

Blm  
Rice  
K  
C



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) 827-5800

**ADMINISTRATIVE ORDER DHC-970**

Union Oil Company of California  
3300 North Butler Avenue, Suite 200  
Farmington, NM 87401

Attention: Glen O. Papp

*Rincon Unit Well No. 108*

*Rio Arriba County, New Mexico.*

*Blanco Mesaverede and Basin-Dakota Gas Pools*

REC-10034  
CONFIDENTIAL  
NMPM  
EST-3

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:

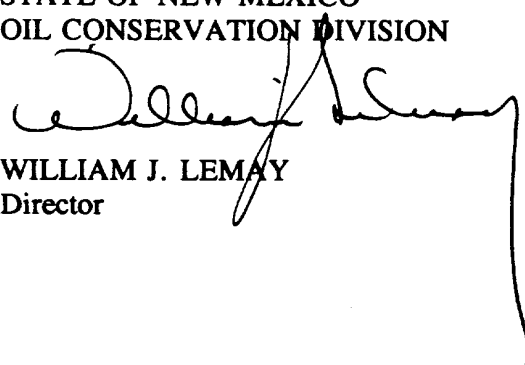
Blanco-Mesaverde Pool	Oil	0%	Gas	36%
Basin-Dakota Pool	Oil	100%	Gas	64%

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Pursuant to Rule 303-C-5, the commingling authority granted by the order may be rescinded by the Division Director if, in his opinion, conservation is not being best served by such commingling.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 2nd day of February, 1994.

STATE OF NEW MEXICO  
OIL CONSERVATION DIVISION

  
WILLIAM J. LEMAY  
Director

S E A L

WJL/DRC/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: 1-25-94

*Attn: Ben Stone*

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

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

Proposed DHC A \_\_\_\_\_  
Proposed SWD \_\_\_\_\_  
Proposed PMX \_\_\_\_\_  
Proposed DD \_\_\_\_\_

Gentlemen:

I have examined the application received on 1-12-94  
for the UNOCAL OPERATOR Rincon Unit #108 LEASE & WELL NO.

G-19-27N-06W and my recommendations are as follows:  
UL-S-T-R

Approve  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

Yours truly,

*Samuel Bush*

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

January 10, 1994

## 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**  
JAN 12 1994  
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. 108  
1750' FNL, 1750' FEL  
Section 19, 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 currently marginally economic. 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



Glen O. Papp  
Field Superintendent

Attachments

GOP/DLD/df

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JAN 12 1984

OIL CON. DIV  
DIST. 3

# OFFSET LEASE OWNERSHIP

R 7 W

R 6 W

13	18	17
EL PASO 79298C	 RINCON UNIT #108 19	20
24		29
	30	
25		

T 27 N

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JAN 12 1994

OIL CON. DIV.  
DIST. 3

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										
3300 NORTH BUTLER, SUITE 200, FARMINGTON, NEW MEXICO 87401		Scheduled		Special										
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 BBL.S.	GRAV. OIL		OIL BBL.S.
RINCON UNIT  BLANCO MESAVERDE  BASIN DAKOTA	108	G	19	27N	6W	11/93	F 64/64"	286		24	-0-	-0-	60	--
						11/93	F 64/64"	299		24	-0-	0.9	108	120,000

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OIL CON. DIV.  
DIST. 3

#### 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.

*Glen O. Papp*  
Signature

GLEN O. PAPP

Printed name and title

FIELD SUPERINTENDENT

JANUARY 10, 1994

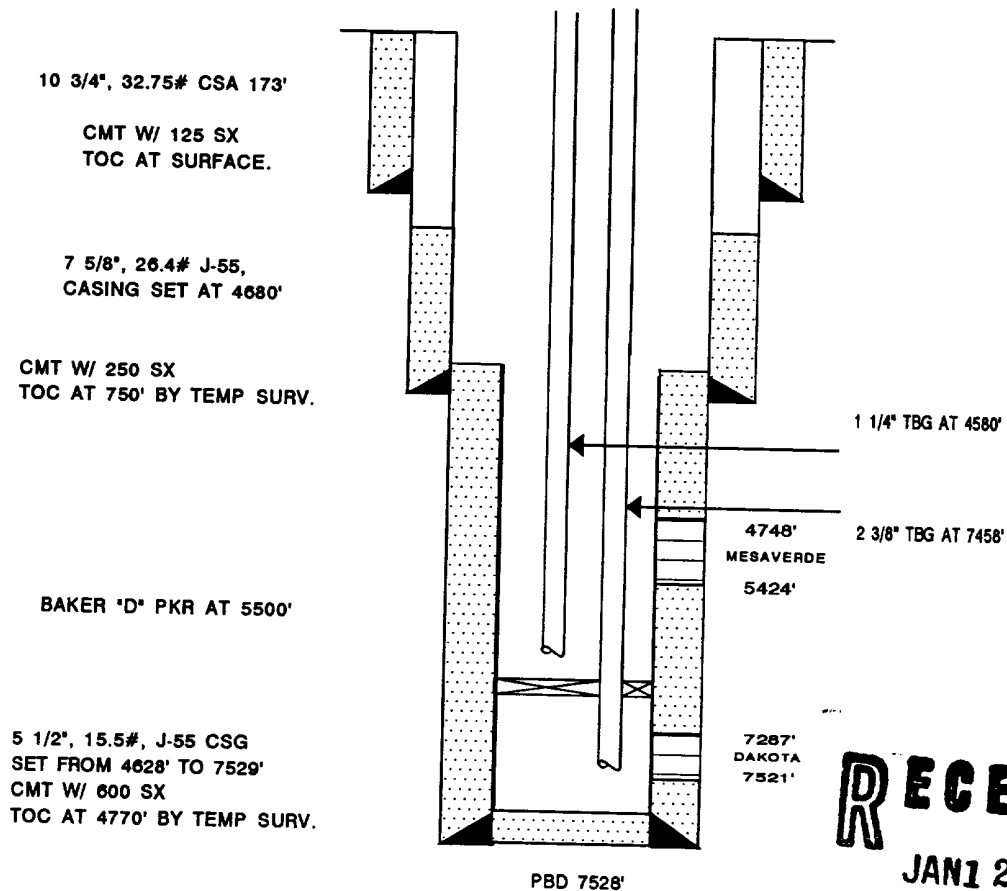
Date

(505)326-7600

Telephone No.

# RINCON UNIT #108

1750' FNL, 1750' FWL  
SEC. 19, T27N, R6W

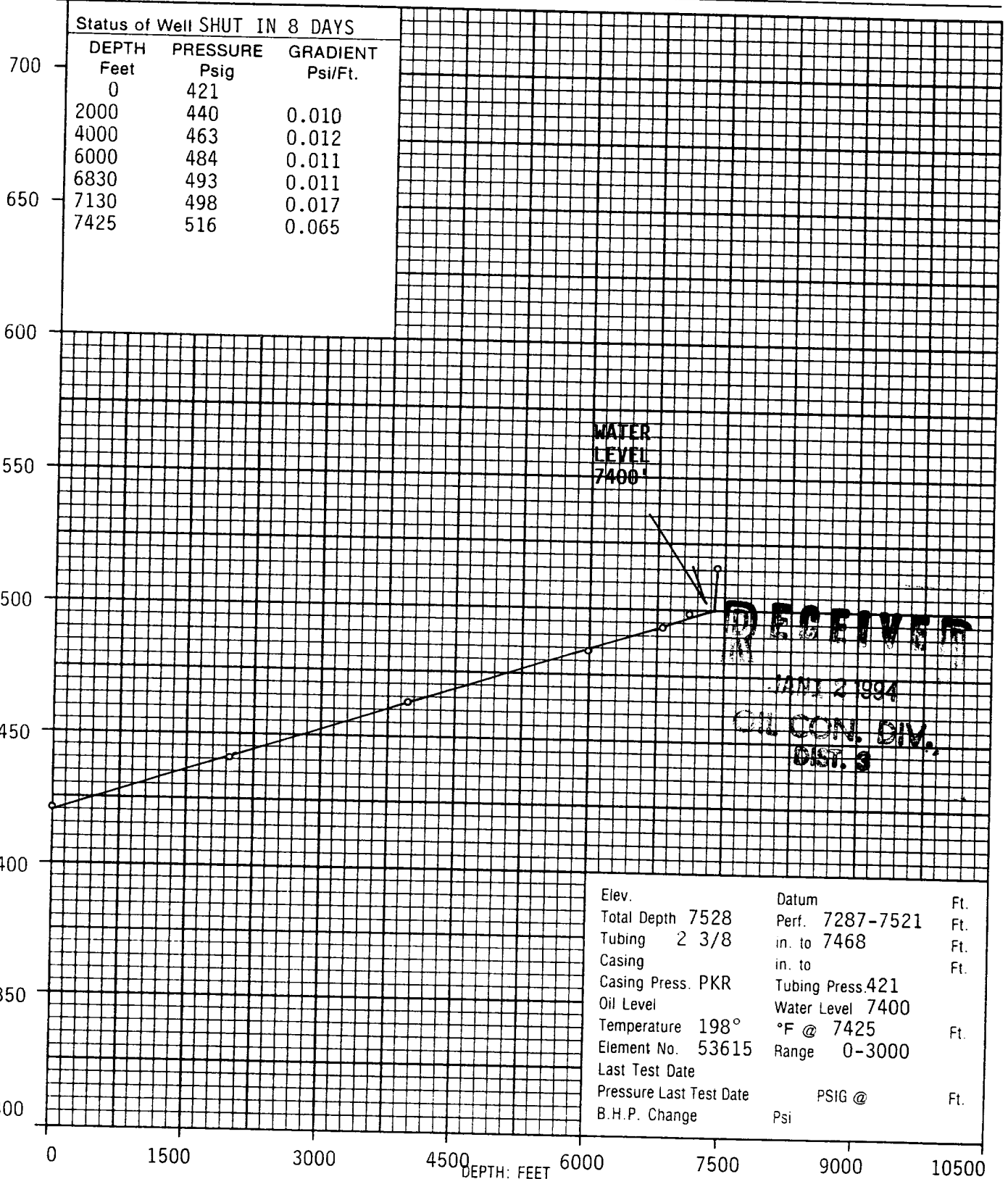


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Company UNOCAL Lease RINCON UNIT Well No. 108  
Field SAN JUAN BASIN County RIO ARRIBA State N.M.  
Formation Dakota - Mesa Verde Test Date 9-22-93





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OIL CON. DIV.  
DIST. 3

Page 2 of 19  
File 2-25399-FL&P

COMPANY UNOCAL LEASE RINCON UNIT WELL NO. 108  
FIELD \_\_\_\_\_ COUNTY RIO ARriba STATE NEW MEXICO  
FORMATION MESA VERDE TEST DATE 9-22-93 TIME \_\_\_\_\_

FLUID LEVEL REPORT

WELL DATA

Elevation \_\_\_\_\_ feet Datum \_\_\_\_\_ feet subsea Total Depth \_\_\_\_\_ feet  
Perforations 4748-5424 feet Test Depth 5086 (MP) feet Packer 5500 feet  
Tubing Size 1 1/4 in. to 4590 feet Tubing Pressure 326 psig  
Casing Size \_\_\_\_\_ in. to \_\_\_\_\_ feet Casing Pressure 329 psig  
Oil Level \_\_\_\_\_ feet Water Level \_\_\_\_\_ feet Average Tubing Joint 31.5 feet  
Well Makes \_\_\_\_\_ % Oil, \_\_\_\_\_ % Water Atmospheric Temperature \_\_\_\_\_ °F  
Status of Well SHUT IN 8 DAYS Operator JR-SB Unit No. P-204

PRESSURE DATA

	Feet	Gradient Psig/Ft.	Psi
Casing Pressure			329
GAS			
Average Tubing Joints <u>31.5</u> ft. Joints to Fluid <u>140</u> Feet to Fluid.	4410	0.008	35
OIL			
Fluid Column Length _____ ft. % Oil _____ Oil Column Length.			
WATER			
Fluid Column Length <u>676</u> Ft. % Water <u>100</u> Water Column Length.	676	0.430	291

PRESSURE AT TEST DEPTH

Calculated subsurface pressure at datum depth of 5086 feet subsea is 655 psig  
Last Test Date \_\_\_\_\_ Pressure Last Test \_\_\_\_\_ psig BHP Change \_\_\_\_\_ psi  
Remarks: \_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

RINCON UNIT NO. 108

After a 7 day SI period:

Mesaverde BHP = 655 psi @ 5086'

Dakota BHP = 516 psi @ 7425'

Gas Gradient = 0.011 psi/ft

Adjusting to a common datum of 5086':

Mesaverde BHP = 655 psi

Dakota BHP =  $516 - [(0.011)(7425 - 5086)] = 490$  psi

Therefore the reservoir pressures fall within the 50% requirement.

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OIL CON. DIV.  
DIST. 3

EL PASO NATURAL GAS COMPANY  
VOLUME ACCOUNTING DEPARTMENT  
MEASUREMENT DIVISION  
POST OFFICE BOX 1492  
EL PASO, TEXAS 79978  
PHONE: (915) 541-5267  
CHROMATOGRAPHIC GAS ANALYSIS REPORT

DATE 3/11/92

MAILEE  
94100

UNION OIL CO. OF CALIFORNIA  
ATTN: MIDLAND PRODUCTION DEPT.  
P.O. BOX 671  
MIDLAND, TEXAS 79702

METER NUMBER 72393 - RINCON UNIT #108 MV  
OPERATOR 9165 - UNION OIL CO OF CALIF

ANALYSIS DATE 99/99/99  
SAMPLE DATE 6/10/91  
EFFECTIVE DATE 3/01/92  
EFFECTIVE FOR 6 MONTHS

TYPE CODE 2 - ACTUAL  
H2S GRAINS 0  
LOCATION F - FARMINGTON

COMPONENTS	NORMALIZED MOL %	GPM
CO2	1.22	.000
H2S	.00	.000
N2	.60	.000
METHANE	83.26	.000
ETHANE	7.96	2.129
PROPANE	4.01	1.105
ISO-BUTANE	.77	.252
NORM-BUTANE	1.03	.325
ISO-PENTANE	.39	.143
NORM-PENTANE	.25	.091
HEXANE PLUS	.51	.223
	100.00	4.268

SPECIFIC GRAVITY .700  
MIXTURE HEATING VALUE  
(BTU @ 14.73 DRY) 1200  
RATIO OF SPECIFIC HEATS .000  
NO TEST SECURED FOR H2S CONTENT

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JAN 2 1994  
OIL CON. DIV.  
DIST. 3

EL PASO NATURAL GAS COMPANY  
VOLUME ACCOUNTING DEPARTMENT  
MEASUREMENT DIVISION  
POST OFFICE BOX 1492  
EL PASO, TEXAS 79978  
PHONE: (915) 541-5267  
CHROMATOGRAPHIC GAS ANALYSIS REPORT

DATE 1/08/93

MAILEE  
94100 UNION OIL CO. OF CALIFORNIA  
ATTN: SHARON L. MILLER  
P.O. BOX 671  
MIDLAND, TEXAS 79702

METER NUMBER 72394 - RINCON UNIT #108 DK  
OPERATOR 9165 - UNION OIL CO OF CALIF

ANALYSIS DATE 12/03/92 TYPE CODE 2 - ACTUAL  
SAMPLE DATE 12/02/92 H2S GRAINS 0  
EFFECTIVE DATE 1/01/93 LOCATION F - FARMINGTON  
EFFECTIVE FOR 6 MONTHS

COMPONENTS	NORMALIZED MOL %	GPM
CO2	1.23	.000
H2S	.00	.000
N2	.21	.000
METHANE	84.03	.000
ETHANE	8.68	2.322
PROPANE	3.07	.846
ISO-BUTANE	.56	.183
NORM-BUTANE	.92	.290
ISO-PENTANE	.42	.154
NORM-PENTANE	.33	.120
HEXANE PLUS	.55	.240
	100.00	4.155

SPECIFIC GRAVITY .691

MIXTURE HEATING VALUE  
(BTU @ 14.73 DRY) 1193

RATIO OF SPECIFIC HEATS .000

NO TEST SECURED FOR H2S CONTENT

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DIST. 3

RINCON UNIT NO. 108  
ALLOCATION FORMULA

<u>GAS PRODUCTION:</u>	Mesaverde Rate	60 MCFD
	Dakota Rate	<u>108</u> MCFD
	Total Rate	<u>168</u> MCFD

Therefore,	Mesaverde	36%
	Dakota	64%

<u>OIL PRODUCTION:</u>	Mesaverde Rate	0.0 BOPD
	Dakota Rate	<u>0.9</u> BOPD
	Total Rate	<u>0.9</u> BOPD

Therefore,	Mesaverde	0%
	Dakota	100%

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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

January 10, 1994

Farmington District

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

Dear Sirs:

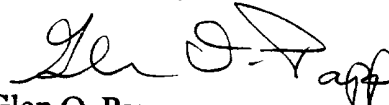
Union Oil Company of California (UNOCAL) has requested permission from the New Mexico Oil Conservation Division to downhole commingle production from the Blanco Mesaverde and Basin Dakota formations in the following well:

Rincon Unit No. 108  
1750' FNL, 1750' FEL  
Section 19, 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

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JAN 12 1994  
**OIL CON. DIV.]**  
**\DIST. 3**

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

January 10, 1994

Farmington District

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

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. 108  
1750' FNL, 1750' FEL  
Section 19, 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

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JAN 12 1994  
OIL CON. DIV  
DIST. 3