

Unocal Oil & Gas Division  
Unocal Corporation  
3300 North Butler Avenue  
Suite 200  
Farmington, New Mexico 87401  
Telephone (505) 326-7600  
Fax: (505) 326-6145

REC-100  
22 JUN 8 57



July 20, 1992

**CERTIFIED RETURN RECEIPT**  
**P-671-272-507**

Farmington District

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. 171-M  
Sec 21, T-27-N, R-6-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. 171-M, 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. 171-M well is a development gas well scheduled to be drilled by Unocal. The well is to be completed as a dual Dakota/Mesa Verde producer; and it is anticipated that it will be ready for pipeline deliveries August 31, 1992.

Unocal is proposing to surface commingle produced fluids from individual separators into a common stock tank (Exhibit No. 1). Royalties will be paid on the liquid volumes sold from the tank.

The proposed location is within existing Dakota and Mesa Verde participating areas within the Rincon Unit (Exhibit No. 2). The lease is a federal lease and it is described in Exhibit No. 3. The royalty in the two formations is the same.

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. 4, Part 1). Each

month this rate will be multiplied by the days on production, to yield a volume produced for the month (Exhibit No. 4, Part 3). The corrected volumes will be allocated as per Exhibit 4, 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

  
Glen O. Papp  
District Production Engineer

pmh

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

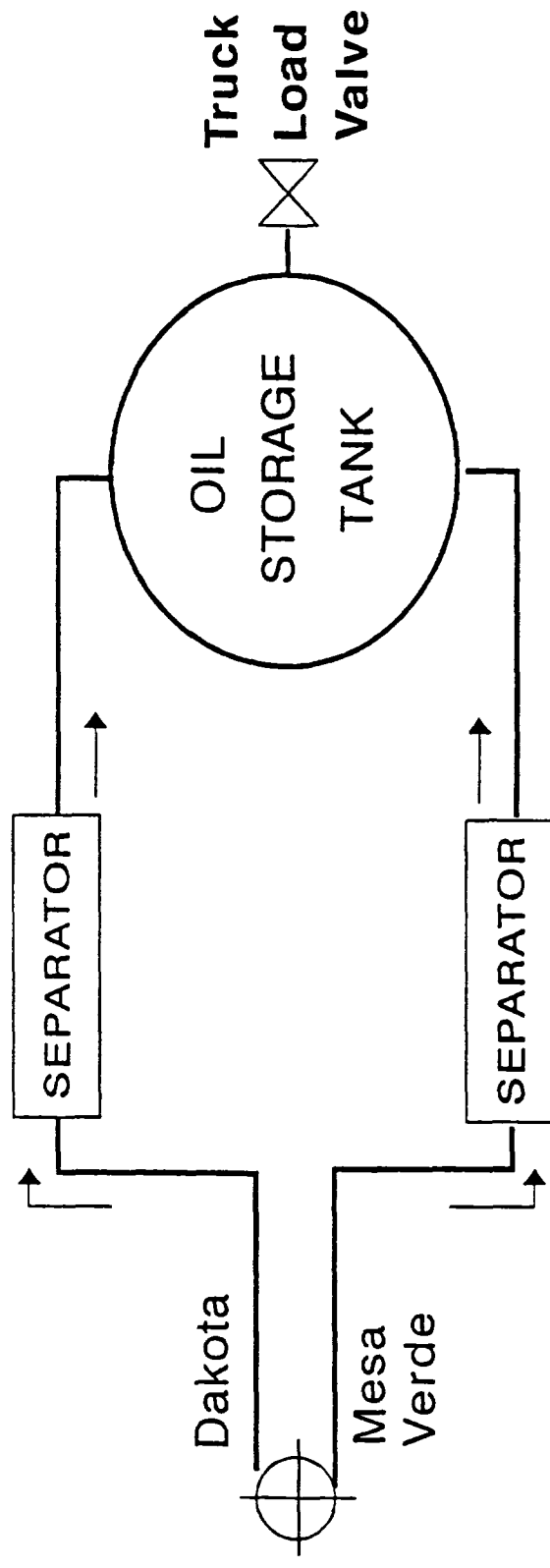
# EXHIBIT No. 1

**UNOCAL** 

CONDENSATE ACCOUNTING SCHEMATIC

RINCON UNIT # 171-M

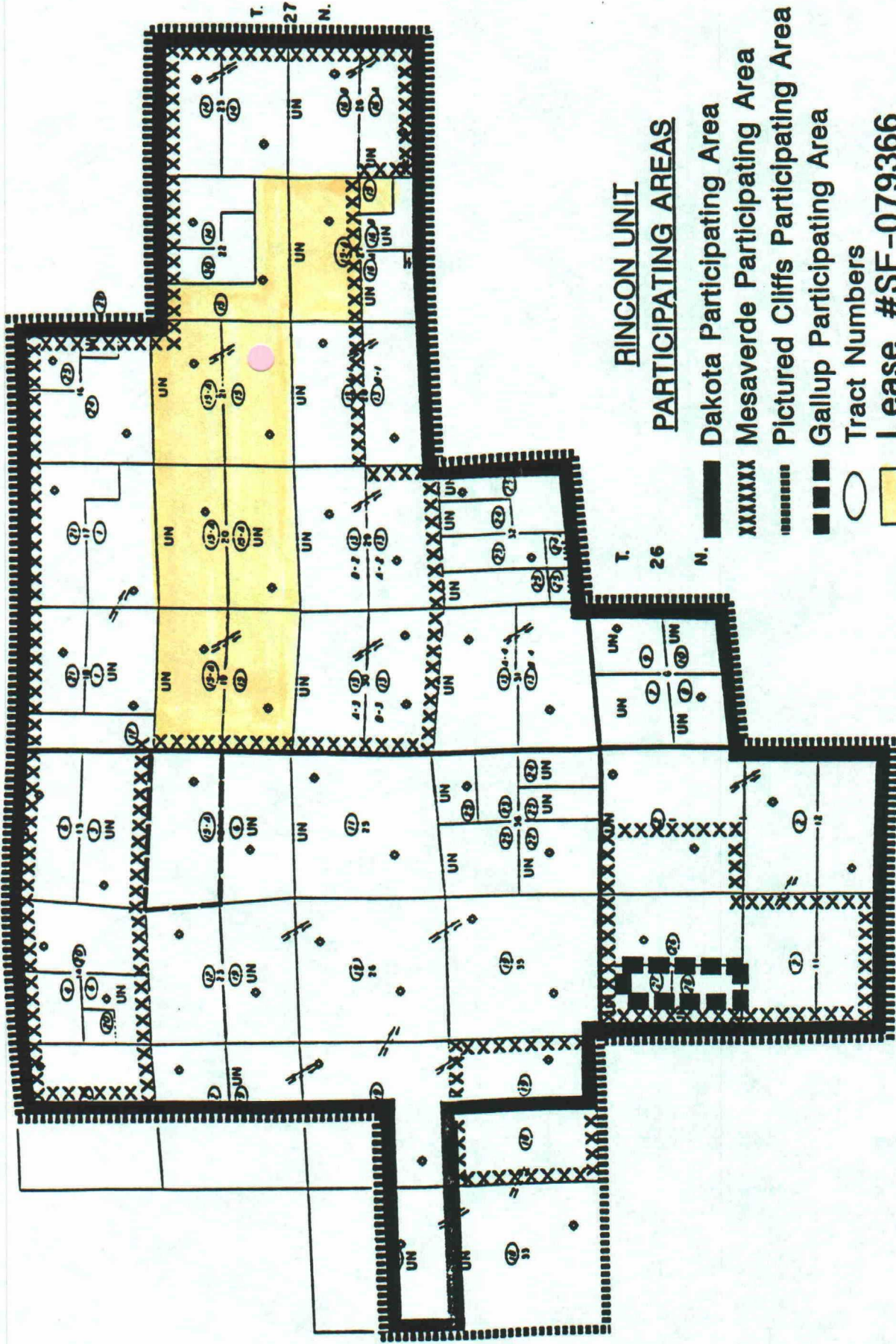
RIO ARriba COUNTY, NEW MEXICO



# EXHIBIT No. 2

R. 7 W.

R. 6 W.



## RINCON UNIT

### PARTICIPATING AREAS

- XXXXXX Dakota Participating Area
- Mesaverde Participating Area
- ===== Pictured Cliffs Participating Area
- ===== Gallup Participating Area
- Tract Numbers
- Lease #SF-079366
- Proposed Well #171M

Rio Arriba County, New Mexico

# EXHIBIT NO #3

## LEASE DISCRIPTION

FEDERAL LEASE	# ACRES	DESCRIPTION
SF - 079366	2558.72	SEC.s 19, 20, 21 ALL SEC 22: W/2 NW/4, W/2 SW/4, SE/4 SW/4, S/2 SE/4 SEC 23: N/2, NE/4 SE/4

### OTHER WELLS ON LEASE # SF - 079366

PRODUCING			
WELL #	ZONE	LOCATION	WELL STATUS
8	MV	1450' FSL, 1450' FWL, Sec. 20	Producing
29	MV	1180' FNL, 815' FWL, Sec. 22	Producing
33	MV	802' FSL, 950' FEL, Sec. 22	Producing
52	PC	1650' FNL, 990' FEL, Sec. 20	Producing
98	MV	990' FNL, 990' FEL, Sec. 21	Producing
98	PC	990' FNL, 990' FEL, Sec. 21	Producing
99-A	MV	1760' FNL, 810' FEL, Sec. 27	Producing
99	MV	1025' FNL, 1025' FEL, Sec. 27	Producing
99	PC	1025' FNL, 1025' FEL, Sec. 27	Producing
107	MV	1500' FSL, 1500' FWL, Sec. 19	Producing
108-A	MV	1460' FSL, 1020' FEL, Sec. 19	Producing
108	DK	1750' FNL, 1750' FEL, Sec. 19	Producing
108	MV	1750' FNL, 1750' FEL, Sec. 19	Producing
109	PC	1050' FNL, 840' FWL, Sec. 19	Producing
110	PC	990' FSL, 1700' FEL, Sec. 19	Producing
111	PC	1650' FNL, 1165' FWL, Sec. 20	Producing
112	PC	990' FSL, 1450' FEL, Sec. 20	Producing
113	MV	1500' FNL, 800' FEL, Sec. 20	Producing
114	PC	1790' FSL, 1800' FWL, Sec. 20	Producing
115	MV	1550' FSL, 1550' FWL, Sec. 21	Producing
116	PC	890' FNL, 990' FWL, Sec. 21	Producing
117	PC	1750' FSL, 990' FEL, Sec. 21	Producing
119	PC	1100' FSL, 900' FWL, Sec. 22	Producing
120	PC	1500' FNL, 840' FWL, Sec. 22	Producing
141	PC	990' FNL, 1550' FWL, Sec. 27	Producing
142	PC	1650' FSL, 1040' FEL, Sec. 27	Producing
158	DK	1090' FSL, 1450' FWL, Sec. 22	Disconnected
165	DK	1450' FNL, 1600' FEL, Sec. 27	Producing
170	DK	990' FSL, 790' FWL, Sec. 20	Producing
171	DK	890' FSL, 1140' FWL, Sec. 21	Producing
174	DK	990' FSL, 1650' FWL, Sec. 19	Producing
175	DK	1840' FNL, 1760' FEL, Sec. 20	Producing
180	DK	1550' FNL, 1650' FEL, Sec. 21	Producing
195	PC	1460' FNL, 1750' FEL, Sec. 19	Producing
240	FC	1500' FSL, 1750' FWL, Sec. 18	Producing
241	FC	1500' FSL, 990' FWL, Sec. 22	Producing
254	FC	1419' FNL, 794' FEL, Sec. 20	Producing
255	FC	1185' FSL, 1840' FWL, Sec. 20	Producing
261	FC	798' FSL, 1254' FWL, Sec. 29	Producing
263	FC	1369' FNL, 1015' FEL, Sec. 19	Producing
264	FC	1200' FSL, 798' FWL, Sec. 19	Producing

**EXHIBIT No. 4**  
**CONDENSATE**  
**ALLOCATION CALCULATIONS**

1) Production Test completed on both zones, yields:

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

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

2) Days On / Month

$$\text{Mesa Verde Days On} = A$$

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

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

ii) Calculated Individual Volumes:

$$\text{Mesa Verde} = R_1 \times A$$

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

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

4) Allocation Factor (AF):

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

5) Corrected Allocation Volumes:

$$\text{Mesa Verde} = AF \times R_1(A)$$

$$\text{Dakota} = AF \times R_2(B)$$

COMPANY: UNOCAL OIL & GAS DIVISION  
 ADDRESS: 3300 N. BUTLER AVENUE, SUITE 200  
 CITY, STATE, ZIP: FARMINGTON, NEW MEXICO 87401  
 ATTENTION: GLEN O. PAPP  
 LEASE NAME: RINCON UNIT (WELL NO. 171-M)  
 DESCRIPTION: S/2 SECTION 21, TOWNSHIP 27 NORTH, 6 WEST, NMPM  
RIO ARRIBA COUNTY, NEW MEXICO

The above-named company is hereby authorized to commingle Basin-Dakota and Blanco Mesaverde Gas Pool liquid hydrocarbon production in a common tank battery and to determine such production from each pool by multiplying the monthly liquid hydrocarbon production by an allocation factor. Such allocation factor shall be determined by initial production tests and by production tests conducted bi-annually thereafter.

REMARKS: \_\_\_\_\_  
 \_\_\_\_\_  
 \_\_\_\_\_

DONE at Santa Fe, N.M., on this \_\_\_\_ day of \_\_\_\_\_, 19\_\_\_\_.

REQUIREMENTS:

WELL TESTS:

~~NO TOP ALLOWABLE WELLS~~  
~~COMMON OWNERSHIP~~  
~~FEDERAL OR STATE APPROVAL~~

SEPARATELY METERING:

~~TOP ALLOWABLE WELLS~~  
~~DIVERSE OWNERSHIP~~  
~~FEDERAL OR STATE APPROVAL~~