

MC



BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION



POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-1800

**ADMINISTRATIVE ORDER DHC-915**

UNOCAL Oil & Gas Division  
3300 North Butler Avenue  
Farmington, NM 87401

Attention: Glen O. Papp

**RECEIVED**

SEP 23 1993

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

*Rincon Unit Well No. 125-M  
Unit F, Section 26, 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 100 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:

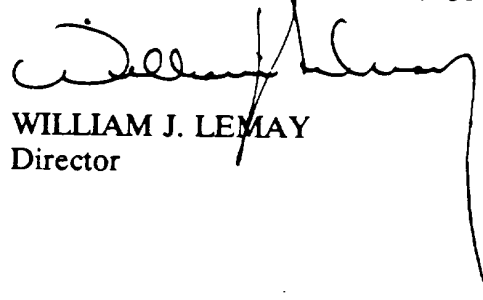
Blanco Mesaverde Pool	Oil	50%	Gas	56%
Basin Dakota Pool	Oil	50%	Gas	44%

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Pursuant to Rule 303-C-5, the commingling authority granted by the order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.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 17th day of September, 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



STATE OF NEW MEXICO  
ENERGY, MINERALS and NATURAL RESOURCES DEPARTMENT  
OIL CONSERVATION DIVISION  
AZTEC DISTRICT OFFICE

1000 RIO BRAZOS ROAD  
AZTEC, NEW MEXICO 87410  
(505) 334-6178

Date: 5-27-93

*Alfred David [Signature]*

Oil Conservation Division  
P.O. Box 2088  
Santa Fe, NM 87504-2088

RE: Proposed MC \_\_\_\_\_  
Proposed NSL \_\_\_\_\_  
Proposed WFX \_\_\_\_\_  
Proposed NSP \_\_\_\_\_

Proposed DHC X \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed PMX \_\_\_\_\_  
Proposed DD \_\_\_\_\_

Gentlemen:

I have examined the application received on 5-6-93  
for the RIMCON OPERATOR RIMCON U. #1251  
OPERATOR LEASE & WELL NO.

F-20-27N-06W and my recommendations are as follows:  
UL-S-T-R

*[Signature]*

Yours truly,

*[Signature]*

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 <sup>76</sup>

August 5, 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**  
AUG - 6 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. 125M  
1800' FNL, 1700' FWL  
Section 26, 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 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.

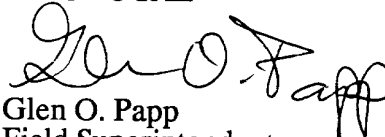
The Blanco Mesaverde formation is uneconomic to drill as a stand alone well. To develop these reserves, a dual or commingled completion is required. We estimate an ultimate recovery of approximately 750 MMCF from the Mesaverde horizon, which would otherwise remain undeveloped. Also, commingling will allow for better lift of liquids production and benefits from compression.

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

A handwritten signature in black ink, appearing to read "Glen O. Papp", with a stylized flourish at the end.

Glen O. Papp  
Field Superintendent

Attachments

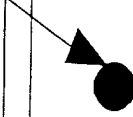
GOP/DLD/df

# OFFSET LEASE OWNERSHIP

R 6 W

22	23	EL PASO SF079365	EL PASO
27	26	EL PASO SF079367B	25
EL PASO SF079210	CAULKINS 3547	E290-28 E290 6	EL PASO E290 28 E290-28
34	35	E290-36 E290	36

RINCON UNIT #125M



T 27 N

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

## OIL CONSERVATION DIVISION

P.O. Box 2088  
Santa Fe, New Mexico 87504-2088

Form C-116  
Revised 1/1/89

### GAS - OIL RATIO TEST

Operator		Pool		County										
Union Oil Company of California		Blanco Mesaverde/Basin Dakota		Rio Arriba										
Address		TYPE OF TEST - (X)		Completion <input checked="" type="checkbox"/> Scheduled <input type="checkbox"/> Special <input type="checkbox"/>										
3300 N. Butler, Suite 200, Farmington, NM 87401														
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/8BBL.	
		U	S	T						R	WATER BBL.S.	GRAV. OIL		OIL BBL.S.
Rincon Unit	125M	F	26	27N	6W									
Blanco Mesaverde						12/10/92	F	14/64"	370			-0-	333	--
Basin Dakota						12/18/92	F	15/64"	270			-0-	278	--

#### 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.

Signature

Glen O. Papp  
Printed name and title

August 5, 1993  
Date

Field Superintendent

(505) 326-7600

Telephone No.

**RINCO UNIT NO. 125-M**  
**1800' FNL, 1700' FWL SEC 26 T27N R6W**  
**RIO ARriba COUNTY, NM**

12 1/4" Hole

KB DATUM = 13' ABOVE G.L.  
 GROUND ELEVATION = 6674'

8-5/8" 24# K-55 @ 368'  
 Cmt'd w/ 250 SX - CIRC  
 To Surface

7-7/8" Hole

DV TOOL @ 3624'  
 Cmt'd Stage #3 w/ 645 sxs- Circ To Surface  
 TOC @ 4330' by Wireline Survey

UPPER MESAVERDE  
 4990-5004', 5014-50', 5062-70'  
 5076-5100' w/ 4 SPF

"XO" Sliding Sleeve  
 @ 5597'

LOWER MESAVERDE  
 5298-5314', 5472-90', 5520-64' w/ 4 SPF

Gulberson Uni VI  
 pkr @ 5609'

5720' Perforations to Cmt Squeeze

DV TOOL @ 6038'  
 Cmt'd Stage #2 w/300 sxs

T.O.C @ 7140' by Wireline Surveys

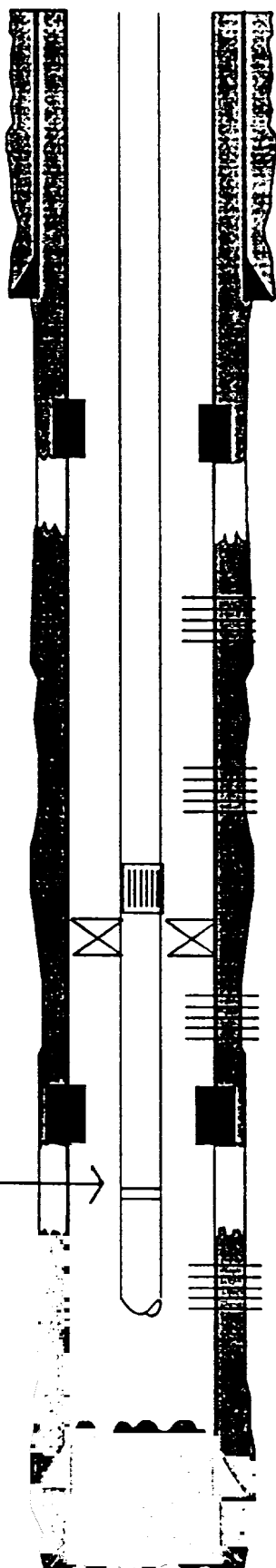
DAKOTA  
 7520-32', 7544-54', 7606-16'  
 7642-68', 7694-7708', 7714-28', 7750-84', w/ 4 SPF

TUBING DETAIL  
 246 Jts 2-3/8" EUE 8rd J-55  
 @ 7788'

5-1/2" 17# N-80, J-55  
 @ 7857'  
 Cmt'd Stage 1 w/ 330 sxs

PBTD = 7810'

TD @ 7877'





# B & R SERVICE, INC.

P. O. Box 1048  
Farmington, New Mexico 87499  
(505) 325-2393

Company Unocal Lease Rincon Well 125-M  
County Rio Arriba State N.Mex. Date 12-10-92  
Shut-In \_\_\_\_\_ Zero Point K.B. Tbg. Pressure 788  
Casing Pressure \_\_\_\_\_ Tbg. Depth \_\_\_\_\_ Casing Perf. \_\_\_\_\_  
Max. Temp. \_\_\_\_\_ Fluid Level 6075

## DEPTH

## PSIG

## GRADIENT

0	790	- - -
1000	808	.018
2000	833	.025
3000	858	.025
4000	883	.025
5000	909	.026
6000	952	.043
7000	1325	.373
7200	1410	.425
7400	1498	.440
7652	1607	.433

B & R SERVICE, INC.  
P.O. BOX 1048  
FARMINGTON, N.M.

FLUID LEVEL SURVEY

COMPANY: UNOCAL CORPORATION COUNTY: RIO ARRIHA  
FIELD: RINCON DATE: \_\_\_\_\_ STATE: N. MEX.

LEASE AND WELL NO.	LOCATION	TIME	ELEV.	DATUM	CASING PRESSURE PSIG	JOINTS TO FLUID	FEET TO FLUID	FLUID ABOVE DATUM	PRESSURE AT DATUM
10/30/92 RINCON 158 M				MID PERF. 5039'	540	110	3432'	1607'	1231 PSIG
11/01/92 RINCON 151 M				MID PERF. 5211'	750	130	4108'	1103'	1228 PSIG
11/04/92 RINCON 171 M				MID PERF. 4883'	340	152	4758'	125'	394 PSIG
12/17/92 RINCON 184 M				MID PERF. 5127'	965	105	3308'	1819'	1753 PSIG
12/19/92 RINCON 136 E				MID PERF. 4845'	600	118	3729'	1116'	1139 PSIG
12/19/92 RINCON 127 M				MID PERF. 5080'	610	153	4835'	245'	716 PSIG
12/22/92 RINCON 125 M				MID PERF. 5277'	480	154	4882'	395'	789 PSIG
12/22/92 RINCON 137 E				MID PERF. 6712'	1120	205	6765'	0'	1120 PSIG
7/15/93 RINCON 126 M				MID PERF. 5224'	780	155	4898'	326'	921 PSIG
12/4/92 RINCON 168 E				MID PERF. 6408'	1020	203	6415'	193'	1104 PSIG

AVERAGE TUBING LENGTH:  
REMARKS:

## RINCON UNIT NO. 125 M

After a 7 day SI period:

$$\text{Mesaverde BHP} = 789 \text{ psi @ } 5277'$$

$$\text{Dakota BHP} = 1607 \text{ psi @ } 7652'$$

$$\text{Gas Gradient} = 0.025 \text{ psi/ft}$$

Adjusting to a common datum of 5277':

$$\text{Mesaverde BHP} = 789 \text{ psi}$$

$$\text{Dakota BHP} = 1607 - [(0.025)(7652 - 5277)] = 1548 \text{ psi}$$

Therefore the reservoir pressures fall within the 50% requirement.



WELL ANALYSIS COMPARISON  
-----

LEASE: RINCON 125M

DECEMBER 21, 1992

DATE: 12/10/92 12/17/92

NO.: 20041 20045  
MESAVERDE DAKOTA

	MOLE %	MOLE %
	-----	-----
NITROGEN	0.436	0.241
CO2	1.044	1.235
METHANE	82.256	87.142
ETHANE	9.097	6.414
PROPANE	4.333	2.354
I-BUTANE	0.768	0.588
N-BUTANE	1.073	0.757
I-PENTANE	0.381	0.442
N-PENTANE	0.265	0.275
HEXANE+	0.347	0.552
BTU'S	1211.2	1159.8
-----	-----	-----
GPM	4.6039	3.2976
-----	-----	-----
SPEC GRAV	0.7023	0.6706
-----	-----	-----

RINCON UNIT NO. 125 M

C-116 ADJUSTMENT

BASIN DAKOTA

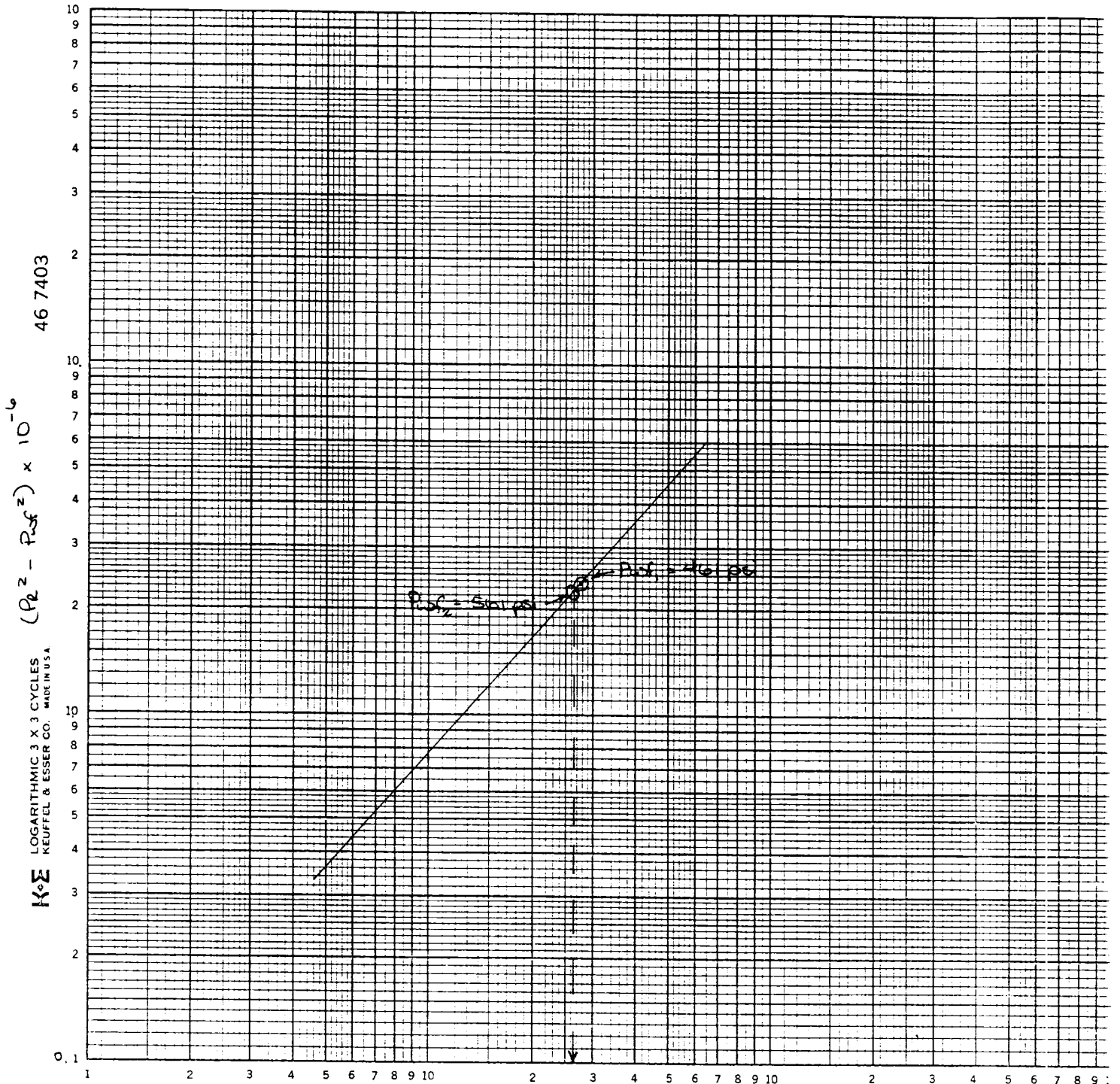
$n = 0.75$

$P_R = 1607 \text{ psi @ } 71652'$

$P_{wf1} = 461 \text{ psi @ } 71652'$

$Q_1 = 278 \text{ MCFD}$

$P_{wf2} = 561 \text{ psi @ } 71652'$



RINCON UNIT NO. 125 M  
ALLOCATION FORMULA

<u>GAS PRODUCTION:</u>	Mesaverde Rate	333 MCFD
	Dakota Rate	<u>265</u> MCFD
	Total Rate	<u>598</u> MCFD

Therefore,	Mesaverde	56%
	Dakota	44%

<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

**UNOCAL 76**

August 5, 1993

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. 125 M  
1800' FNL, 1700' FWL  
Section 26, 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

  
Glen O. Papp  
Field Superintendent

GOP/DLD/df

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 <sup>76</sup>

August 5, 1993

Farmington District

Caulkins Oil Company  
310 North First  
Bloomfield, New Mexico 87413

Dear Sirs:

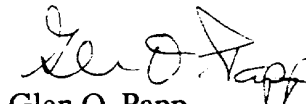
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Sincerely,

Union Oil Company of California  
dba UNOCAL



Glen O. Papp  
Field Superintendent

GOP/DLD/df



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

August 5, 1993

Farmington District

Meridian Oil Production Inc.  
P.O. Box 4289  
Farmington, New Mexico 87499

Dear Sirs:

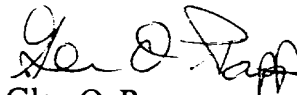
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Sincerely,

Union Oil Company of California  
dba UNOCAL



Glen O. Papp  
Field Superintendent

GOP/DLD/df