

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. 10831  
ORDER NO. R-10008*

**APPLICATION OF ROBERT L. BAYLESS FOR DOWNHOLE COMMINGLING, RIO  
ARRIBA COUNTY, NEW MEXICO.**

ORDER OF THE DIVISION

BY THE DIVISION:

This cause came on for hearing at 8:15 a.m. on September 23, 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) The applicant, Robert L. Bayless ("Bayless"), is the owner and operator of the Simms Federal Well No. 1, located 1730 feet from the South line and 1820 feet from the East line (Unit J) of Section 13, Township 30 North, Range 4 West, NMPM, Rio Arriba County, New Mexico.
- (3) The applicant seeks authority to commingle East Blanco-Pictured Cliffs Pool gas and Undesignated Cabresto-Gallup Pool gas production within the wellbore of the above-described well.
- (4) Said well was originally drilled by Southland Royalty Company ("Southland") in mid-1981 to a total depth ("TD") of 8720 feet, 5-1/2 inch production casing was set and cemented to 8731 feet. The Dakota interval between 8367 feet to 8683 feet tested dry and was abandoned by setting a cast iron bridge plug at 8300 feet.

(5) According to the evidence submitted by the applicant Southland caused the Gallup formation in the perforated interval between 7541 feet to 7634 feet to be tested in September, 1981 after fracture stimulation. A three hour flow test resulted in an absolute open flow of 1251 MCF per day and the surface shut-in pressure taken at that time was 2431 psi, which corresponds to a calculated bottomhole pressure of 2955 psi at 7588 feet (mid-perforations of the Gallup interval). Further, it appears that Southland caused the Pictured Cliffs zone to be tested in October, 1983 when a drillable bridge plug was set at 4150 feet, which is the current plug-back-TD of this well, the interval between 3709 feet to 3715 feet was perforated and fractured, however no results of this test were presented.

(6) Bayless however caused this well to be tested in the Pictured Cliffs formation in July, 1993 by conducting a three hour flow test which resulted in an absolute open flow of 508 MCF per day and the surface shut-in pressure taken at the time was 1065 psi which corresponds to a calculated bottomhole pressure of 1176 psi at 3712 feet.

(7) The calculated bottomhole pressure in the Gallup interval is approximately 2-1/2 times that of the Pictured Cliffs zone.

(8) The Division has previously found that when bottomhole pressures of zones to be commingled differ by a factor greater than two, potentially damaging crossflow between zones could occur if the well were to be shut-in.

(9) There is no mechanism to assure the Division, or any other authority that may have jurisdiction thereon, that the Simms Federal Well No. 1 could not be shut-in following completion of the proposed downhole commingling.

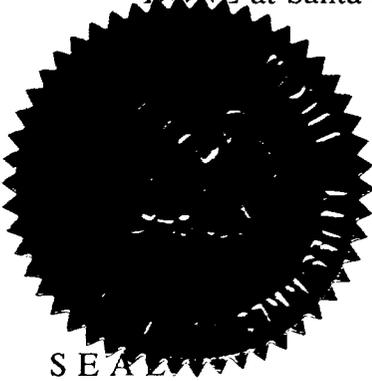
(10) In order to avoid the potential for waste the subject application should therefore be denied.

IT IS THEREFORE ORDERED THAT:

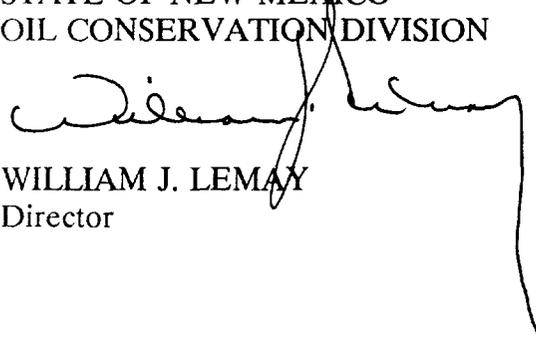
(1) The application of Robert L. Bayless for authority to commingle East Blanco-Pictured Cliffs Pool gas and Undesignated Cabestro-Gallup Pool gas production within the wellbore of its Simms Federal Well No. 1, located 1730 feet from the South line and 1820 feet from the East line (Unit J) of Section 13, Township 30 North, Range 4 West, NMPM, Rio Arriba County, New Mexico, is hereby denied.

(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