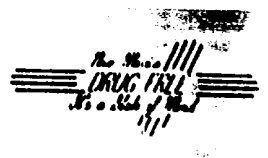




STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DIVISION
OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE



BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

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

Date: 12/22/97

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

RE: Proposed MC _____ Proposed DHC X _____
Proposed NSL _____ Proposed SWD _____
Proposed WFX _____ Proposed PMX _____
Proposed NSP _____ Proposed DD _____

Gentlemen:

I have examined the application received on 12/20/97
for the Unocal Union Unit #149
OPERATOR LEASE & WELL NO.

N-30-27N-6W and my recommendations are as follows:
UL-S-T-R

Approve. The question of the TOC for the 5" casing
and the perf. depths is not clearly answered. However,
MV treating pressures and past BIT Tests don't indicate
a problem.

Yours truly,

B. J. G.

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

December 17, 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
DEC 20 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. 149
1100' FSL, 1750' FWL
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 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
Glen O. Papp
Field Superintendent

Attachments

GOP/DLD/df

OFFSET LEASE OWNERSHIP

R 7 W

R 6 W

EL PASO 79298C 24	19	20
25	30	29
36	31	32

RINCON UNIT #149

T 27 N

**State of New Mexico
Energy, Minerals and Natural Resources Department**

Form C-116
Revised 1/1/89

OIL CONSERVATION DIVISION

P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 882
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 8

**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)		Scheduled	Completion	Special				
3300 N. Butler, Suite 200, Farmington, NM 87401								☐	☒	☐				
LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST			GAS - OIL RATIO CU FT/BBLS
		U	S	T	R						WATER BBLS.	GRAV. OIL	OIL BBLS.	
Rincon Unit	149	N	30	27N	6W	07/93	F 64/64"	115		24	-0-	-0-	19	--
Blanco Mesaverde Basin Dakota						07/93	F 64/64"	114		24	-0-	0.25	147	588,000

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 116 & 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. Padd

Printed name and title

December 17, 1993

Date _____

Her O. Papp 200

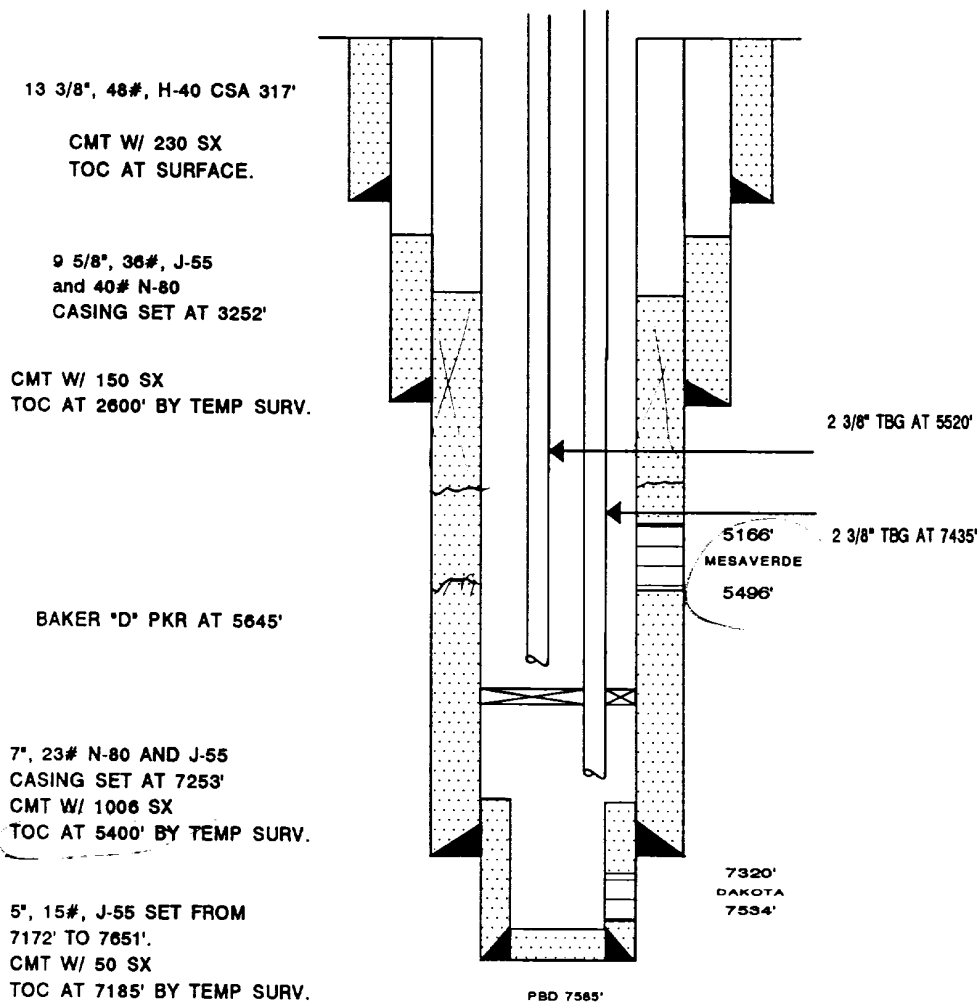
Field Superintendent

(505) 326-7600

Telephone No.

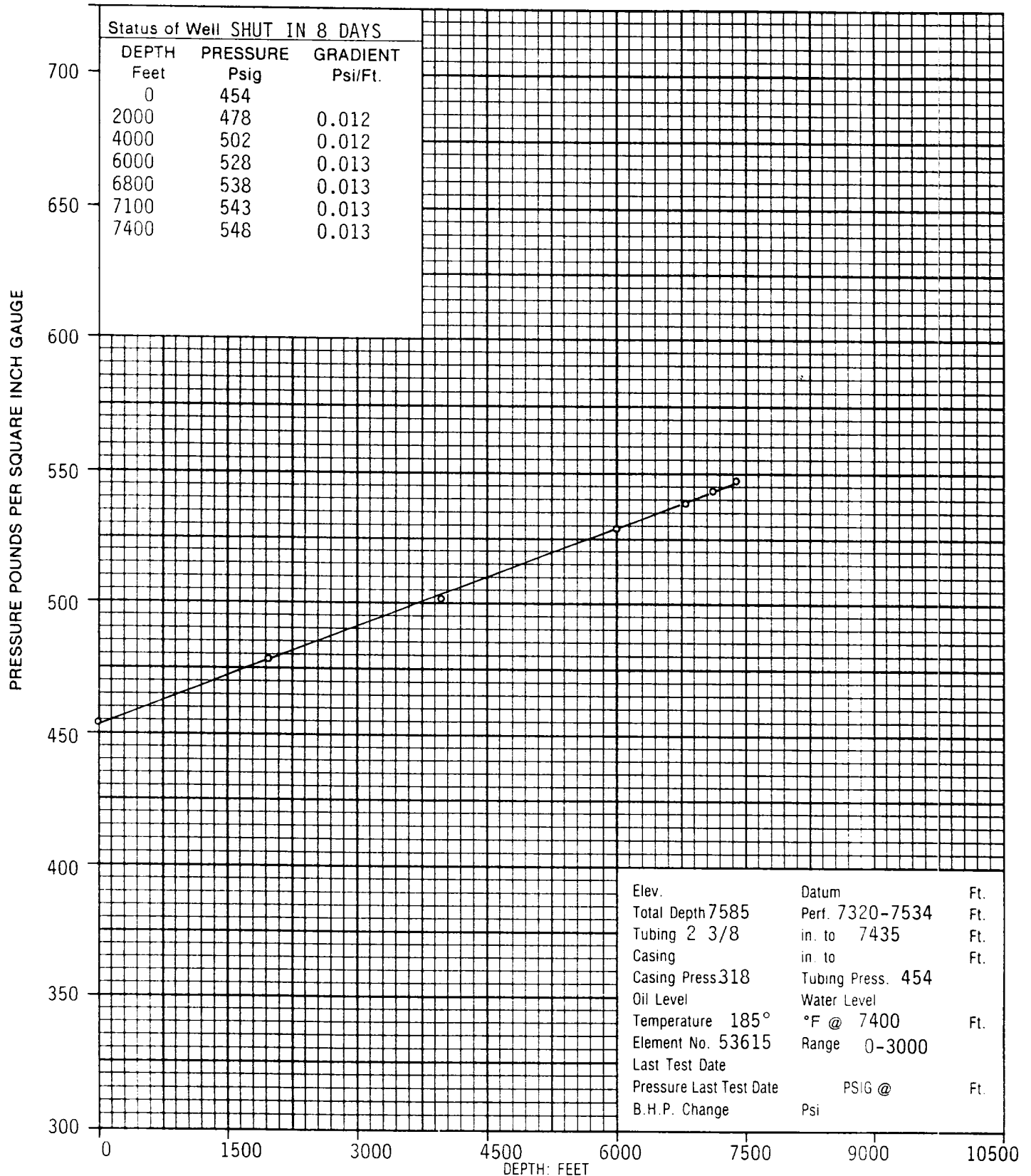
RINCON UNIT #149

1100' FSL, 1750' FWL
SEC. 30, T27N, R6W





Company UNOCAL Lease RINCON UNIT Well No. 149
Field SAN JUAN BASIN County RIO ARRIBA State N.M.
Formation DAKOTA Test Date 9-22-93



Page 19 of 19

File 2-25399-FL&P

COMPANY UNOCAL LEASE RINCON UNIT WELL NO. 149
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 5166-5496 feet Test Depth 5331(MP) feet Packer 5645 feet
Tubing Size 2 3/8 in. to 5520 feet Tubing Pressure 315 psig
Casing Size _____ in. to _____ feet Casing Pressure 318 psig
Oil Level _____ feet Water Level _____ feet Average Tubing Joint 31.5 feet
Well Makes 0 % Oil, 100 % 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			313
GAS			
Average Tubing Joints <u>31.5</u> ft. Joints to Fluid <u>161</u> Feet to Fluid.	5071	0.008	41
OIL			
Fluid Column Length _____ ft. % Oil _____ Oil Column Length.			
WATER			
Fluid Column Length <u>260</u> Ft. % Water <u>100</u> Water Column Length.	260	0.430	112

PRESSURE AT TEST DEPTH

5331 471
Calculated subsurface pressure at datum depth of 5331 feet subsea is 471 psig
Last Test Date _____ Pressure Last Test _____ psig BHP Change _____ psi
Remarks: _____

After a 7 day SI period:

$$\text{Mesaverde BHP} = 471 \text{ psi @ } 5331'$$

$$\text{Dakota BHP} = 548 \text{ psi @ } 7400'$$

$$\text{Gas Gradient} = 0.013 \text{ psi/ft}$$

Adjusting to a common datum of 5331':

$$\text{Mesaverde BHP} = 471 \text{ psi}$$

$$\text{Dakota BHP} = 548 - [(0.013)(7400 - 5331)] = 521 \text{ psi}$$

Therefore the reservoir pressures fall within the 50% requirement.

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 6/08/92

MAILEE
94100

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

METER NUMBER 72535 - RINCON UNIT #149 MV
OPERATOR 9165 - UNION OIL CO OF CALIF

ANALYSIS DATE	0/00/00	TYPE CODE	2 - ACTUAL
SAMPLE DATE	5/05/92	H2S GRAINS	0
EFFECTIVE DATE	6/01/92	LOCATION	F - FARMINGTON
EFFECTIVE FOR	6 MONTHS		

COMPONENTS	NORMALIZED MOL %	GPM
CO2	.84	.000
H2S	.00	.000
N2	.83	.000
METHANE	76.46	.000
ETHANE	12.27	3.282
PROPANE	5.81	1.601
ISO-BUTANE	.89	.291
NORM-BUTANE	1.37	.432
ISO-PENTANE	.46	.168
NORM-PENTANE	.35	.127
HEXANE PLUS	<u>.72</u>	<u>.314</u>
	100.00	6.215

SPECIFIC GRAVITY .752
MIXTURE HEATING VALUE
(BTU @ 14.73 DRY) 1286
RATIO OF SPECIFIC HEATS 1.280
NO TEST SECURED FOR H2S CONTENT

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 6/08/92

MAILEE
94100

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

METER NUMBER 74937 - RINCON UNIT #149 DK
OPERATOR 9165 - UNION OIL CO OF CALIF

ANALYSIS DATE	98/99/99	TYPE CODE	2 - ACTUAL
SAMPLE DATE	5/05/92	H2S GRAINS	0
EFFECTIVE DATE	6/01/92	LOCATION	F - FARMINGTON
EFFECTIVE FOR	6 MONTHS		

COMPONENTS	NORMALIZED MOL %	GPM
CO2	1.26	.000
H2S	.00	.000
N2	.59	.000
METHANE	86.86	.000
ETHANE	6.86	1.835
PROPANE	2.30	.634
ISO-BUTANE	.45	.147
NORM-BUTANE	.64	.202
ISO-PENTANE	.27	.099
NORM-PENTANE	.19	.069
HEXANE PLUS	<u>.58</u>	<u>.253</u>
	100.00	3.239

SPECIFIC GRAVITY .666
MIXTURE HEATING VALUE
(BTU @ 14.73 DRY) 1146
RATIO OF SPECIFIC HEATS .000
NO TEST SECURED FOR H2S CONTENT

RINCON UNIT NO. 149
ALLOCATION FORMULA

<u>GAS PRODUCTION:</u>	Mesaverde Rate	19 MCFD
	Dakota Rate	<u>147</u> MCFD
	Total Rate	<u>166</u> MCFD

Therefore,	Mesaverde	11%
	Dakota	89%

<u>OIL PRODUCTION:</u>	Mesaverde Rate	0.00 BOPD
	Dakota Rate	<u>0.25</u> BOPD
	Total Rate	<u>0.25</u> BOPD

Therefore,	Mesaverde	0%
	Dakota	100%

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

December 17, 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. 149
1100' FSL, 1750' FWL
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

Glen O. Papp

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

December 17, 1993

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. 149
1100' FSL, 1750' FWL
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

Glen O. Papp

Glen O. Papp
Field Superintendent

as

GOP/DLD/df