



NEW MEXICO ENERGY, MINERALS  
& NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION  
2040 South Pacheco Street  
Santa Fe, New Mexico 87505  
(505) 827-7131

**ADMINISTRATIVE ORDER DHC-1376**

Unocal Oil & Gas Division  
P.O. Box 850  
Bloomfield, New Mexico 87413-0850

Attention: Mr. Brett H. Liggett

*Rincon Unit Well No.183 (API No.30-039-06834)  
Unit K, Section 31, Township 27 North, Range 6 West, NMPM,  
Rio Arriba, New Mexico.  
Blanco Mesaverde (Gas - 72319) and  
Basin Dakota (Prorated Gas - 71599) Pools*

Dear Mr. Liggett:

Reference is made to your recent application for an exception to Rule 303.A. of the Division Rules and Regulations to permit the subject well to commingle production from multiple pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303.C., and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the subject zones is hereby placed in abeyance.

The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

Production from the subject well shall be allocated utilizing the formula as shown on Exhibit 'A' attached hereto.

The allocation method established herein may be altered at some time subsequent to initiating downhole commingling operations upon request by the operator and for good cause shown.

REMARKS: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

Pursuant to Rule 303.H., the commingling authority granted by the order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 16th day of October, 1996.

*Administrative Order DHC-1376*

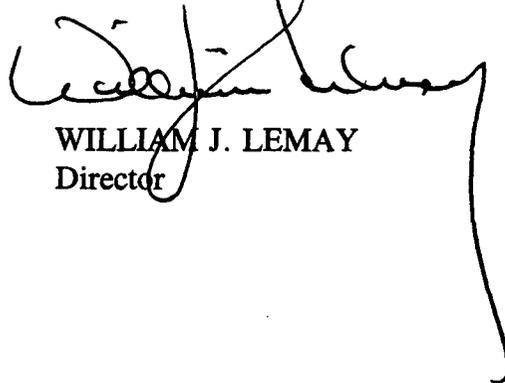
*Unocal Oil & Gas Division*

*October 16, 1996*

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STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

A handwritten signature in black ink, appearing to read 'William J. Lemay', is written over the typed name and title. The signature is fluid and cursive, with a long, sweeping tail that extends downwards and to the right.

WILLIAM J. LEMAY  
Director

SEAL

WJL/BES

cc: Oil Conservation Division - Aztec  
Bureau of Land Management - Farmington

**EXHIBIT 'A'**

To allow for flush production for a period of less than 24 months:

$$Q1n = qi(e^{-D(t-0.5)})(365/12) \text{ and } Q2n = Qn - Q1n;$$

When:  $Qn < Q1n$ ;

$$\text{Then: } Q1n = Qn(Q1(n-1)/(Q1(n-1)+Q2(n-1))) \text{ and } Q2n = Qn(Q2(n-1)/(Q1(n-1)+Q2(n-1)));$$

And to allow for flush production for a period of more than 24 months:

$$Q1n = Qn(Q1(24)/(Q1(24)+Q2(24))) \text{ and } Q2n = Qn(Q2(24)/(Q1(24)+Q2(24)));$$

Where:

qi	Average three month production rate of the existing completion prior to downhole commingling in Mcfd
D	Effective monthly decline rate of the existing completion (1/months)
Qn	Total commingled production, for the <i>n</i> th month, after <i>n</i> months of commingled production in Mcfd.
Q1n	Total production for the existing completion, for the <i>n</i> th month, after <i>n</i> months of commingled production in Mcfd.
Q2n	Total production for the new completion, for the <i>n</i> th month, after <i>n</i> months of commingled production in Mcfd.
t	Time from beginning of commingled production (months)