

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

UNOCAL 76

May 21, 1993

CERTIFIED RETURN RECEIPT REQUESTED

Farmington District

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

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

RECEIVED
MAY 24 1993
OIL CON. DIV
DIST. 3

Dear Sirs:

Union Oil Company of California (UNOCAL) requests permission to downhole commingle production from the Blanco Mesaverde and Basin Dakota formations in the following well:

Rincon Unit No. 1 E
1615' FNL, 1830' FEL
Section 30, T27N, R6W
Rio Arriba County, New Mexico

As provided by Order No. R-9893, administrative approval may be granted without notice and hearing.

As required for an exception to rule 303-A, the following information is attached:

1. An acreage dedication plat showing offset lease ownership.
2. A Form C-116 showing current productivity from each zone.
3. A wellbore diagram with completion detail.
4. A measured bottomhole pressure from each zone and a calculated adjustment to a common datum.
5. Gas analyses from each zone.
6. An allocation formula for commingled production.
7. A copy of the notification letter sent to all offset operators and the Bureau of Land Management.

The Blanco Mesaverde formation is uneconomic to drill as a stand alone well. To develop these reserves, a dual or commingled completion is required. We estimate an ultimate recovery of approximately 750 MMCF from the Mesaverde horizon, which would otherwise remain undeveloped.

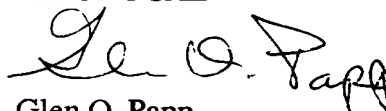
Although the Basin Dakota horizon produced at a rate of 748 MCFD and the Blanco Mesaverde horizon produced at a rate of 457 MCFD during flow tests to atmosphere, the current sales rates at line pressure are 400 MCFD for the Dakota horizon and 20 MCFD for the Mesaverde horizon. Commingling will allow for better lift of condensate production and benefits from compression.
water

Both zones produce essentially dry gas. Therefore, the respective formation fluids are compatible. Also, no crossflow will occur between the commingled zones.

If you have any questions, please contact Dana Delventhal at (505)326-7600. Thank you for your consideration in this matter.

Sincerely,

Union Oil Company of California
dba UNOCAL

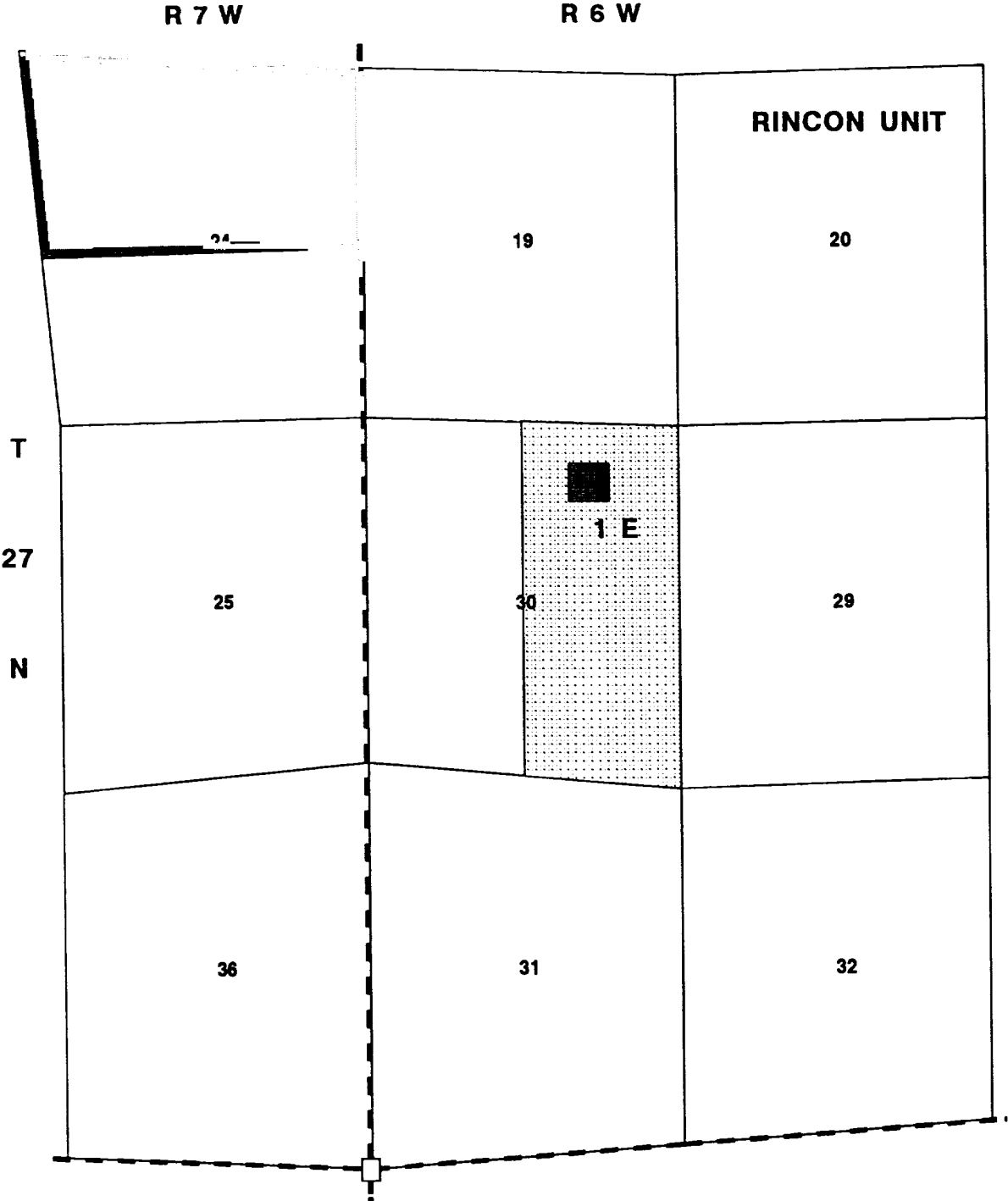


Glen O. Papp
Field Superintendent

Attachments

GOP/DLD/df

OFFSET LEASE OWNERSHIP



Submit 2 copies to Appropriate
District Office.

DISTRICT I

P.O. Box 1980, Hobbs, NM 88240

DISTRICT II

P.O. Drawer DD, Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-116
Revised 1/1/89

OIL CONSERVATION DIVISION

P.O. Box 2088

Santa Fe, New Mexico 87504-2088

GAS - OIL RATIO TEST

Operator		Pool		County												
Union Oil Company of California		Blanco Mesaverde/Basin Dakota		Rio Arriba												
Address		TYPE OF TEST - (X)		Completion		Special										
3300 N. Butler, Suite 200, Farmington, NM 87401		Scheduled		x												
LEASE NAME	WELL NO.	LOCATION			DATE OF TEST	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW. ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU FT/ BBL			
		U	S	T						R	WATER BBLs.	GRAV. OIL		OIL BBLs.	GAS MCF.	
Rincon Unit	1E	G	30	27	6											
Blanco Mesaverde						9/21/92	F	48/64"	300			24	4	0	457	-
Basin Dakota						9/14/92	F	48/64"	280			24	16	0	748	-

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

W.L. Irwin

Signature

W.L. Irwin District Petroleum Engineer

Printed name and title

10/29/92

Date

(505) 326-7600

Telephone No.

RINCON UNIT NO. 1-E
1615' FNL, 1830' FEL, SEC 30, T27N-R6W
RIO ARRIBA COUNTY, NM

KB Datum 10' Above GL

8-5/8" 24# K-55 @ 368'
CMT W/ 250 SX - CIRC TO SURF

242 lbs, 2-3/8", 4.7# EUE J-55 tbg.
(FHD @ 7578')

DV TOOL @ 3371'

Sliding Sleeve
@ 5163'

Gulberson Uni VI
pkr @ 5173'

DV TOOL @ 5600'

MESAVERDE

4834-70, 4882-4902, 4992-5012,
& 5122-42' W/ 4 SPF

Stimulate w/: 64,080 gal 30# XL gel, 247,940#
20/40 sand

DAKOTA

7350-68, 7376-84, 7390-7400,
7478-7500, 7520-28 & 7532-80' W/ 4 SPF

Stimulate w/: 96,100 gal 35# XL gel, 285,160#
20/40 sand

5-1/2", 17# N-80 & K-55 @ 7705'

CMT'D IN THREE STAGES: 1st stg w/ 670 sx (5600'-TD),
2nd stg w/ 670 sx (3371'-5600'), 3rd stg w/ 360 sx
(Surf-3371')

PBTD = 7659'

TD = 7707'



Company UNOCAL CORPORATION Lease RINCON UNIT Well No. 1-E
Field RINCON County RIO ARRIBA State NEW MEXICO
Formation MESA VERDE Test Date OCTOBER 3, 1992

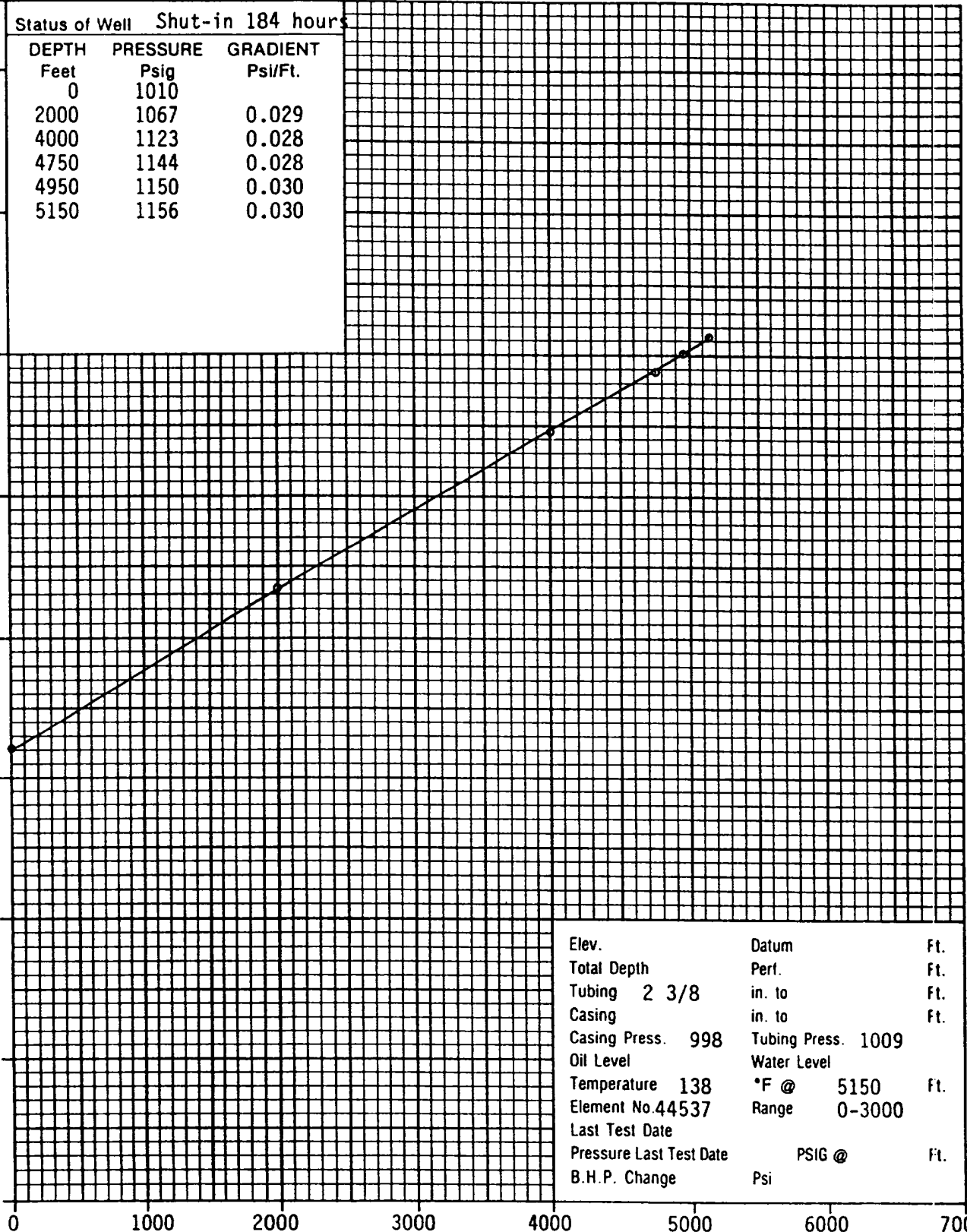
MIDLAND, TEXAS

Status of Well Shut-in 184 hours

DEPTH	PRESSURE	GRADIENT
Feet	Psig	Psi/Ft.
0	1010	
2000	1067	0.029
4000	1123	0.028
4750	1144	0.028
4950	1150	0.030
5150	1156	0.030

PRESSURE POUNDS PER SQUARE INCH GAUGE

1250
1200
1150
1100
1050
1000
950
900
850



DEPTH: FEET

Elev.	Datum	Ft.
Total Depth	Perf.	Ft.
Tubing 2 3/8	in. to	Ft.
Casing	in. to	Ft.
Casing Press. 998	Tubing Press. 1009	
Oil Level	Water Level	
Temperature 138	*F @ 5150	Ft.
Element No. 44537	Range 0-3000	
Last Test Date		
Pressure Last Test Date	PSIG @	Ft.
B.H.P. Change	Psi	

TEFTELLER, INC.

RESERVOIR ENGINEERING DATA AND PRODUCTIVITY ENHANCEMENT SERVICES
MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1992 DATE	STATUS OF WELL	TIME	ELAPSED TIME		WELLHEAD PRESSURE		BHP @ 7581' PSIG
			HRS	MIN	TBG	CSG	
9-18	Arrived on location, well flowing 3/4" choke	11:00			270	878	
	Release tandem instruments @ 7581'	12:30					527
		13:30					521
		14:30					523
	Shut-in	14:30	0	00			
	Set 1.78 FWG blanking plug	15:00	0	30			670
	Open sliding sleeve	15:30	1	00			844
	Open Mesa Verde to test	16:00	1	30			962
	Dakota shut-in						
	Mesa Verde flowing	16:15	1	45			1009
		16:30	2	00			1044
		16:45	2	15			1065
		17:00	2	30			1071
		17:15	2	45			1078
		17:30	3	00			1082
		17:45	3	15			1086
		18:00	3	30			1096
		18:15	3	45			1106
		18:30	4	00			1123
		19:00	4	30			1152
		19:30	5	00			1177
		20:30	6	00			1220
		21:30	7	00			1251
		22:30	8	00			1280
		23:30	9	00			1303
9-19		00:30	10	00			1324
		01:30	11	00			1342

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MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1992 DATE	STATUS OF WELL	TIME	ELAPSED TIME		WELLHEAD PRESSURE		BHP @ 7581' PSIG
			HRS	MIN	TBG	CSG	
9-19		02:30	12	00			1360
		03:30	13	00			1375
		04:30	14	00			1390
		05:30	15	00			1402
		06:30	16	00			1413
		07:30	17	00			1424
		08:30	18	00			1433
		09:30	19	00			1442
		10:30	20	00			1452
		11:30	21	00			1461
		12:30	22	00			1470
		13:30	23	00			1479
		14:30	24	00			1487
		16:30	26	00			1502
		18:30	28	00			1514
		20:30	30	00			1528
		22:30	32	00			1539
9-20		00:30	34	00			1549
		02:30	36	00			1557
		04:30	38	00			1566
		06:30	40	00			1574
		10:30	44	00			1593
		14:30	48	00			1607
		18:30	52	00			1619
		22:30	56	00			1632
9-21		02:30	60	00			1642
		06:30	64	00			1650
		10:30	68	00			1659

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MIDLAND, TEXAS • FARMINGTON, NEW MEXICO • GRAND JUNCTION, COLORADO

CHRONOLOGICAL PRESSURE AND PRODUCTION DATA

1992 DATE	STATUS OF WELL	TIME	ELAPSED TIME		WELLHEAD PRESSURE		BHP @ 7581' PSIG
			HRS	MIN	TBG	CSG	
9-21		14:30	72	00			1667
		18:30	76	00			1675
		22:30	80	00			1684
9-22		02:30	84	00			1691
		06:30	88	00			1698
		10:30	92	00			1703
		14:30	96	00			1708
		16:30	100	00			1712
9-23		02:30	110	00			1723
		14:30	120	00			1733
9-24		00:30	130	00			1742
		10:30	140	00			1752
		20:30	150	00			1759
9-25		06:30	160	00			1766
		14:30	168	00			1773
	<i>Dakota shut-in, shut-in Mesa Verde</i>	16:00	169	30			1776
		16:30	170	00			1777
		21:30	175	00			1797
9-26		02:30	180	00			1812
		12:30	190	00			1834
		22:30	200	00			1855
9-27		08:30	210	00			1869
		18:30	220	00			1882
9-28		04:30	230	00			1893
		14:30	240	00			1905
9-29		00:30	250	00			1915
		10:30	260	00			1925
		20:30	270	00			1936

RINCON UNIT NO. 1 E

After a 7 day SI period:

$$\text{Mesaverde BHP} = 1156 \text{ psi @ } 5150'$$

$$\text{Dakota BHP} = 1812 \text{ psi @ } 7581'$$

$$\text{Gas Gradient} = \frac{(0.01875)(0.65)(2500)}{(0.88)(655)} = 0.05 \text{ psi/ft}$$

Adjusting to a common datum of 5150':

$$\text{Mesaverde BHP} = 1156 \text{ psi}$$

$$\text{Dakota BHP} = 1812 - [(0.05)(7581 - 5150)] = 1690 \text{ psi}$$

Therefore the reservoir pressures fall within the 50% requirement.



WELL ANALYSIS COMPARISON

LEASE: RINCON #1E

SEPTEMBER 30, 1992

DATE:	9/18/92	9/25/92
NO.:	20022	20023
	DAKOTA	MESAVERDE
	MOLE %	MOLE %
NITROGEN	0.206	0.413
CO2	1.186	1.104
METHANE	90.732	87.977
ETHANE	5.709	6.411
PROPANE	1.283	2.466
I-BUTANE	0.209	0.439
N-BUTANE	0.323	0.602
I-PENTANE	0.124	0.210
N-PENTANE	0.093	0.156
HEXANE+	0.135	0.222
BTU'S	1087.8	1129.7
GPM	2.1889	2.9582
SPEC GRAV	0.6231	0.6509

RINCON UNIT NO. 1 E
ALLOCATION FORMULA
(BASED ON C-116)

<u>GAS PRODUCTION:</u>	Mesaverde Rate	457 MCFD
	Dakota Rate	<u>748</u> MCFD
	Total Rate	<u>1205</u> MCFD

Therefore,	Mesaverde	38%
	Dakota	62%

<u>OIL PRODUCTION:</u>	Mesaverde Rate	0 BOPD
	Dakota Rate	<u>0</u> BOPD
	Total Rate	<u>0</u> BOPD

Therefore,	Mesaverde	50%
	Dakota	50%

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



October 29, 1992

Farmington District

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

Dear Sirs:

Union Oil Company of California (UNOCAL) has requested permission from the New Mexico Oil Conservation Division to downhole commingle production from the Blanco Mesaverde and Basin Dakota formations in the following well:

Rincon Unit No. 1 E
1615' FNL, 1830' FEL
Section 30, T27N, R6W
Rio Arriba County, New Mexico

If you have any objections to this proposal, please notify the NMOCD within twenty (20) days. If you have any questions about this application, please contact Dana Delventhal at (505)326-7600.

Sincerely,

Union Oil Company of California
dba UNOCAL

William L. Irwin
District Petroleum Engineer

WLI/DLD/df



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) 827-5900

ADMINISTRATIVE ORDER DHC-902

UNOCAL Oil and Gas Division
3300 North Butler, Suite 200
Farmington, NM 87401

Attention: Glen O. Papp

RECEIVED

JUN 28 1993

**OIL CON. DIV.
DIST. 3**

*Rincon Unit Well No. 1-E
Unit G, Section 30, Township 27 North, Range 6 West, NMPM,
Rio Arriba County, New Mexico.
Blanco Mesaverde and Basin Dakota Pools*

Dear Mr. Papp:

Reference is made to your recent application for an exception to Rule 303-A of the Division Rules and Regulations to permit the subject well to commingle production from both pools in the wellbore.

It appearing that the subject well qualifies for approval for such exception pursuant to the provisions of Rule 303-C, and that reservoir damage or waste will not result from such downhole commingling, and correlative rights will not be violated thereby, you are hereby authorized to commingle the production as described above and any Division Order which authorized the dual completion and required separation of the two zones is hereby placed in abeyance.

In accordance with the provisions of Rule 303-C-4., total commingled oil production from the subject well shall not exceed 50 barrels per day, and total water production shall not exceed 80 barrels per day. The maximum amount of gas which may be produced daily from the well shall be determined by Division Rules and Regulations or by the gas allowable for each respective prorated pool as printed in the Division's San Juan Basin Gas Proration Schedule.

Assignment of allowable to the well and allocation of production from the well shall be on the following basis:

Blanco Mesaverde	Oil	50%	Gas	38%
Basin Dakota	Oil	50%	Gas	62%

In accordance with the provisions of Rule 303-C, the supervisor of the Aztec District Office of the Oil Conservation Division shall determine the proper allocation of production from the subject well following its completion.

FURTHER: The operator shall notify the Aztec District Office of the Division upon implementation of the commingling process.

Pursuant to Rule 303-C-5, the commingling authority granted by the order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.

Approved at Santa Fe, New Mexico on this 18th day of June, 1993.

STATE OF NEW MEXICO
OIL CONSERVATION DIVISION

WILLIAM J. LEMAY
Director

S E A L

WJL/BES/amg

cc: Oil Conservation Division - Aztec
US Bureau of Land Management - Farmington