



**NEW MEXICO ENERGY, MINERALS
& NATURAL RESOURCES DEPARTMENT**

AZTEC DISTRICT OFFICE
1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(800) 334-6170 Fax (505) 334-6170

GARY E. JOHNSON
GOVERNOR

JENNIFER A. SALSBURY
CABINET SECRETARY

ADMINISTRATIVE ORDER RECOMMENDATION

Date: 2/2/96

New Mexico Oil Conservation Division
PO Box 2088
Santa Fe NM 87504-2088

RE: Proposed MC _____	Proposed DHC <u>X</u> _____
Proposed NSL _____	Proposed SWD _____
Proposed WFX _____	Proposed PMX _____
Proposed NSP _____	Proposed DD _____

Gentlemen:

I have examined the application received on 2/1/96
for the Unocal Rincon Unit 168E
OPERATOR LEASE & WELL NUMBER
I-36-27A-7W and my recommendations are as follows:

UL-S-T-R
Approve

Yours truly,

[Signature]

Unocal Oil & Gas Division
Unocal Corporation
913 West Broadway, P.O. Box 850
Bloomfield, New Mexico 87413
Telephone (505) 632-1811



Monday, January 29, 1996

Certified Receipt No. Z 407 288 662

New Mexico Oil Conservation Division
Attn.: Mr. Frank Chavez
1000 Rio Brazos Road
Aztec, New Mexico 87410

CC:
New Mexico Oil Conservation Division
Attn.: Mr. William J. LeMay
PO Box 2088
Santa Fe, New Mexico 87504-2088

RECEIVED
FEB - 1 1996
OIL CON. DIV.
DIST. 3

Dear Mr. Chavez:

Union Oil Company of California d.b.a. UNOCAL requests approval to down-hole commingle hydrocarbon production from the Blanco Mesa Verde and Basin Dakota/Largo Gallup formations in the following Rincon Unit well, Rio Arriba County, New Mexico.

<u>Well</u>	<u>Legal Location</u>
Rincon Unit 168E	1845' FSL, 840' FEL, S36, T27N, R7W

a UNOCAL operated well located on State acreage.

This well was drilled and completed, with 5-1/2" casing, November, 1992 in the Dakota and Gallup formation. The Dakota/Gallup is currently producing, under commingle order DHC-917, 300 Mcfd gas and a trace of oil. UNOCAL proposes to perforate, stimulate with a hydraulic fracture and isolate and test (w/ a production packer and 2-3/8" tubing) oil, gas and water production from the Mesa Verde formation. If production from the Mesa Verde is deemed economical, UNOCAL would like the option to commingle gas production from the Mesa Verde

and Dakota/Gallup formations. Approval prior to completion is being sought because marginal production from the Mesa Verde will not justify completion of this well as a dual string Mesa Verde - Dakota/Gallup. If UNOCAL elects to down hole commingle, allocation factors will be calculated from the Mesa Verde test and the Dakota/Gallup's historical production.

One week shut-in surface pressures from off-set Mesa Verde wells were obtained in October, 1995 as follows-

<u>WELL</u>	<u>Location</u>	<u>SICP (psig)</u>
183E MV	SE, S31, T27N, R6W	460
150E MV	NW, S6, T26N, R6W	820 (Initial well test 11/9/95)
168E DK/GL	SE, S36, T27N, R7W	410

UNOCAL is confident that production will not be wasted and the proposed method of completion will efficiently drain Dakota and Mesa Verde acreage around this wellbore. Royalty interests between zones are identical.

Attachments:

- 1) Current well bore schematic.
- 2) Oil and gas production curves.
- 3) Lease map showing well locations for offset pressure data and offset lease operators.
- 4) Letters to offset operators stating UNOCAL's proposal.

If you have any questions regarding this proposal please contact me at (505) 632 - 1811 #14.

Sincerely,

Union Oil Company of California
d.b.a. UNOCAL


Brett H. Liggett
Production Engineer

UNOCAL ROCKY MOUNTAIN ASSET GROUP

WELL: RINCON UNIT #168E

LOCATION: 1845' FSL 840' FEL Sec. 36 T27N R7W NE SE

COUNTY: Rio Arriba

STATE: NM

PRODUCING FORMATION: Dakota/Gallup

SPUD DATE: 9/19/92
 COMPL DATE: 11/10/92
 RECOMPL DATE: -----
 Elevation = 6547'
 KB = 13'
 Updated: 1/5/96
 By: H. Dahlgren

8-5/8", 24# J-55 @ 373'
 Cmt w/ 250 sxs, Circ. to Surface

233 Jts., 2-3/8" EUE 8rd, 4.7# J-55 FHD @ 7359'
 (10/13/93)
 .43' 2-3/8 mule shoe collar
 .78' "R" nipple
 31.53' 1 jt. 2-3/8 J-55 4.7# EUE tbg.
 .78' 2-3/8 standard SN
 7312.84' 232 jts. 2-3/8 J-55 4.7# EUE tbg.
 7346.36' 233 jts. Total
 13.00' BKDB
 7359.36' FHD

DV Tool
 @ 3132'

DV Tool
 @ 5338'

PBTD
 @ 7482'

Gallup Perfs: 6506-6710
 6506-44, 6550-88, 6598-6638, 6702-10 w/ 4 spf
 Frac w/ 73,250 X gel, 245,300# 20/40 sand

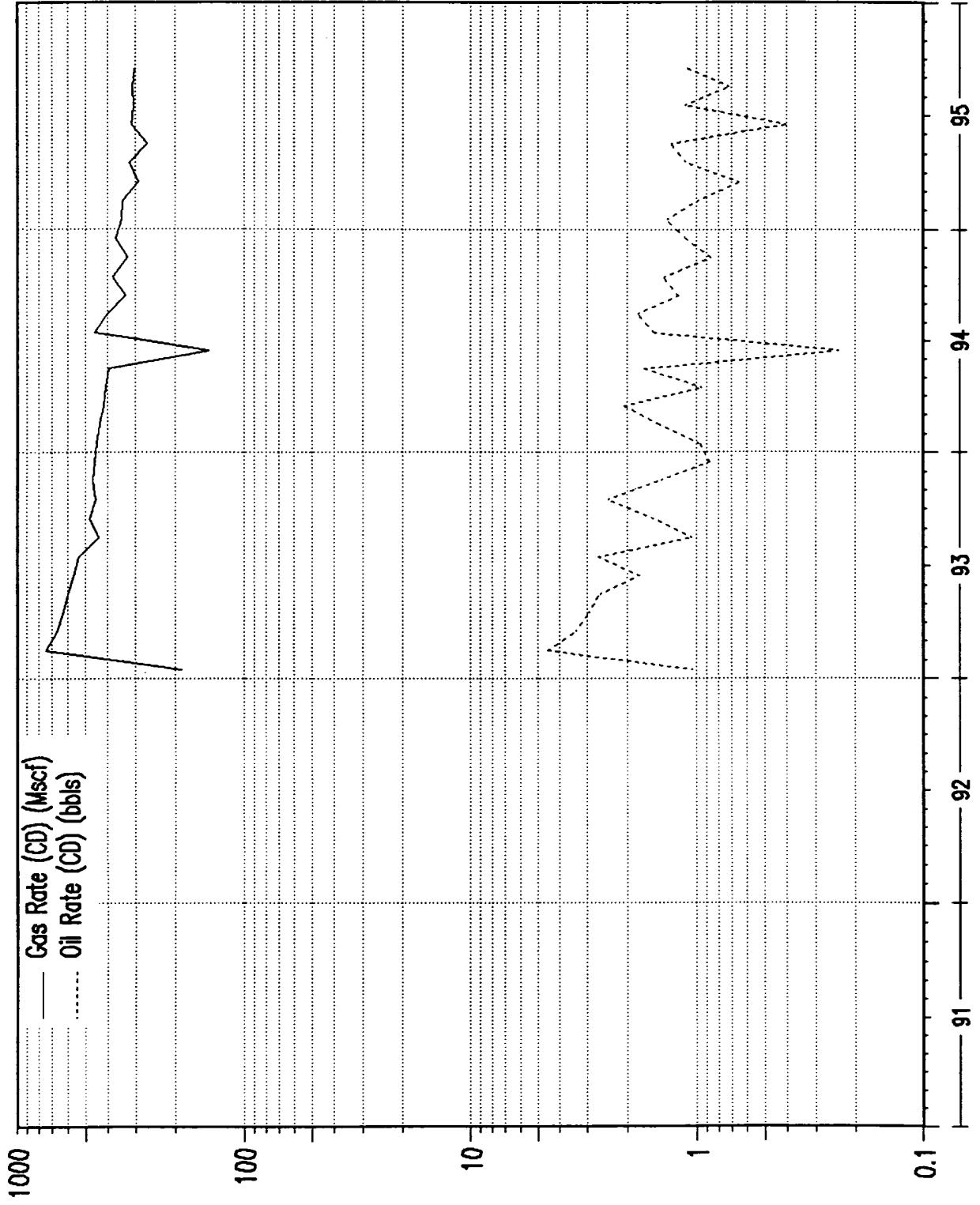
Dakota perfs: 7198-7438
 7198-7210, 7294-7314, 7330-36, 7346-74,
 7382-7402, 7416-20, 7426-38 w/ 4 spf
 Frac w/ 67,000 X gel, 252,100# 20/40 sand

DHL

5-1/2", 17#, N-80 & K-55 @ 7529'

TD = 7523' Cmt w/ 610 sxs 1st stg., 290 sxs 2nd stg., 805 sxs 3rd stg.

168E



UNOCAL, RINCON UNIT, T27N R6W

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36



108A



170



30



29



195A






153E

OPERATOR:
CAULKINS OIL CO.

OPERATOR:
CAULKINS OIL CO.



UNIT BOUNDARY

UNOCAL, RINCON UNIT, T26N R7W

6	5	4	3	2	1
	OPERATOR: LOUIS DRYFUS CORP	OPERATOR: CENTRAL RESOURCES INC. UNIVERSAL RESOURCES INC.	OPERATOR: CENTRAL RESOURCES INC. UNIVERSAL RESOURCES INC.		
7	8	9	10	11	12
					 231E  134  134E
18	17	16	15	14	13
			OPERATOR: LOUIS DRYFUS CORP BAYDER OIL CORP	OPERATOR: CALKINS OIL CO.	OPERATOR: CALKINS OIL CO.
19	20	21	22	23	24
30	29	28	27	26	25
31	32	33	34	35	36


UNIT BOUNDARY

UNOCAL, RINCON UNIT, T27N R7W

6	5	4	3	2	1
7	8	9	10	11	12
18	17	16	15	14	13
19	20	21	22	23	24 OPERATOR: MERIDIAN OIL CO.
30	29	28	27	26	25
31	32	33	34 124 	35	36  168E

UNIT BOUNDARY

UNOCAL, RINCON UNIT, T26N R6W

 150E	6	5	4	3	2	1
	OPERATOR: CAULKING OIL CO.	OPERATOR: CAULKING OIL CO.	8	9	10	11
7	OPERATOR: CAULKING OIL CO.	17	16	15	14	13
OPERATOR: CAULKING OIL CO.	19	20	21	22	23	24
30	29	28	27	26	25	
31	32	33	34	35	36	

UNIT BOUNDARY

Unocal Oil & Gas Division
Unocal Corporation
913 West Broadway, P.O. Box 850
Bloomfield, New Mexico 87413
Telephone (505) 632-1811



Monday, January 29, 1996

United State Department of the Interior
Bureau of Land Management
1235 La Plata Highway
Farmington, New Mexico 87401

Greetings:

Union Oil Company of California (UNOCAL) has requested, from the State of New Mexico, Oil Conservation Division, approval to down hole commingle production from the Blanco Mesa Verde and Basin Dakota/Largo Gallup formations in the following Rincon Unit well, Rio Arriba County, New Mexico.

Well	Legal Location
Rincon Unit 168E	1845' FSL, 840' FEL, S36, T27N, R7W

If the Bureau of Land Management, as an offset royalty interest owner, has an objection to this proposal, please notify NMOCD within twenty days. If you have any questions regarding this application, please contact me at (505) 532-1811 ext. 14.

Sincerely,

Union Oil Company of California
d.b.a. UNOCAL

Brett H. Liggett
Production Engineer