STATE OF NEW MEXICO



ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



BRUCE KING GOVERNOR ANITA LOCKWOOD CABINET SECRETARY

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

COMMINGLING ORDER PC-795

Unocal Oil & Gas Division 3300 North Butler Avenue Suite 300 Farmington, New Mexico 87401

Attention: Glen O. Papp

LEASE NAME:

Rincon Unit (Well No. 159-M)

DESCRIPTION:

N/2 Section 18, Township 27 North, Range 6 West, NMPM,

Rio Arriba County, New Mexico

The above-named company is hereby authorized to commingle Basin-Dakota and Blanco-Mesaverde Pool production in a common gas sales line and to determine the gas production from each pool by separately metering individual gas 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.

NOTE: This installation shall be installed and operated in accordance with the applicable provisions of Rule 303 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 28th day of July 1992.

WILLIAM J. LEMAY,

Division Director

cc: Oil Conservation Division - Aztec

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





June 16, 1992

Russell C. Hanscom Project Manager 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 Exception to Rule 303-A Rincon Unit, Well No. 159-M Sec. 18, T-27-N, R-6-W Rio Arriba County, New Mexico

Union Oil Company of California, dba Unocal, requests permission to surface commingle gas from its Rincon Unit, Well No. 159-M, Rio Arriba County, New Mexico. 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, and under the New Mexico Oil Conservation Commission Manual for the Installation and Operation of Commingling Facilities.

The Rincon Unit, No. 159-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 10, 1992. The local gas gathering company, El Paso Natural Gas (EPNG), has requested that Unocal deliver this gas to a pre-determined tie-in point on their gathering system. EPNG wishes only to set one sales meter, at this tie-in point, in order to minimize chart handling.

Unocal is proposing to set two allocation meters at the well site and measure gas from each stream separately. Downstream of the allocation meters the gas will be surface commingled in the flow line and measured again at the EPNG sales meter downstream (Exhibit No. 1). Royalties will be paid based on the gas volume measured at EPNG's sales meter.

The proposed location is within existing Dakota and Mesa Verde participating areas in 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 gas and approval for the following method of allocating production from the central meter to the individual meters. Unocal will calculate a monthly allocation factor, as shown in Exhibit No. 4, part 1. The allocation factor will then be used as illustrated in Exhibit No. 4, part 2, to determine individual meter 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.

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

Ch.

Glen O. Papp

District Production Engineer

pmh

cc:NMOCD Aztec Office--Frank Chavez
BLM--Ken Townsend
Return Receipt Requested

UNOCAL ®

GAS ACCOUNTING SCHEMATIC RINCON UNIT # 159-M RIO ARRIBA COUNTY, NEW MEXICO

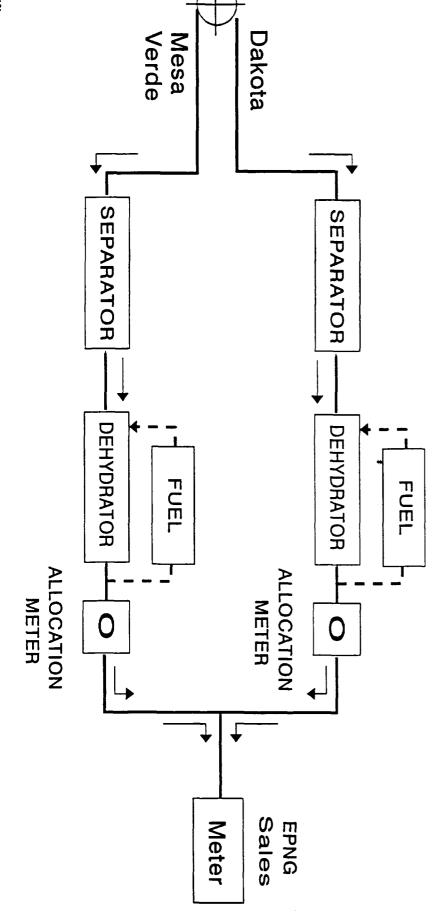


EXHIBIT No. 2

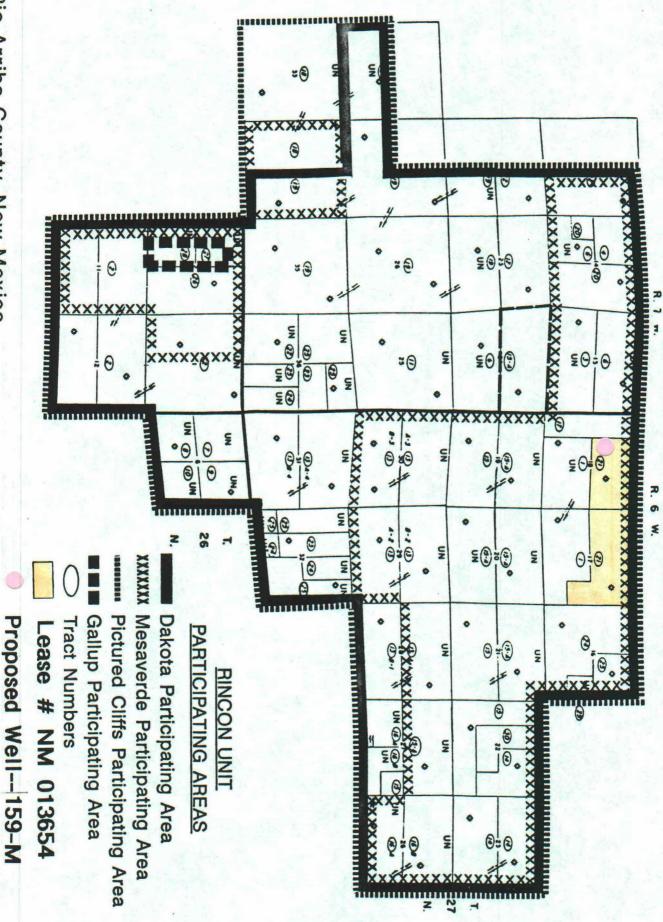


EXHIBIT NO. 3LEASE DISCRIPTION

FEDERAL LEASE #	# ACRES	DESCRIPTION
NM - 013654	600	T-27-N, R-6-W Sec. 18 N/2 Sec. 17 N/2, NE/4SE/4

OTHER WELLS ON LEASE # NM - 013654

WELL #	PRODUCING ZONE	LOCATION T-27-N, R-6-W	
159	DAKOTA	1700' FNL, 1720' FEL - Sec. 18	
161	DAKOTA	1450' FNL, 1000' FEL - Sec. 17	
252	FRUITLAND	1640' FNL, 1605' FEL - Sec. 18	
258	FRUITLAND	1505' FNL, 915' FEL - Sec. 17	
80	MESA VERDE	1090' FNL, 1636' FEL - Sec. 18	
79A	MESA VERDE	1110' FNL, 730' FWL - Sec. 17	
190	PICTURED CLIFF	850' FNL, 1550' FEL - Sec. 17	
105	PICTURED CLIFF	1650' FSL, 990' FEL - Sec. 17	
159 – M	MESA VERDE/DAKOTA	1695' FNL, 1735' FWL - Sec. 18	
		1	

FILENAME EX3_159M

EXHIBIT #4 GAS ALLOCATION CALCULATIONS

I) Allocation Factor (AF):

$$AF = \frac{\text{Integrated Central Meter Volume (MCF/MO)}}{\sum_{1}^{2} \text{Integrated Individual Meter Volumes (MCF/MO)}}$$

2) Allocation to Individual Zones:

Zone	Integrated Individual	Monthly AF	Allotted Volume
	Meter Volume		(MCF/MO)
		^ —	
Mesa Verde	Vol 1	AF	Vol, x AF
Dakota	Vol ₂	AF	Vol ₂ x AF