

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

UNOCAL 

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.

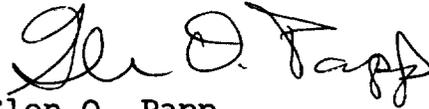
Unocal requests, from the New Mexico Oil Conservation Division, expansion of previous authority for surface commingling of the produced gas in Lateral #2, and approval for the expanded method for allocating production from the central sales meter at CDP #2 to the individual well-site meters. Unocal will 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 written in a cursive style with a large initial "G" and a distinct "P".

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.

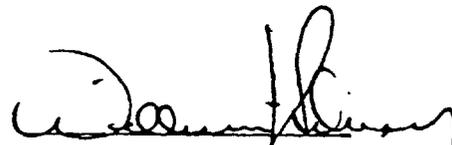
EXHIBIT No. 1

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

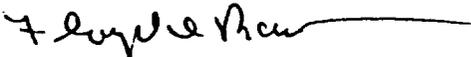
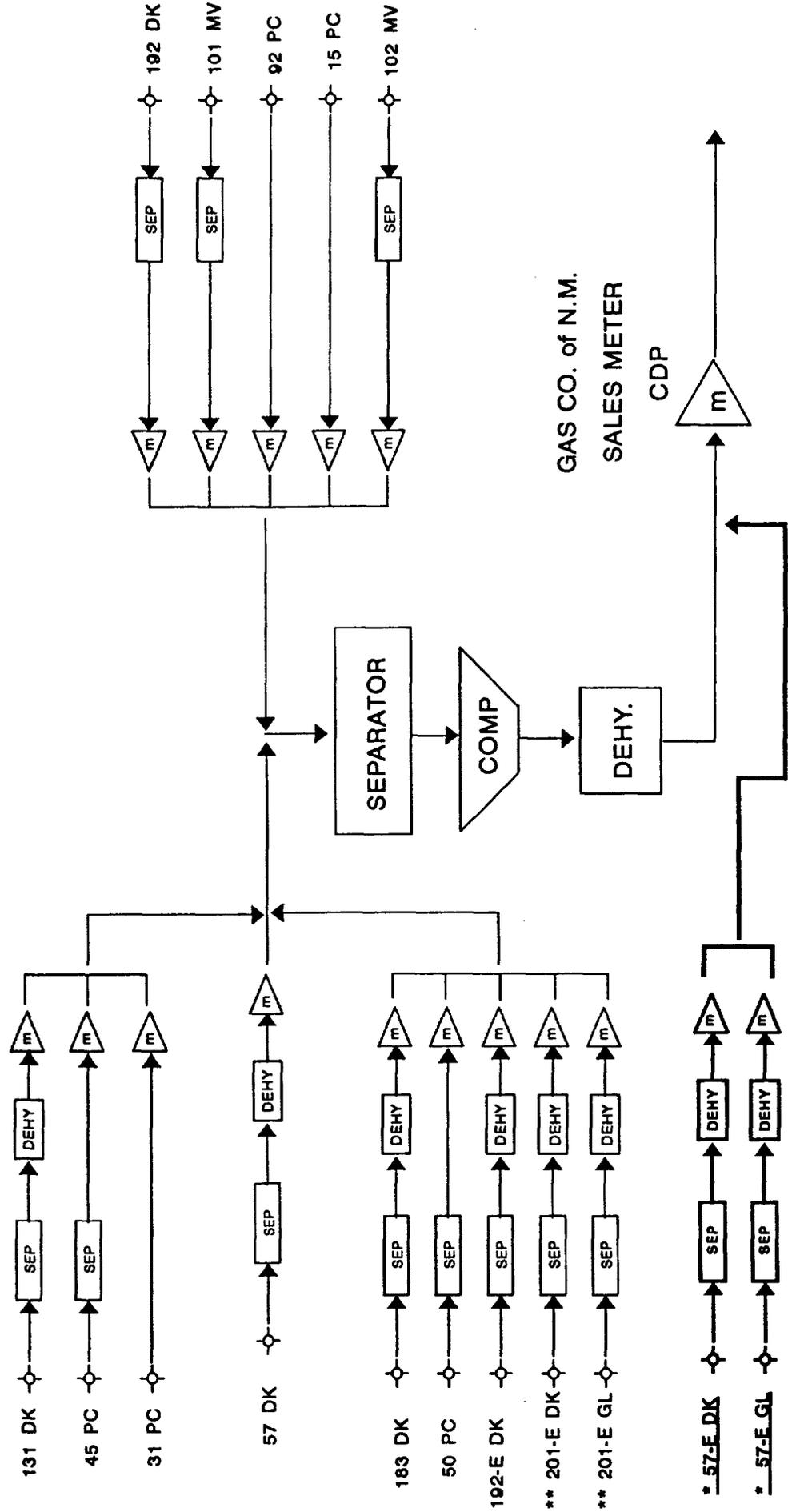
BY: 
FLOYD O. PRANDO, Director
Oil/Gas and Minerals Division
(505) 827-5744
JP/FOP/pm
UCS
BLM

EXHIBIT # 3

RINCON UNIT LATERAL #2 GAS ACCOUNTING SCHEMATIC

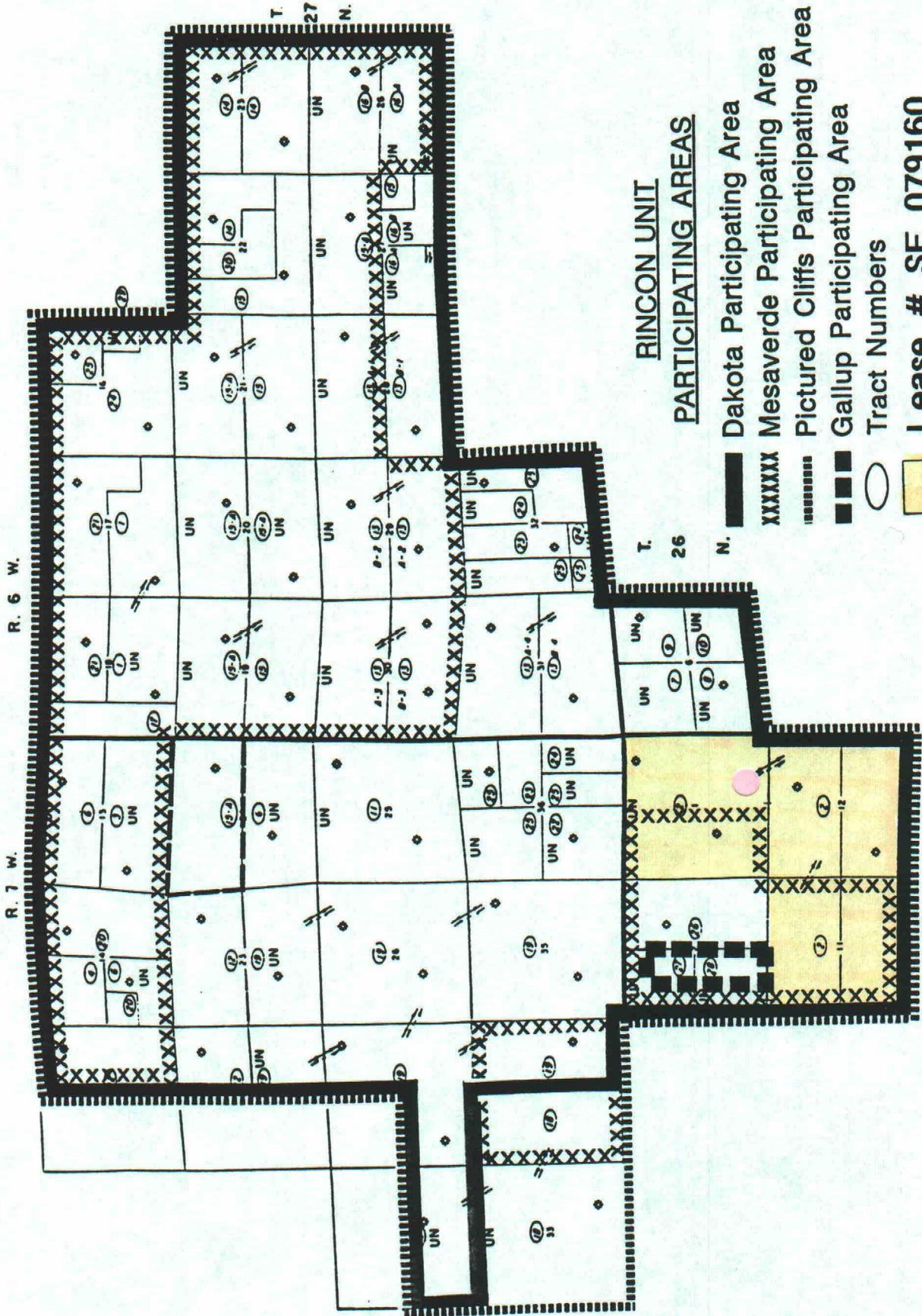


* Proposed Well

** Commingling approval pending.

All piping between facilities is underground except for meter runs.

EXHIBIT NO. 4



- RINCON UNIT**
- PARTICIPATING AREAS**
- █ Dakota Participating Area
 - XXXXXX 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 All of Sec. 1, 11, 12

OTHER WELLS ON LEASE # SF - 079160

WELL #	PRODUCING ZONE	LOCATION 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):

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

2) Allocation To Individual Wells:

WELL #	Integrated Individual Meter Volume (MCF/MO)	Monthly GAF	Allotted Volumes (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

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

JIM BACA
COMMISSIONER

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.

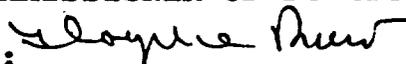
Also, It is our understanding that the Rincon Unit Well No. 201-E is a development gas well scheduled to be drilled and completed as a dual Gallup and Dakota producer by August 1, 1992. In addition it is also our understanding that this well is within the existing Dakota participating area and you will 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, Director
Oil/Gas and Minerals Division
(505) 827-5744
JB/FOP/pm
cc: OCD