

**Unocal North American  
Oil & Gas Division**

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CONSERVATION DIVISION



192 NO 10 21

Farmington District

October 29, 1992

**CERTIFIED RETURN RECEIPT  
P-081-447-475**

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

SUBJECT:

Requesting Approval for  
Surface Commingling of  
Condensate Production from  
Rincon Unit, Well No. 137-E  
Sec 24, T-27-N, R-7-W  
Rio Arriba County, New Mexico

Union Oil Company of California, dba Unocal, requests permission to surface commingle condensate from its Rincon Unit, Well No. 137-E, Rio Arriba County, New Mexico. The following describes and demonstrates how Unocal proposes to allocate production under the context of BLM Onshore Oil and Gas orders for commingling, and under the New Mexico Oil Conservation Commission Manual for the Installation and Operation of Commingling Facilities.

The Rincon Unit No. 137-E well is a development gas well which is currently being completed by Unocal. The well is to be completed as a dual Dakota/Gallup producer. This well was originally named the No. 137-M, and was scheduled to be completed as a dual Dakota/Mesa Verde producer. However, before the well was spudded it was decided to target the Dakota and Gallup formations for completion. The NMOCDC has previously granted authority to surface commingle condensate production from the Dakota and Mesa Verde formations in this well (Exhibit No.1). This request is for new authority to surface commingle production in the Dakota and Gallup formations.

Unocal is proposing to surface commingle produced fluids from individual separators into a common stock tank (Exhibit No. 2). Royalties will be paid on the liquid volumes sold from the tank.

The proposed location is within existing Dakota participating area (PA) within the Rincon Unit (Exhibit No. 3). Upon completion of the Gallup formation in this well, Unocal will apply to the Bureau of Land Management (BLM) for expansion of the

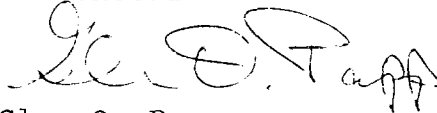
Gallup PA to include this lease. The royalty in the two formations is the same. The lease is a federal lease and is described in Exhibit No. 4.

Unocal is requesting from the New Mexico Oil Conservation Division, approval for surface commingling of the produced condensate and the following method for allocating production. Unocal will conduct initial condensate production tests of equivalent time frames for each of the two zones. The condensate produced during the test period from each pool will be used to calculate an average daily rate (Exhibit No. 5, Part 1). Each month this rate will be multiplied by the days on production, to yield a volume produced for the month (Exhibit No. 5, Part 3). The corrected volumes will be allocated as per Exhibit 5, Part 5. To ensure the accuracy of the allocation factor, Unocal will retest the zones every six months after the initial test.

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 dark ink, appearing to read "Glen O. Papp", written over the printed name.

Glen O. Papp  
District Production Engineer

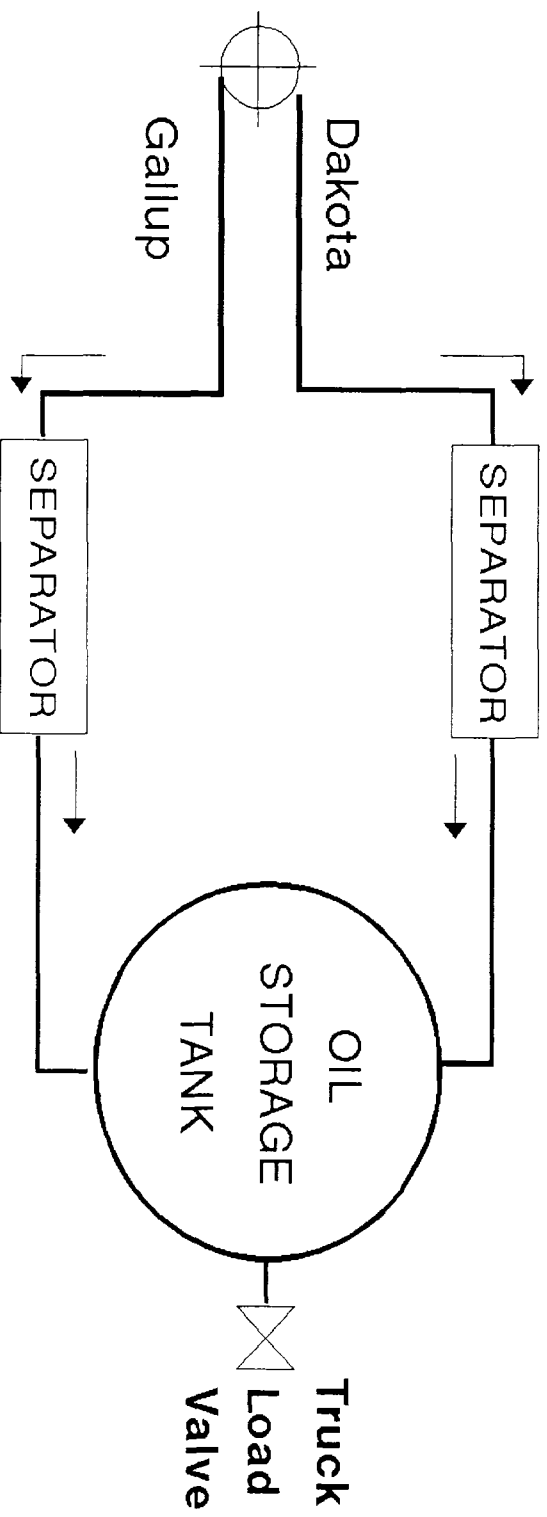
pmh

cc:NMOCD Aztec Office--Frank Chavez  
BLM--Ken Townsend

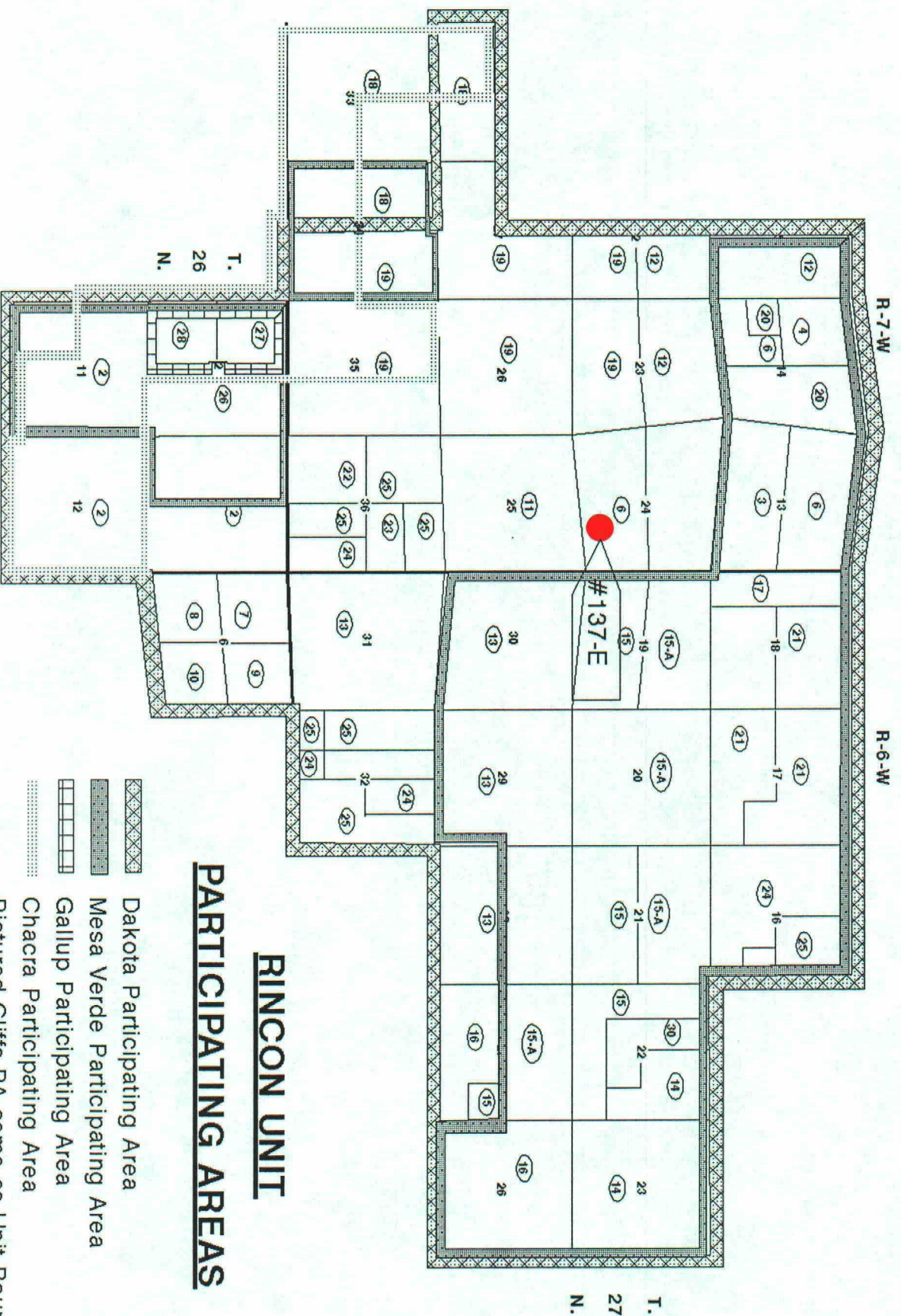
# EXHIBIT No. 2

**UNOCAL** 

CONDENSATE ACCOUNTING SCHEMATIC  
RINCON UNIT # 137-E  
RIO ARRIBA COUNTY, NEW MEXICO



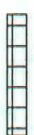
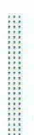




# EXHIBIT No. 3



## RINCON UNIT

### PARTICIPATING AREAS

-  Dakota Participating Area
-  Mesa Verde Participating Area
-  Gallup Participating Area
-  Chacra Participating Area
-  Pictured Cliffs PA same as Unit Boundary
-  Tract Numbers

Rio Arriba County, New Mexico

# EXHIBIT No. 4

## LEASE DISCRIPTION

FEDERAL LEASE	# ACRES	DESCRIPTION
SF - 074298-D	768.76	SEC.13 N/2 SEC.14: S/2 SW4, NE/4 SW/4 SEC.24: S/2

## OTHER WELLS ON LEASE # SF - 074298-D

WELL #	PRODUCING ZONE	LOCATION	WELL STATUS
36	MV	975' FSL 1450' FWL Sec. 14	P & A'd
58	MV	990' FSL 890' FWL Sec. 24	Producing
59	PC	1650' FSL 1645' FEL Sec. 24	Producing
87	PC	1800' FSL 1750' FEL Sec. 13	Producing
88	MV	1750' FNL 1650' FEL Sec. 13	Producing
88	PC	1750' FNL 1650' FEL Sec. 13	Producing
133	DK	1600' FSL 1650' FWL Sec. 14	Producing
137	DK	1500' FSL 1800' FWL Sec. 24	Producing
137	MV	1500' FSL 1800' FWL Sec. 24	Producing
167	DK	1100' FNL 1650' FEL Sec. 13	Producing
276	FC	1080' FNL 1240' FEL Sec. 13	Producing
279	FC	1735' FSL 1456' FWL Sec. 14	Producing

EXHIBIT #5  
CONDENSATE  
ALLOCATION CALCULATIONS

1) Production Test completed on both zones, yields:

$$\text{Gallup Test Rate} = R_1 \text{ (BPD)}$$

$$\text{Dakota Test Rate} = R_2 \text{ (BPD)}$$

2) Days On / Month

$$\text{Gallup Days On} = A$$

$$\text{Dakota Days On} = B$$

3) i) Actual Total Monthly Gauge Volume:  $G$  (BPM)

ii) Calculated Individual Volumes:

$$\text{Gallup} = R_1 \times A$$

$$\text{Dakota} = R_2 \times B$$

$$\text{Total Volume} = R_1(A) + R_2(B)$$

4) Allocation Factor (AF):

$$AF = \frac{G}{R_1(A) + R_2(B)}$$

5) Corrected Allocation Volumes:

$$\text{Gallup} = AF_1 \times R \text{ (A)}$$

$$\text{Dakota} = AF_2 \times R \text{ (B)}$$