

**Unocal North American**

**Oil & Gas Division**

Unocal Corporation

3300 North Butler Avenue

Suite 200

Farmington, New Mexico 87401

Telephone (505) 326-7600

Fax: (505) 326-6145

CONSERVATION DIVISION

RECEIVED



'92 JUN 17 AM 9 16

June 16, 1992

Farmington District

New Mexico Oil Conservation Division  
310 Old Santa Fe Trail, Box 2088  
Santa Fe, NM 87504-2088  
Attn: David Catanach

SUBJECT:

Request for Expansion of  
Rincon Unit Lateral #2  
Adding Proposed Well No. 57-E  
Sec 1, T-26-N, R-7-W  
Rio Arriba County, New Mexico

Union Oil Company of California, dba Unocal, requests permission to add Rincon Unit, well No. 57-E to its Rincon Unit Lateral #2, Rio Arriba County, New Mexico. Authority to surface commingle produced gas in the Rincon Unit Lateral #2 was granted by the New Mexico Oil Conservation Division (OCD) on March 6, 1992 (Exhibit No. 1) and by State Land Office (SLO) on February 21, 1992 (Exhibit No. 2). The following describes and demonstrates how Unocal proposes to allocate gas production under the context of BLM Onshore Oil and Gas Order No. 5, Measurement of Gas for commingling, New Mexico Oil Conservation Commission Manual for the Installation and Operation of Commingling Facilities, and State Land Office Rules 1.053 and 1.054 Commingling and Off Lease Storage of Oil and Gas on State Trust Land, for the expanded Rincon Unit Lateral #2.

The Rincon Unit No. 57-E well is a development gas well scheduled to be drilled by Unocal. It is anticipated that the well will be completed as a dual Gallup and Dakota producer and will be ready for first pipeline deliveries August 10, 1992. In order to economically justify recovery of these undeveloped reserves, Unocal is proposing to gather this gas in it's Rincon Unit Lateral #2.

Unocal is proposing to set two allocation meters at the well site and measure gas from each stream separately. The gas will be transported to Unocal's central delivery point #2 (CDP) and surface commingled downstream of the Lateral #2 compressor (Exhibit No. 3). Royalties will be paid based on the gas volume measured at the sales meter and allocated back to the individual wells.

The proposed location is within the existing Dakota participating area (PA) in the Rincon Unit. The location is separated from the existing Gallup PA by two stand-up 320 acre proration units. Unocal is planning Gallup completions in these two proration units as well. The existing Gallup PA includes only one well (320 acres) and is shown on Exhibit No. 4. Upon completion of the Gallup formation in this well, Unocal will apply to the Bureau of Land Management (BLM) for expansion of the Gallup PA to include this proration unit. The lease is a Federal lease, and is described in Exhibit No. 5. The royalty in the two formations is the same.

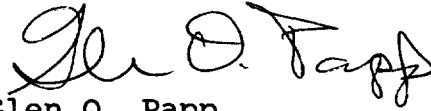
Unocal requests, from the New Mexico Oil Conservation Division, expansion of previous authority for surface commingling of the produced gas in Lateral #2, and approval for the expanded method for allocating production from the central sales meter at CDP #2 to the individual well-site meters. Unocal will calculate a monthly allocation factor, as shown in Exhibit No. 6, part 1. The allocation factor will then be used as illustrated in Exhibit No. 6, part 2, to determine individual allotted volumes. To ensure the accuracy of the individual meters, Unocal will continue to calibrate, perform orifice plate inspections, and settlement tests as described in BLM Onshore Oil and Gas Order No. 5, Measurement of Gas. (Note: Exhibit No. 6 is a revision of the approved allocation calculations for Unocal's Lateral #2, with the addition of the two zones from the proposed well and all other proposed production.)

A Copy of this request is being forwarded to the BLM and the SLO for their approval. I will ask the SLO to forward a copy of their approval to you. I will also forward a copy of the BLM's approval to you as soon as it is received.

Should you have any questions or need any additional information to process this request, please feel free to contact me at the above letterhead address or phone.

Very truly yours,

Union Oil Company of California  
dba Unocal

A handwritten signature in black ink, appearing to read "Glen O. Papp". The signature is fluid and cursive, with the first name "Glen" being more prominent.

Glen O. Papp  
District Production Engineer

pmh

cc:NMOCD Aztec Office--Frank Chavez  
BLM--Ken Townsend  
CPL--Pete Martinez

# EXHIBIT No. 1

STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING  
GOVERNOR



POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

*COMMINGLING ORDER PLC-88*

Unocal Oil & Gas Division  
3300 North Butler Avenue  
Suite 200  
Farmington, New Mexico 87401

Attention: Glen O. Papp

The above-named company is hereby authorized to commingle Basin-Dakota, Blanco-Mesaverde, Largo - Gallup and South Blanco - Pictured Cliffs Pool production from the following leases:

|              |  |
|--------------|--|
| LEASE NAME:  | Rincon Unit Tract No. 2 (SF-079160)  |
| DESCRIPTION: | All of Section 1, W/2, NE/4 Section 11, Township 26 North, Range 7 West, NMPM; |
| LEASE NAME:  | Rincon Unit Tract No. 13 (SF-079364)   |
| DESCRIPTION: | S/2 Section 31, Township 27 North, Range 6 West, NMPM;                         |
| LEASE NAME:  | Rincon Unit Tract No. 22 (E-290-29)  |
| DESCRIPTION: | SW/4 Section 36, Township 27 North, Range 7 West, NMPM;                        |
| LEASE NAME:  | Rincon Unit Tract Nos. 24 & 25 (E-290-28)                                      |
| DESCRIPTION: | NW/4, SE/4 Section 36, Township 27 North, Range 7 West, NMPM;                  |

All in Rio Arriba County, New Mexico

Gas Production shall be allocated to each lease by:

Separately metering individual well production by allocation meters and multiplying said volumes by an allocation factor. The allocation factor shall be determined by dividing the central sales meter volume by the sum of the individual allocation meter volumes.

# EXHIBIT No. 1

Page 2

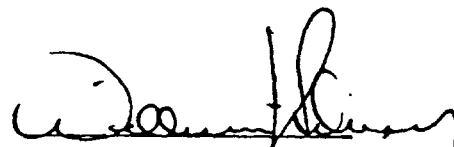
Unocal Oil & Gas Division

March 6, 1992

Page 2

NOTE: This installation shall be installed and operated in accordance with the applicable provisions of Rule 309-B of the Division Rules and Regulations and the Division "Manual for the Installation and Operation of Commingling Facilities." It is the responsibility of the producer to notify the transporter of this commingling authority.

DONE at Santa Fe, New Mexico, on this 6th day of March, 1992.



WILLIAM J. LEMAY,  
Division Director

cc: Oil Conservation Division - Aztec  
State Land Office - Oil & Gas Division  
U.S. BLM - Farmington

# EXHIBIT No. 2



JIM BACA  
COMMISSIONER

State of New Mexico  
OFFICE OF THE  
Commissioner of Public Lands  
Santa Fe

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

February 21, 1992

UNOCAL Oil & Gas Division  
3300 North Butler Avenue, Suite 200  
Farmington, New Mexico 87401

Attn: Mr. Glen O. Papp

Re: Approval Request for Central Metering  
Rincon Unit Lateral No. 2  
Rio Arriba County, New Mexico

Dear Mr. Papp:

Reference is made to your application letter of September 5, 1991, which has been forwarded to us for our approval by Mr. Bill Carr. Your application requests approval to build a gas gathering system, Rincon Unit Lateral #2, and deliver existing conventional gas through a central metering facility.

According to the information provided, the proposed Rincon Unit Lateral #2 will gather gas from 12 conventional gas wells of which the Well Nos. 31(PC), 45(PC) and 131(DK) are located on State Lease No. E-290. The remaining wells are located on Federal lands. It is our understanding that the wells to be connected to the proposed system are all within established participating areas, and the royalty ownership in all formations within a given tract is identical. In addition, it is also our understanding that Unocal is in the process of seeking approval of this application and the allocation formula from the Bureau of Land Management.

The Commissioner of Public Lands has this date granted approval to your proposed request. Please be advised that any deviation from your proposed request will be grounds to rescind our approval. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791. Your Thirty (\$30.00) Dollar filing fee has been received.

Very truly yours,

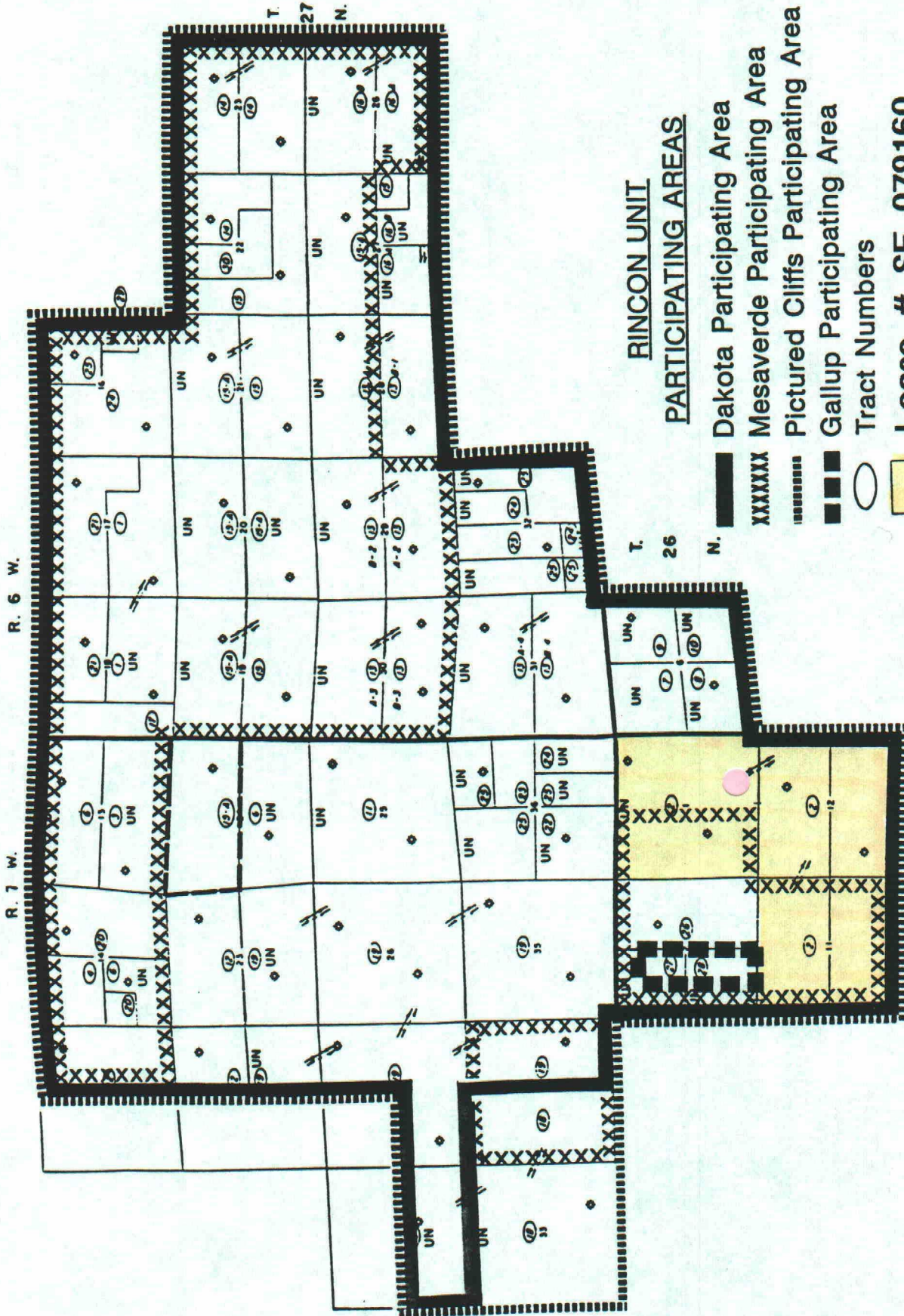
JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd O. Prando*  
FLOYD O. PRANDO, Director  
Oil/Gas and Minerals Division  
(505) 827-5744  
JB/FOP/pm  
UCS  
BLM

# RINCON UNIT LATERAL #2 GAS ACCOUNTING SCHEMATIC



# EXHIBIT No. 4



- RINCON UNIT**
- PARTICIPATING AREAS**
- Dakota Participating Area
  - XXXX Mesaverde Participating Area
  - Pictured Cliffs Participating Area
  - Gallup Participating Area
  - Tract Numbers
  - Lease # SF 079160
  - Proposed Well--57-E

Rio Arriba County, New Mexico



# EXHIBIT NO. 5

## LEASE DESCRIPTION

| FEDERAL LEASE # | # ACRES | DISCRIPTION                           |
|-----------------|---------|---------------------------------------|
| SF - 079160     | 1920.8  | T-26-N R-7-W<br>All of Sec. 1, 11, 12 |

OTHER WELLS ON LEASE #      SF - 079160

| WELL # | PRODUCING<br>ZONE    | LOCATION<br>T-26-N R-7-W       |
|--------|----------------------|--------------------------------|
| 7      | PICTURED CLIFF       | 65' FNL, 1655' FWL - Sec. 1    |
| 12     | PICTURED CLIFF (P&A) | 1550' FSL, 990' FEL - Sec. 1   |
| 14     | PICTURED CLIFF       | 1700' FNL, 1800' FWL - Sec. 12 |
| 15     | PICTURED CLIFF       | 1713' FSL, 1002' FWL - Sec. 11 |
| 46     | PICTURED CLIFF       | 990' FNL, 1650' FEL - Sec. 1   |
| 47     | PICTURED CLIFF       | 1518' FSL, 980' FWL - Sec. 1   |
| 57     | DAKOTA               | 790' FSL, 1825' FEL - Sec. 1   |
| 91     | PICTURED CLIFF       | 921' FNL, 1004' FWL - Sec. 11  |
| 92     | PICTURED CLIFF       | 1650' FNL, 1835' FEL - Sec. 11 |
| 93     | PICTURED CLIFF       | 800' FSL, 1050' FEL - Sec. 11  |
| 94     | PICTURED CLIFF       | 800' FSL, 990' FWL - Sec. 12   |
| 95     | PICTURED CLIFF       | 890' FEL, 1650' FSL - Sec. 12  |
| 96     | PICTURED CLIFF       | 990' FNL, 800' FEL - Sec. 12   |
| 101    | MESA VERDE           | 1850' FSL, 850' FWL - Sec. 1   |
| 102    | MESA VERDE           | 990' FSL, 990' FWL - Sec. 11   |
| 134    | DAKOTA               | 800' FNL, 1800' FEL - Sec. 12  |
| 189    | CHACRA               | 1190' FNL, 790' FWL - Sec. 12  |
| 191    | CHACRA               | 1460' FNL, 800' FWL - Sec. 11  |
| 192    | CHACRA               | 1700' FSL, 1700' FWL - Sec. 1  |
| 212    | CHACRA               | 1000' FSL, 975' FEL - Sec. 12  |
| 231    | DAKOTA               | 1140' FSL, 970' FWL - Sec. 12  |
| 232    | CHACRA               | 1710' FNL, 1550' FEL - Sec. 12 |
| 269    | FRUITLAND            | 1800' FSL, 1200' FWL - Sec. 12 |
| 270    | FRUITLAND            | 1658' FNL, 2311' FEL - Sec. 12 |
| 271    | FRUITLAND            | 1155' FSL, 1155' FWL - Sec. 1  |
| 272    | FRUITLAND            | 790' FNL, 1200' FEL - Sec. 1   |
| 295    | FRUITLAND            | 1645' FNL, 1125' FEL - Sec. 11 |

# EXHIBIT #6

## GAS ALLOCATION CALCULATIONS

LATERAL #2

- 1) Allocation Factor (AF):

$$\text{GAF} = \frac{\text{Integrated Central Meter Volume; MCF/MO}}{\sum_{i=1}^{16} \text{Integrated Individual Meter Volumes, MCF/MO}}$$

- 2) Allocation To Individual Wells:

| WELL #    | Integrated Individual<br>Meter Volume<br>(MCF/MO) | Monthly<br>GAF | Allotted Volumes<br>(MCF/MO) |
|-----------|---|----------------|------------------------------|
| 15-PC     | Vol.1   | GAF            | Vol.1 X GAF                  |
| 102-MV    | Vol.2   | GAF            | Vol.2 X GAF                  |
| 92-PC     | Vol.3   | GAF            | Vol.3 X GAF                  |
| 101-MV    | Vol.4   | GAF            | Vol.4 X GAF                  |
| 192-DK    | Vol.5   | GAF            | Vol.5 X GAF                  |
| 57-DK     | Vol.6   | GAF            | Vol.6 X GAF                  |
| 45-PC     | Vol.7   | GAF            | Vol.7 X GAF                  |
| 131-DK    | Vol.8   | GAF            | Vol.8 X GAF                  |
| 31-PC     | Vol.9   | GAF            | Vol.9 X GAF                  |
| 50-PC     | Vol.10  | GAF            | Vol.10 X GAF                 |
| 183-DK    | Vol.11  | GAF            | Vol.11 X GAF                 |
| 192E-DK   | Vol.12  | GAF            | Vol.12 X GAF                 |
| * 201E-DK | Vol.13  | GAF            | Vol.13 X GAF                 |
| * 201E-GL | Vol.14  | GAF            | Vol.14 X GAF                 |
| 57E-DK    | Vol.15  | GAF            | Vol.15 X GAF                 |
| 57E-GL    | Vol.16  | GAF            | Vol.16 X GAF                 |

\*COMMINGLING APPROVAL PENDING



State of New Mexico

OFFICE OF THE

Commissioner of Public Lands

Santa Fe

JIM BACA  
COMMISSIONER

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

June 22, 1992

UNOCAL Oil & Gas Division  
3300 North Butler Avenue, Suite 200  
Farmington, New Mexico 87401

Attn: Mr. Glen O. Papp

Re: Approval Request for Expansion of ~~Rincon Unit~~ Lateral #2  
Addition of Rincon Unit Well No. 201-E, Lease No. E-291-3  
Rio Arriba County, New Mexico

Dear Mr. Papp:

This office is in receipt of your letter of June 15, 1992 together with an application to expand the Rincon Unit Lateral #2 to include the Rincon Unit Well No. 201-E.

According to your application, authority to surface commingle produced gas in the Rincon Unit Lateral No. 2 has been previously approved by this office and by the New Mexico Oil Conservation Division.

Also, It is our understanding that the Rincon Unit Well No. 201-E is a development gas well scheduled to be drilled and completed as a dual Gallup and Dakota producer by August 1, 1992. In addition it is also our understanding that this well is within the existing Dakota participating area and you will be applying to expand the Gallup participating area to include this lease.

In view of the above, please be advised that the Commissioner of Public Lands has this date granted approval to your proposed request. Please be advised that any deviation from your proposed request will be grounds to rescind our approval. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

If you have any questions, or if we may be of further help, please contact Pete Martinez at (505) 827-5791. Your Thirty (\$30.00) Dollar filing fee has been received.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd O. Prando*

FLOYD O. PRANDO, Director  
Oil/Gas and Minerals Division  
(505) 827-5744  
JB/FOP/pm  
cc: OCD