, T. 22 N., R. 2 W., section 16, T. 22 N., R. 3 W. (A'), section 8, T. 22 N., R. 4 W., section 1, T. 22 N., R. 5 W., section 36, T. 23 N., R. 5 W., and section 35, T. 23 N., R. 6 W. The Pictured Cliffs in these wells appears to be poorly developed, containing a greater proportion of clay and having higher water

saturations than wells along the main trend of the field. Further southwest of this line of wells the sands are again better developed indicating another set of nearshore bars.

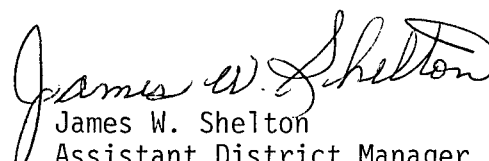
Although the Pictured Cliffs sands may be tight in the southwest corner of the proposed area, our data suggests that it is not part of the same trend as the Ballard Pictured Cliffs. As such, these sands have not been adequately tested, described or characterized by the data presented by the applicant. Therefore, we disagree with that portion of the State order which defines the boundaries and recommend that the following lands not be included in the proposed tight gas sands area:

T. 22 N., R. 5 W., all  
 T. 22 N., R. 4 W., sections 13-36  
 T. 22 N., R. 3 W., sections 19-36

This results in a southwestern boundary which more closely approximates the trend of the deposit.

It is requested that this concurrence and recommendation be included with the package submitted to the Federal Energy Regulatory Commission.

Sincerely yours,

  
 James W. Shelton  
 Assistant District Manager  
 for Minerals