

DISTRICT I

9625 J. French Dr., Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410

DISTRICT IV

2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429

APPLICATION FOR DOWNHOLE COMMINGLING

Form C-107-A
Revised March 17, 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☐ YES ☐ NO

UNION OIL COMPANY OF CALIFORNIA (UNOCAL)

1004 N. BIG SPRING, MIDLAND, TX 79702

Operator

Address

RINCON UNIT

185

A - 22 - 27N - 7W

070 FARMINGTON, NM

RIO ARRIBA

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 023708

Property Code 011510

API NO. 30-039-07008

Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	BLANCO MESAVERDE - 72319		BASIN DAKOTA - 71599
2. Top and Bottom of Pay Section (Perforations)	TO BE DETERMINED		7342 - 7496
3. Type of production (Oil or Gas)	GAS		GAS
4. Flowing or Artificial Lift (Flowing or Artificial Lift)	FLOWING		FLOWING
5. Bottomhole Pressure Oil Zones - Artificial Lift: Estimated Current Gas & Oil - Flowing: Measured Current All Gas Zones: Estimated Or Measured Original	a. (Current) 316 psia b. (Original) 339 psia	a. b. <i>REC'D 5-25-99</i>	a. 383 psia b. 2109 psia
6. Oil Gravity (EAPI) or Gas BTU Content	1333 BTU		1229 BTU
7. Producing or Shut-In?	Not Completed - Shut In		Producing
Production Marginal? (yes or no)	YES		YES
* If Shut-In, give date and oil/gas/water rates of last production	Date: Rates:	Date: Rates:	Date: Rates:
Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data	Date: SEE ATTACHED Rates:	Date: Rates:	Date: 2-99 Rates: 91 MCFD, .6 BOPD, 0 BWPD
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)			
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: %	Oil: % Gas: %	Oil: % Gas: %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

10. Are all working, overriding, and royalty interests identical in all commingled zones? ☐ Yes ☒ No
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☐ No (R-9893)
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOCD Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). SEE ATTACHED

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of all offset operators.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

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

SIGNATURE *Heather Dahlgren* TITLE: Senior Engineering Tech DATE: 5/21/99

TYPE OR PRINT NAME HEATHER DAHLGREN TELEPHONE NO. (915) 685-7665

NMOCD Reference Cases for Rule 303(D) Exceptions

Unocal, Rincon Unit, Rio Arriba County, New Mexico

Rincon Unit Well	Legal Description				NMOCD Order No.	Issue Date
	UL	S	TWN	RNG.		
167M	C	13	27	N 7 W	DHC-863	11/5/1992
175M	F	20	27	N 6 W	DHC-864	11/24/1992
158M	J	22	27	N 6 W	DHC-909	4/27/1993
159M	F	18	27	N 6 W	DHC-904	6/18/1993
129M	P	29	27	N 6 W	DHC-903	6/18/1993
1E	G	30	27	N 6 W	DHC-902	6/18/1993
127M	D	28	27	N 6 W	DHC-916	8/17/1993
184M	P	15	27	N 7 W	DHC-911	8/25/1993
170M	I	20	27	N 6 W	DHC-920	9/17/1993
126M	P	27	27	N 6 W	DHC-914	9/17/1993
151M	O	14	27	N 7 W	DHC-918	9/17/1993
136E	D	23	27	N 7 W	DHC-912	9/17/1993
125M	F	26	27	N 6 W	DHC-95	9/17/1993
137E	J	24	27	N 7 W	DHC-913	9/17/1993
180M	D	21	27	N 6 W	DHC-940	10/25/1993
174M	F	19	27	N 6 W	DHC-966	1/31/1994
128M	O	28	27	N 6 W	DHC-1042	8/31/1994
133E	D	14	27	N 7 W	DHC-1043	8/31/1994
185E	J	22	27	N 7 W	DHC-1038	8/31/1994
178E	I	23	27	N 7 W	DHC-1040	8/31/1994
138E	P	25	27	N 7 W	DHC-1044	8/31/1994
139E	F	25	27	N 7 W	DHC-1041	8/31/1994
149M	F	30	27	N 7 W	DHC-1037	8/31/1994
131E	C	36	27	N 7 W	DHC-1039	8/31/1994
302	C	11	26	N 7 W	DHC-1050	11/3/1994
303	E	33	27	N 6 W	DHC-1086	2/3/1995
171M	J	21	27	N 6 W	DHC-1101	3/7/1995
229E	M	34	27	N 7 W	DHC-1124	5/16/1995
186M	L	33	27	N 6 W	DHC-1176	12/21/1995
187E	P	35	27	N 7 W	DHC-1176	12/21/1995
134	B	12	26	N 7 W	DHC-1190	3/7/1996
170	M	20	27	N 6 W	DHC-1192	3/7/1996
168E	I	36	27	N 7 W	DHC-1191	3/7/1996
203	M	27	27	N 7 W	DHC-1261	5/23/1996
183	K	31	27	N 6 W	DHC-1376	10/16/1996
168	A	36	27	N 7 W	DHC-1778	2/4/1998
139	K	25	27	N 6 W	DHC-1777	2/4/1998
181	G	22	27	N 6 W	DHC-1779	2/4/1998
166E	F	32	27	N 6 W	DHC-1784	2/24/1998
201E	J	2	26	N 7 W	DHC-1841	3/6/1998
57E	O	1	26	N 7 W	DHC-1865	4/1/1998
57	A	1	26	N 7 W	DHC-1892	4/9/1998
131	K	36	27	N 7 W	DHC-1906	4/14/1998
137	K	24	27	N 7 W	DHC-1907	4/14/1998
137E	J	24	27	N 7 W	DHC-913	4/14/1998
169	K	26	27	N 7 W	DHC-1917	4/27/1998
192	K	1	26	N 7 W	DHC-1918	4/27/1998
192E	D	1	26	N 7 W	DHC-2097	9/15/1998

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

Date OCTOBER 18, 1962

Operator EL PASO NATURAL GAS COMPANY Lease RINCON UNIT SF079360
 Well No. 185 Unit Letter A Section 22 Township 27-N Range 7-W NMPM
 Located 990 Feet From NORTH Line, 990 Feet From EAST Line
 County RIO ARriba G. L. Elevation 6587 Dedicated Acreage 320 Acres
 Name of Producing Formation DAKOTA Pool BASIN DAKOTA

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes XX No _____
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes _____ No _____. If answer is "yes", Type of Consolidation.
3. If the answer to question two is "no", list all the owners and their respective interests below:

OwnerLand Description

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company

(Operator)

ORIGINAL SIGNED H.E. McANALLY

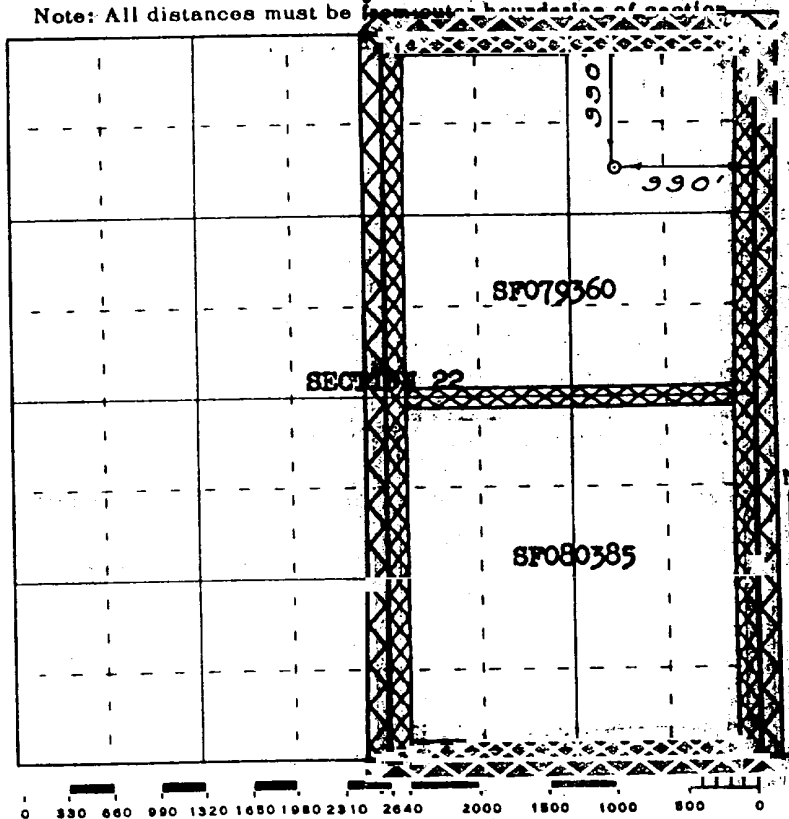
(Representative)

Box 990

(Address)

Farmington, New Mexico

Note: All distances must be measured to the boundaries of sections.



Scale 4 inches equal 1 mile

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Farmington, New Mexico

Date Surveyed JUNE 25, 1962

David C. Kilmer
 Registered Professional Engineer and/or Land Surveyor

RECEIVED
 99 MAY 25 AM 9:49
 070 FARMINGTON, NM

District I
PO Box 1988, Hobbs, NM 88241-1988
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

070 FARMINGTON, NM

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

1 API Number 30-039-07008		2 Pool Code 72319		3 Pool Name BLANCO MESAVERDE		
4 Property Code 011510		4 Property Name RINCON UNIT			5 Well Number 185	
7 OGRID No. 023708		8 Operator Name UNION OIL COMPANY OF CALIFORNIA (UNOCAL)			9 Elevation 6587'	

10 Surface Location

UL or lot no. A	Section 22	Township 27N	Range 7W	Lot Idn	Feet from the 990	North/South line N	Feet from the 990	East/West line E	County Rio Arriba
--------------------	---------------	-----------------	-------------	---------	----------------------	-----------------------	----------------------	---------------------	----------------------

11 Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
12 Dedicated Acres 320.00		13 Joint or Infill Y		14 Consolidation Code U		15 Order No. Unitization			

NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16									

990'

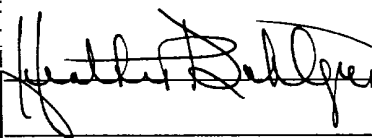
990'

Sec. 22

SF 079360

17 OPERATOR CERTIFICATION

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



Printed Name **HEATHER DAHLGREN** Title
ENGINEERING TECHNICIAN Date
5-19-99

18 SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my

Date of

Survey

Signature and Seal of Professional Surveyor:

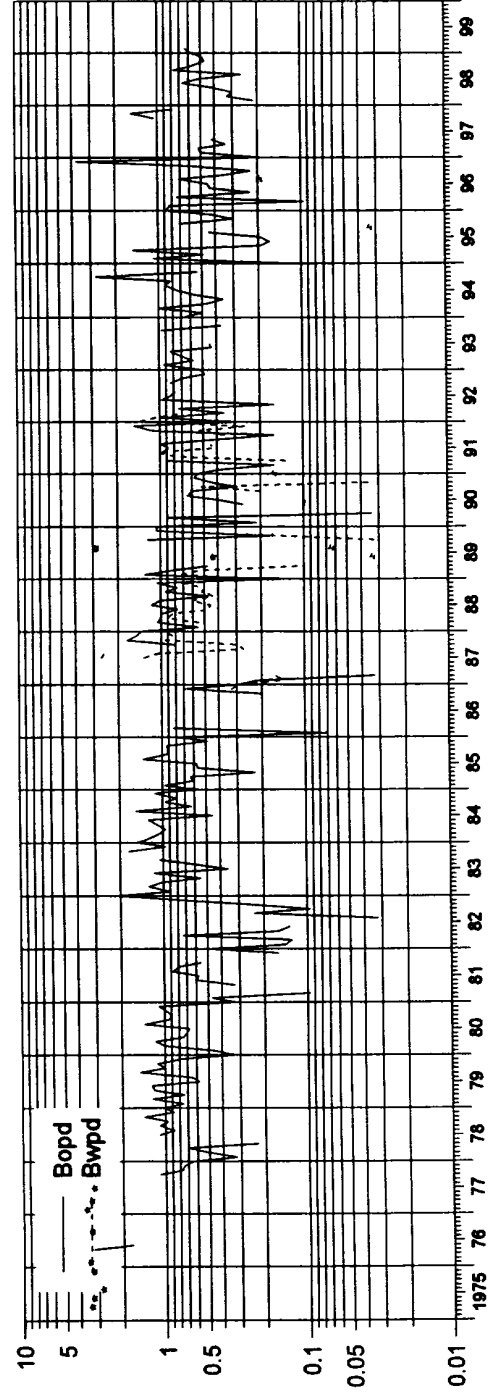
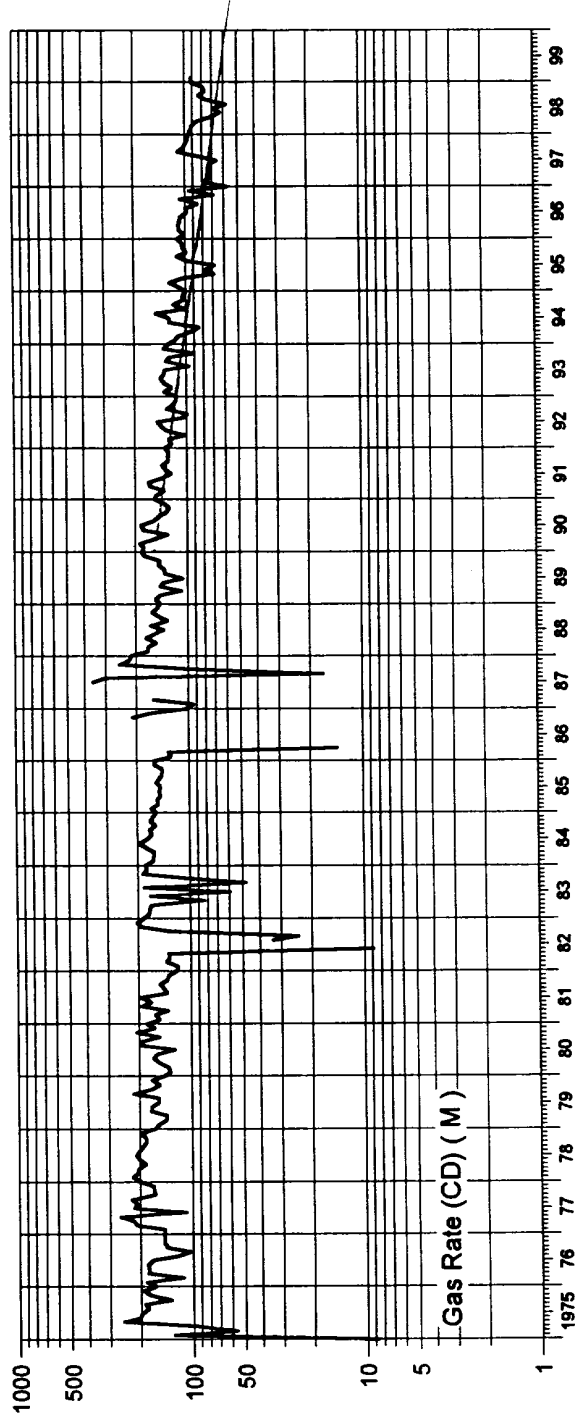
Certificate

Number

UNION OIL COMPANY OF CALIFORNIA

RINCON UNIT 185:DK

RIO ARRIBA CO., NEW MEXICO



RINCON_UNIT_185:DK

DATE	GAS VOL PROD Mcf	OIL VOL PROD bbl	WATER VOL PROD bbl	Gas Rate (CD) Mcf/d	Oil Rate (CD) bbl/d	Water Rate (CD) bbl/d	Cum Gas Prod Mcf	Cum Oil Prod bbl
19970101	1764	6	0	57	0.2	0.0	2026763	15300
19970201	2167	14	0	77	0.5	0.0	2028930	15314
19970301	2238	16	0	72	0.5	0.0	2031168	15330
19970401	2183	10	0	73	0.3	0.0	2033351	15340
19970501	2261	13	0	73	0.4	0.0	2035612	15353
19970601	2173	0	0	72	0.0	0.0	2037785	15353
19970701	2027	0	0	65	0.0	0.0	2039812	15353
19970801	2630	0	0	85	0.0	0.0	2042442	15353
19970901	3276	0	0	109	0.0	0.0	2045718	15353
19971001	3142	33	0	101	1.1	0.0	2048860	15386
19971101	2965	46	0	99	1.5	0.0	2051825	15432
19971201	2986	24	0	96	0.8	0.0	2054811	15456
19980101	2939	0	0	95	0.0	0.0	2057750	15456
19980201	2575	6	0	92	0.2	0.0	2060325	15462
19980301	2806	10	0	91	0.3	0.0	2063131	15472
19980401	2569	9	0	86	0.3	0.0	2065700	15481
19980501	2193	13	0	71	0.4	0.0	2067893	15494
19980601	1877	20	0	63	0.7	0.0	2069770	15514
19980701	2116	16	0	68	0.5	0.0	2071886	15530
19980801	1789	8	0	58	0.3	0.0	2073675	15538
19980901	2277	23	0	76	0.8	0.0	2075952	15561
19981001	2564	18	0	83	0.6	0.0	2078516	15579
19981101	2297	14	0	77	0.5	0.0	2080813	15593
19981201	2428	15	0	78	0.5	0.0	2083241	15608
19990101	2839	18	0	92	0.6	0.0	2086080	15626
19990201	2559	18	0	91	0.6	0.0	2088639	15644

WELL NAME :**RINCON UNIT 185E MESAVERDE**

	ORIGINAL
Test Date:	Aug-95
GAS GRAVITY:	0.685
CONDENSATE (YES=1):	1
RESERVOIR TEMP:	150 F
SURFACE TEMP:	60 F
DEPTH OF ZONE:	5136 ft
% N2	0.38
% CO2	1.16
% H2S	0.00
Pc =	699.95
Tc =	379.07

SURFACE PRESS	300	psia
BHP	339	psia
Z	0.9613	
BHP/Z	353	psia

	CURRENT
Test Date:	Jun-98
GAS GRAVITY:	0.685
CONDENSATE (YES=1):	1
RESERVOIR TEMP:	150 F
SURFACE TEMP:	60 F
DEPTH OF ZONE:	5136 ft
% N2	0.38
% CO2	1.16
% H2S	0.00
Pc =	699.95
Tc =	379.07

SURFACE PRESS	280	psia
BHP	316	psia
Z	0.9638	
BHP/Z	328	psia

WELL NAME :**RINCON UNIT 185 DAKOTA**

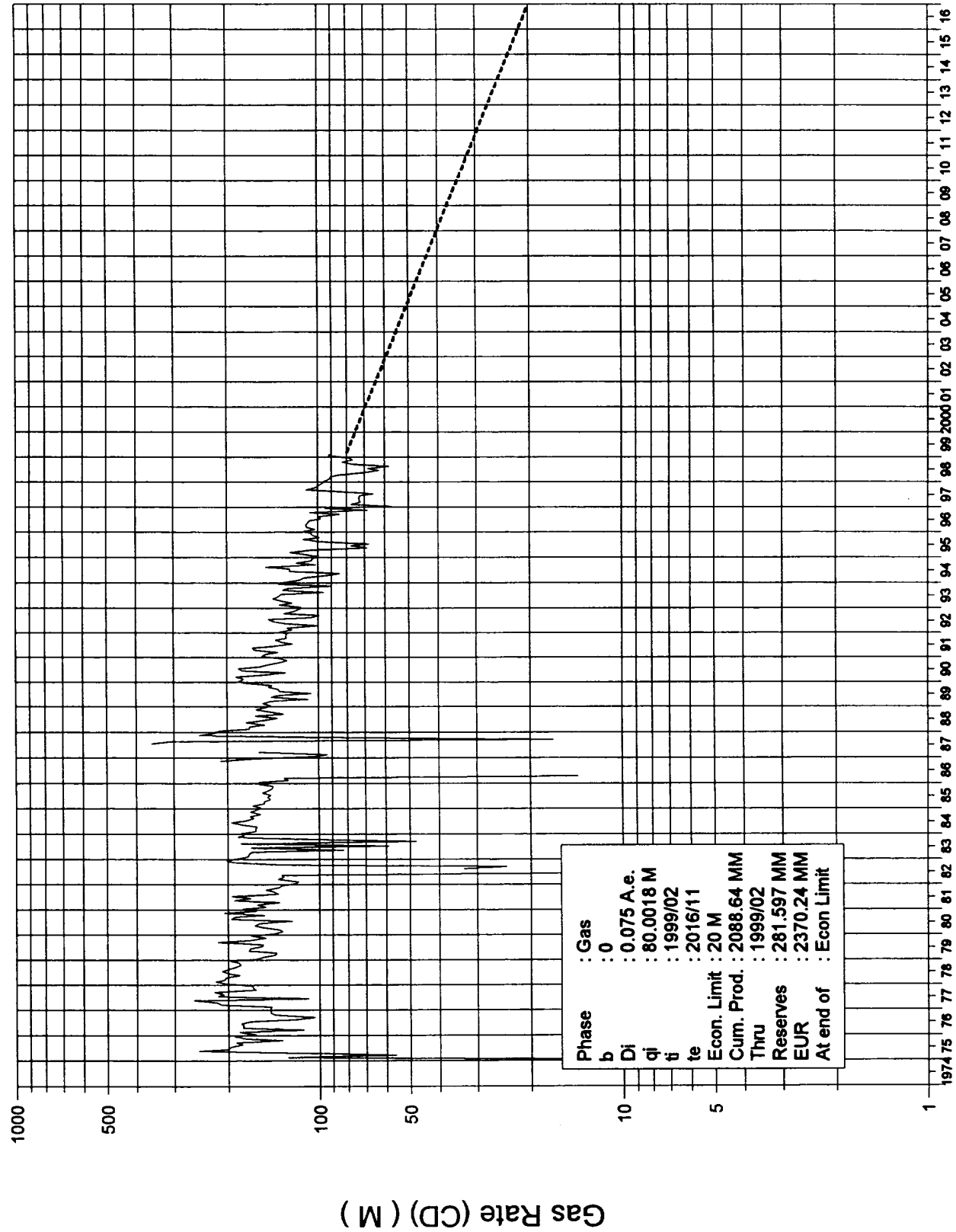
	ORIGINAL
Test Date:	Mar-63
GAS GRAVITY:	0.71
CONDENSATE (YES=1):	1
RESERVOIR TEMP:	190 F
SURFACE TEMP:	60 F
DEPTH OF ZONE:	7420 ft
% N2	0.20
% CO2	1.20
% H2S	0.00
Pc =	668.66
Tc =	385.46

SURFACE PRESS	1,694	psia
BHP by Buildup Measurement	2,109	psig
Z	0.8625	
BHP/Z	2,445	psia

	CURRENT
Test Date:	Jun-98
GAS GRAVITY:	0.714
CONDENSATE (YES=1):	1
RESERVOIR TEMP:	190 F
SURFACE TEMP:	60 F
DEPTH OF ZONE:	7420 ft
% N2	0.20
% CO2	1.20
% H2S	0.00
Pc =	668.66
Tc =	385.46

SURFACE PRESS	320	psia
BHP	383	psia
Z	0.9627	
BHP/Z	398	psia

RINCON UNIT 185:DK



Phase	: Gas
b	: 0
Di	: 0.075 A.e.
qi	: 80.0018 M
ti	: 1999/02
te	: 2016/11
Econ. Limit	: 20 M
Cum. Prod.	: 2088.64 MM
Thru	: 1999/02
Reserves	: 281.597 MM
EUR	: 2370.24 MM
At end of	: Econ Limit

RU 185DK Forecast

Well
Existing Completion Prior to DHC
Annual Decline
Monthly Decline Factor (Annual / 12)
Average Monthly volume (Mcf) prior to DHC
Average Yield (bbbls/mcf) Oil
Average Yield (bbbls/mcf) Water
Est. Volume Prior to DHC (Mcf) - Sept. 1999

RU 185
DK
7.50%
0.6250
2369
0.005
0.000
2303

1998 Annual Average
1998 Annual Average
1998 Annual Average

* Forecasted volumes to be adjusted for actual days on production & actual volume prior to commingling

Month	DK Forecast (Mcf)	DK Forecast (Mcf)	DK Forecast (Bbls-Oil)	DK Forecast (Bbls-Water)
1	87	2648	13.2	0.0
2	83	2517	12.6	0.0
3	76	2303	11.5	0.0
4	75	2289	11.4	0.0
5	75	2274	11.4	0.0
6	74	2260	11.3	0.0
7	74	2246	11.2	0.0
8	73	2232	11.2	0.0
9	73	2218	11.1	0.0
10	72	2204	11.0	0.0
11	72	2190	11.0	0.0
12	72	2177	10.9	0.0
13	71	2163	10.8	0.0
14	71	2150	10.7	0.0
15	70	2136	10.7	0.0
16	70	2123	10.6	0.0
17	69	2109	10.5	0.0
18	69	2096	10.5	0.0
19	68	2083	10.4	0.0
20	68	2070	10.4	0.0
21	68	2057	10.3	0.0
22	67	2044	10.2	0.0
23	67	2032	10.2	0.0
24	66	2019	10.1	0.0

+ DK flush volume @ 15%
+ DK flush volume @ 10%

RINCON UNIT 185:DK - Gas Forecast @ 7.5% A.E.

DATE	Average Rate Mscf/d	Monthly Volume MMscf	Cumulative Volume MMscf	Remaining Reserves MMscf
1999/ 3	80	2.47	2091.1	279.1
1999/ 4	79	2.38	2093.5	276.7
1999/ 5	79	2.44	2095.9	274.3
1999/ 6	78	2.35	2098.3	272.0
1999/ 7	78	2.41	2100.7	269.6
1999/ 8	77	2.39	2103.1	267.2
1999/ 9	77	2.30	2105.4	264.9
1999/10	76	2.36	2107.7	262.5
1999/11	76	2.27	2110.0	260.2
1999/12	75	2.33	2112.3	257.9
2000/ 1	75	2.32	2114.7	255.6
2000/ 2	74	2.16	2116.8	253.4
2000/ 3	74	2.28	2119.1	251.1
2000/ 4	73	2.20	2121.3	248.9
2000/ 5	73	2.25	2123.6	246.7
2000/ 6	72	2.17	2125.7	244.5
2000/ 7	72	2.23	2128.0	242.3
2000/ 8	71	2.21	2130.2	240.1
2000/ 9	71	2.13	2132.3	237.9
2000/10	70	2.18	2134.5	235.8
2000/11	70	2.10	2136.6	233.7
2000/12	70	2.15	2138.7	231.5
2001/ 1	69	2.14	2140.9	229.4
2001/ 2	69	1.93	2142.8	227.4
2001/ 3	68	2.11	2144.9	225.3
2001/ 4	68	2.04	2147.0	223.3
2001/ 5	67	2.09	2149.0	221.2
2001/ 6	67	2.01	2151.0	219.2
2001/ 7	66	2.06	2153.1	217.1
2001/ 8	66	2.05	2155.2	215.1
2001/ 9	66	1.97	2157.1	213.1
2001/10	65	2.02	2159.1	211.1
2001/11	65	1.95	2161.1	209.1
2001/12	64	1.99	2163.1	207.2
2002/ 1	64	1.98	2165.1	205.2
2002/ 2	64	1.78	2166.8	203.4
2002/ 3	63	1.95	2168.8	201.4
2002/ 4	63	1.88	2170.7	199.6
2002/ 5	62	1.93	2172.6	197.6
2002/ 6	62	1.86	2174.5	195.8
2002/ 7	61	1.90	2176.4	193.9
2002/ 8	61	1.89	2178.3	192.0
2002/ 9	61	1.82	2180.1	190.1
2002/10	60	1.87	2182.0	188.3
2002/11	60	1.80	2183.8	186.5
2002/12	59	1.84	2185.6	184.6
2003/ 1	59	1.83	2187.4	182.8
2003/ 2	59	1.65	2189.1	181.2
2003/ 3	58	1.80	2190.9	179.3
2003/ 4	58	1.74	2192.6	177.6
2003/ 5	58	1.78	2194.4	175.8
2003/ 6	57	1.72	2196.1	174.1
2003/ 7	57	1.76	2197.9	172.3
2003/ 8	57	1.75	2199.6	170.6
2003/ 9	56	1.69	2201.3	168.9
2003/10	56	1.73	2203.1	167.2
2003/11	55	1.66	2204.7	165.5
2003/12	55	1.71	2206.4	163.8
2004/ 1	55	1.70	2208.1	162.1
2004/ 2	54	1.58	2209.7	160.5



New Name. Same Spirit.
A Business Unit of Unocal

2000-10-10 10:00 AM

May 20, 1999

Conoco
10 Desta Dr. W, Suite 100W
Midland, TX 79705

Gentlemen:

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 Mesaverde and Basin Dakota formations in the following Rincon Unit wells, Rio Arriba County, New Mexico.

Well	Lease	Legal Location
178	Federal	1450' FSL, 1850' FWL, SW Sec 23, T27N, R7W
185	Federal	990' FNL, 990' FEL, NE Sec 22, T27N, R7W

If Conoco, as an offset operator, has an objection to these proposals, please notify NMOCD within twenty days. If you have any questions regarding these applications, please contact Heather Dahlgren at 915/685-7665.

Sincerely,

Spirit Energy 76
A Business Unit of UNOCAL

A handwritten signature in black ink, appearing to read "Heather Dahlgren".

Heather Dahlgren
Senior Engineering Technician

UNITED STATES
DEPARTMENT OF THE INTERIOR
BUREAU OF LAND MANAGEMENT

FORM APPROVED
Budget Bureau No. 1004-0135
Expires: March 31, 1993

SUNDRY NOTICES AND REPORTS ON WELLS

Do not use this form for proposals to drill or to deepen or reentry to a different reservoir.
Use "APPLICATION FOR PERMIT-" for such proposals

SUBMIT IN TRIPLICATE

1. Type of Well

☐ Oil Well ☒ Gas Well ☐ Other

2. Name of Operator

Union Oil Company of California

3. Address and Telephone No.

P. O. Box 671—Midland, TX 79702 (915) 685-7607

4. Location of Well (Footage, Sec., T., R., M., or Survey Description)

Unit Ltr. "A"—990' FNL & 990' FEL—Sec. 22, T27N, R7W

5. Lease Designation and Serial No.

SF 079360

6. If Indian, Allottee or Tribe Name

7. If Unit or CA, Agreement Designation

Rincon Unit

8. Well Name and No.

Rincon Unit #185

9. Well No.

30-039-07008

10. Field and Pool, or Exploratory Area

Basin Dakota/Mesa Verde

11. County or Parish, State

Rio Arriba County, NM

12. CHECK APPROPRIATE BOX(s) TO INDICATE NATURE OF NOTICE, REPORT, OR OTHER DATA

TYPE OF SUBMISSION	TYPE OF ACTION	
☒ Notice of Intent	☐ Abandonment	☐ Change of Plans
☐ Subsequent Report	☒ Recompletion	☐ New Construction
☐ Final Abandonment Notice	☐ Plugging Back	☐ Non-Routine Fracturing
	☐ Casing Repair	☐ Water Shut-Off
	☐ Altering Casing	☐ Conversion to Injection
	☐ Other _____	☐ Dispose Water

(Note: Report results of multiple completion on Well Completion or Recompletion Report and Log form.)

13. Describe Proposed or Completed Operations (Clearly state all pertinent details, and give pertinent dates, including estimated date of starting any proposed work. If well is directionally drilled, give subsurface locations and measured and true vertical depths for all markers and zones pertinent to this work.)*

Unocal plans to perforate the Mesa Verde at 5050'-5550' (est. depth) and downhole commingle with the existing Basin Dakota—perfs at 7342'-7496'. The work will begin soon after our DHC Permit is approved.

14. I hereby certify that the foregoing is true and correct

Signed Charlotte Beeson

Title Regulatory Clerk

Date 06/15/99

(This space for Federal or State office use)

Approved by /s/ Duane W. Spencer
Conditions of approval, if any:

Title Team Lead, Petroleum Management

Date JUN 25 1999

Title 18 U.S.C. Section 1001, makes it a crime for any person knowingly and willfully to make to any department or agency of the United States any false, fictitious or fraudulent statements or representations as to any matter within its jurisdiction.

*See Instruction on Reverse Side

NMOCB

DISTRICT I

9625 J. French Dr., Hobbs, NM 88240

DISTRICT II

811 South First St., Artesia, NM 88210

DISTRICT III

1000 Rio Brazos Rd, Artes, NM 87410

DISTRICT IV

2040 S. Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429
APPLICATION FOR DOWNHOLE COMMINGLINGForm C-107-A
Revised March 17, 1999

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

UNION OIL COMPANY OF CALIFORNIA (UNOCAL)

1004 N. BIG SPRING, MIDLAND, TX 79702

Operator

Address

RINCON UNIT

185

A - 22 - 27N - 7W

070 FARMINGTON, NM

RIO ARRIBA

Lease

Well No.

Unit Ltr. - Sec - Twp - Rge

County

Spacing Unit Lease Types: (check 1 or more)

OGRID NO. 023708

Property Code 011510

API NO. 30-039-07008

Federal ☒ State ☐ (and/or) Fee ☐

The following facts are submitted in support of downhole commingling:	Upper Zone	Intermediate Zone	Lower Zone
1. Pool Name and Pool Code	BLANCO MESAVERDE - 72319		BASIN DAKOTA - 71599
2. Top and Bottom of Pay Section (Perforations)	TO BE DETERMINED		7342 - 7496
3. Type of production (Oil or Gas)	GAS		GAS
4. Method of Production (Flowing or Artificial Lift)	FLOWING		FLOWING
5. Bottomhole Pressure Oil Zones - Artificial Lift: Gas & Oil - Flowing: All Gas Zones: Estimated Current Measured Current Estimated Or Measured Original	a. (Current) 316 psia b. (Original) 339 psia	a. b.	a. 383 psia b. 2109 psia
6. Oil Gravity (EAPI) or Gas BTU Content	1333 BTU		1229 BTU
7. Producing or Shut-In?	Not Completed - Shut in		Producing
Production Marginal? (yes or no)	YES		YES
* If Shut-In, give date and oil/gas/ water rates of last production Note: For new zones with no production history, applicant shall be required to attach production estimates and supporting data * If Producing, give date and oil/gas/ water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: Rates:
	Date: SEE ATTACHED Rates:	Date: Rates:	Date: 2-99 Rates: 91 MCFD, .6 BOPD, 0 BWPD
8. Fixed Percentage Allocation Formula - % for each zone (total of %'s to equal 100%)	Oil: % Gas: %	Oil: % Gas: %	Oil: % Gas: %

9. If allocation formula is based upon something other than current or past production, or is based upon some other method, submit attachments with supporting data and/or explaining method and providing rate projections or other required data.

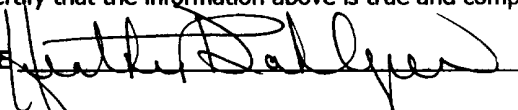
10. Are all working, overriding, and royalty interests identical in all commingled zones?
If not, have all working, overriding, and royalty interests been notified by certified mail? ☒ Yes ☒ No (R-9893)
Have all offset operators been given written notice of the proposed downhole commingling? ☒ Yes ☐ No11. Will cross-flow occur? ☐ Yes ☒ No If yes, are fluids compatible, will the formations not be damaged, will any cross-flowed production be recovered, and will the allocation formula be reliable. ☐ Yes ☐ No (If No, attach explanation)12. Are all produced fluids from all commingled zones compatible with each other? ☒ Yes ☐ No13. Will the value of production be decreased by commingling? ☐ Yes ☒ No (If Yes, attach explanation)14. If this well is on, or communitized with, state or federal lands, either the Commissioner of Public Lands or the United States Bureau of Land Management has been notified in writing of this application. ☒ Yes ☐ No

15. NMOC Reference Cases for Rule 303(D) Exceptions: ORDER NO(S). SEE ATTACHED

16. ATTACHMENTS:

- * C-102 for each zone to be commingled showing its spacing unit and acreage dedication.
- * Production curve for each zone for at least one year. (If not available, attach explanation.)
- * For zones with no production history, estimated production rates and supporting data.
- * Data to support allocation method or formula.
- * Notification list of all offset operators.
- * Notification list of working, overriding, and royalty interests for uncommon interest cases.
- * Any additional statements, data, or documents required to support commingling.

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

SIGNATURE  TITLE: Senior Engineering Tech DATE: 5/21/99

TYPE OR PRINT NAME HEATHER DAHLGREN TELEPHONE NO. (915) 685-7665

NMOCD Reference Cases for Rule 303(D) Exceptions

Unocal, Rincon Unit, Rio Arriba County, New Mexico

Rincon Unit Well	Legal Description UL S TWN RNG.	NMOCD Order No.	Issue Date
167M	C 13 27 N 7 W	DHC-863	11/5/1992
175M	F 20 27 N 6 W	DHC-864	11/24/1992
158M	J 22 27 N 6 W	DHC-909	4/27/1993
159M	F 18 27 N 6 W	DHC-904	6/18/1993
129M	P 29 27 N 6 W	DHC-903	6/18/1993
1E	G 30 27 N 6 W	DHC-902	6/18/1993
127M	D 28 27 N 6 W	DHC-916	8/17/1993
184M	P 15 27 N 7 W	DHC-911	8/25/1993
170M	I 20 27 N 6 W	DHC-920	9/17/1993
126M	P 27 27 N 6 W	DHC-914	9/17/1993
151M	O 14 27 N 7 W	DHC-918	9/17/1993
136E	D 23 27 N 7 W	DHC-912	9/17/1993
125M	F 26 27 N 6 W	DHC-95	9/17/1993
137E	J 24 27 N 7 W	DHC-913	9/17/1993
180M	D 21 27 N 6 W	DHC-940	10/25/1993
174M	F 19 27 N 6 W	DHC-966	1/31/1994
128M	O 28 27 N 6 W	DHC-1042	8/31/1994
133E	D 14 27 N 7 W	DHC-1043	8/31/1994
185E	J 22 27 N 7 W	DHC-1038	8/31/1994
178E	I 23 27 N 7 W	DHC-1040	8/31/1994
138E	P 25 27 N 7 W	DHC-1044	8/31/1994
139E	F 25 27 N 7 W	DHC-1041	8/31/1994
149M	F 30 27 N 7 W	DHC-1037	8/31/1994
131E	C 36 27 N 7 W	DHC-1039	8/31/1994
302	C 11 26 N 7 W	DHC-1050	11/3/1994
303	E 33 27 N 6 W	DHC-1086	2/3/1995
171M	J 21 27 N 6 W	DHC-1101	3/7/1995
229E	M 34 27 N 7 W	DHC-1124	5/16/1995
186M	L 33 27 N 6 W	DHC-1176	12/21/1995
187E	P 35 27 N 7 W	DHC-1176	12/21/1995
134	B 12 26 N 7 W	DHC-1190	3/7/1996
170	M 20 27 N 6 W	DHC-1192	3/7/1996
168E	I 36 27 N 7 W	DHC-1191	3/7/1996
203	M 27 27 N 7 W	DHC-1261	5/23/1996
183	K 31 27 N 6 W	DHC-1376	10/16/1996
168	A 36 27 N 7 W	DHC-1778	2/4/1998
139	K 25 27 N 6 W	DHC-1777	2/4/1998
181	G 22 27 N 6 W	DHC-1779	2/4/1998
166E	F 32 27 N 6 W	DHC-1784	2/24/1998
201E	J 2 26 N 7 W	DHC-1841	3/6/1998
57E	O 1 26 N 7 W	DHC-1865	4/1/1998
57	A 1 26 N 7 W	DHC-1892	4/9/1998
131	K 36 27 N 7 W	DHC-1906	4/14/1998
137	K 24 27 N 7 W	DHC-1907	4/14/1998
137E	J 24 27 N 7 W	DHC-913	4/14/1998
169	K 26 27 N 7 W	DHC-1917	4/27/1998
192	K 1 26 N 7 W	DHC-1918	4/27/1998
192E	D 1 26 N 7 W	DHC-2097	9/15/1998

NEW MEXICO OIL CONSERVATION COMMISSION

Well Location and Acreage Dedication Plat

Section A.

Date OCTOBER 18, 1962

Operator EL PASO NATURAL GAS COMPANY Lease RINCON UNIT SF079360
 Well No. 185 Unit Letter A Section 22 Township 27-N Range 7-W NMPM
 Located 990 Feet From NORTH Line, 990 Feet From EAST Line
 County RIO ARriba G. L. Elevation 6587 Dedicated Acreage 320 Acres
 Name of Producing Formation DAKOTA Pool BASIN DAKOTA

1. Is the Operator the only owner in the dedicated acreage outlined on the plat below?
 Yes XX No _____
2. If the answer to question one is "no", have the interests of all the owners been consolidated by communitization agreement or otherwise? Yes _____ No _____. If answer is "yes", Type of Consolidation.
3. If the answer to question two is "no", list all the owners and their respective interests below:

Owner

Land Description

Section B.

This is to certify that the information in Section A above is true and complete to the best of my knowledge and belief.

El Paso Natural Gas Company

(Operator)

ORIGINAL SIGNED H.E. McANALLY

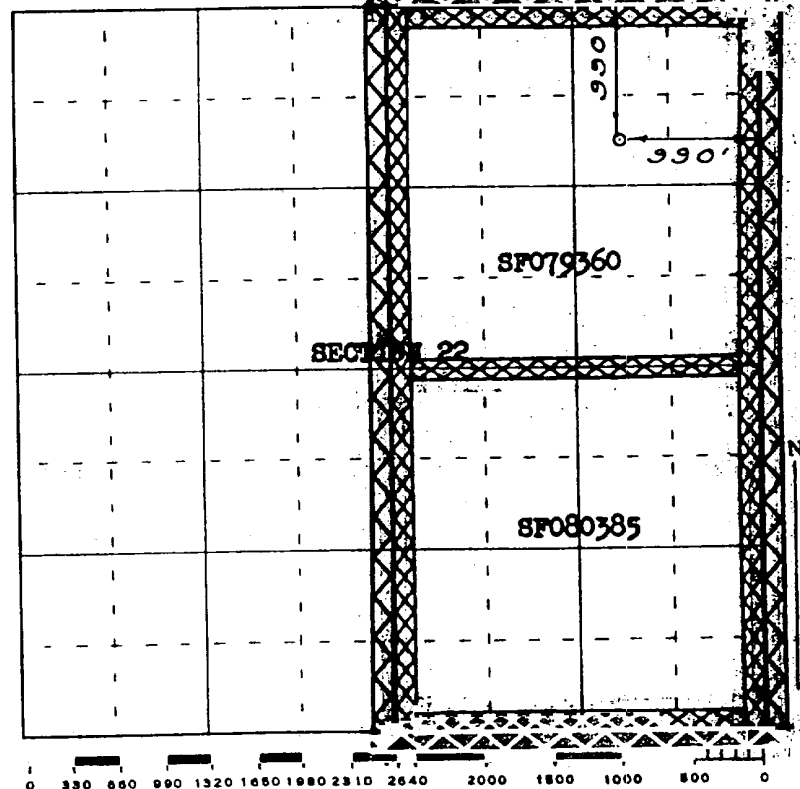
(Representative)

Box 990

(Address)

Farmington, New Mexico

Note: All distances must be from outer boundaries of section.



Scale 4 inches equal 1 mile

This is to certify that the above plat was prepared from field notes of actual surveys made by me or under my supervision and that the same are true and correct to the best of my knowledge and belief.

(Seal)

Date Surveyed JUNE 25, 1962

David C. Kilburn
 Registered Professional Engineer and/or Land Surveyor

Farmington, New Mexico

RECEIVED
 99 MAY 25 AM 9:49
 070 FARMINGTON, NM

District I
PO Box 1900, Hobbs, NM 88241-1900
District II
811 South First, Artesia, NM 88210
District III
1000 Rio Brazos Rd., Aztec, NM 87410
District IV
2040 South Pacheco, Santa Fe, NM 87505

State of New Mexico
Energy, Minerals & Natural Resources Department

OIL CONSERVATION DIVISION
2040 South Pacheco
Santa Fe, NM 87505

Form C-102
Revised October 18, 1994
Instructions on back
Submit to Appropriate District Office
State Lease - 4 Copies
Fee Lease - 3 Copies

RECEIVED
MAY 25 AM 9:49
070 FARMINGTON, NM

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-07008		² Pool Code 72319	³ Pool Name BLANCO MESAVERDE
⁴ Property Code 011510	⁴ Property Name RINCON UNIT		⁴ Well Number 185
⁷ OGRID No. 023708	⁷ Operator Name UNION OIL COMPANY OF CALIFORNIA (UNOCAL)		⁷ Elevation 6587'

¹⁰ Surface Location

UL or lot no. A	Section 22	Township 27N	Range 7W	Lot Idn	Feet from the 990	North/South line N	Feet from the 990	East/West line E	County Rio Arriba
--------------------	---------------	-----------------	-------------	---------	----------------------	-----------------------	----------------------	---------------------	----------------------

¹¹ Bottom Hole Location If Different From Surface

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
¹² Dedicated Acres 320.00		¹³ Joint or Infill Y		¹⁴ Consolidation Code U		¹⁶ Order No. Unitization			

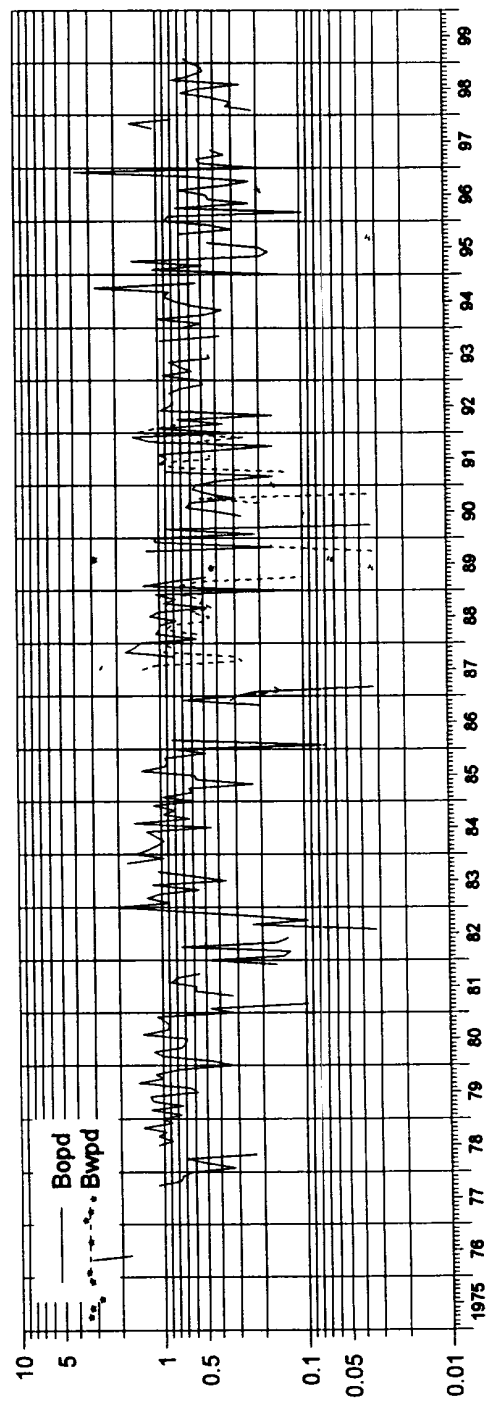
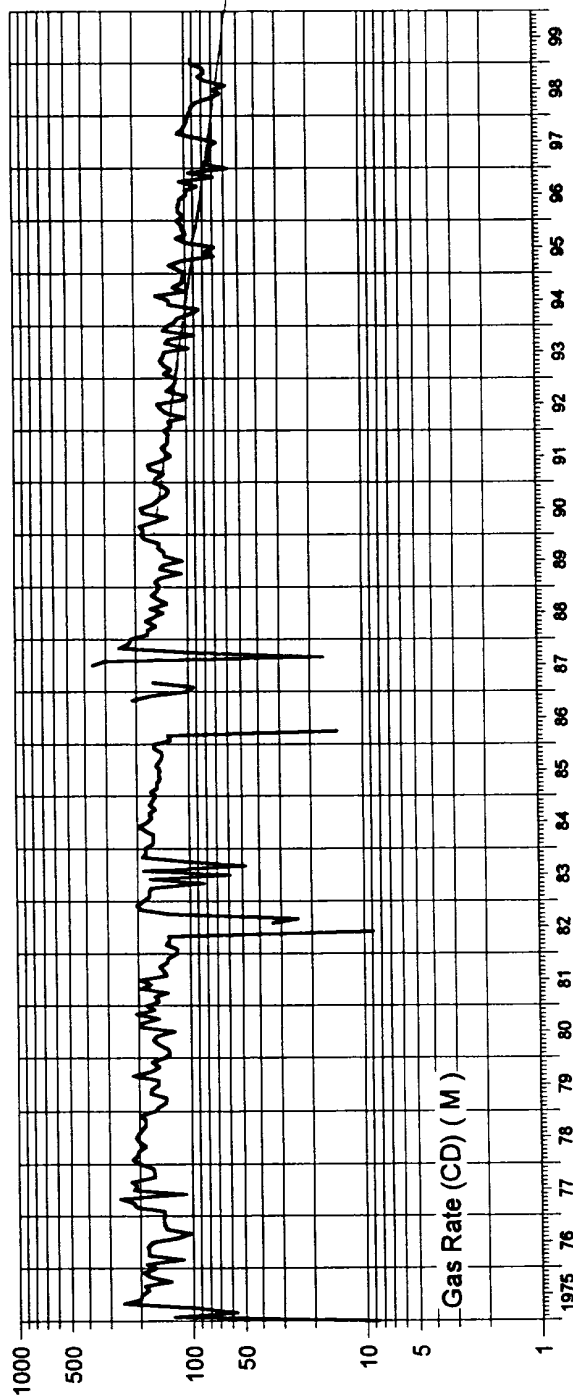
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

16				990'	¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief <i>Heather Dahlgren</i> Signature Printed Name HEATHER DAHLGREN Title ENGINEERING TECHNICIAN Date 5-19-99 ¹⁸ SURVEYOR CERTIFICATION I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my Date of Survey Signature and Seal of Professional Surveyor: Certificate Number
				990'	
		Sec. 22	SF 079360		

UNION OIL COMPANY OF CALIFORNIA

RINCON UNIT 185:DK

RIO ARriba CO., NEW MEXICO



RINCON_UNIT_185:DK

DATE	GAS VOL PROD Mcf	OIL VOL PROD bbl	WATER VOL PROD bbl	Gas Rate (CD) Mcf/d	Oil Rate (CD) bbl/d	Water Rate (CD) bbl/d	Cum Gas Prod Mcf	Cum Oil Prod bbl
19970101	1764	6	0	57	0.2	0.0	2026763	15300
19970201	2167	14	0	77	0.5	0.0	2028930	15314
19970301	2238	16	0	72	0.5	0.0	2031168	15330
19970401	2183	10	0	73	0.3	0.0	2033351	15340
19970501	2261	13	0	73	0.4	0.0	2035612	15353
19970601	2173	0	0	72	0.0	0.0	2037785	15353
19970701	2027	0	0	65	0.0	0.0	2039812	15353
19970801	2630	0	0	85	0.0	0.0	2042442	15353
19970901	3276	0	0	109	0.0	0.0	2045718	15353
19971001	3142	33	0	101	1.1	0.0	2048860	15386
19971101	2965	46	0	99	1.5	0.0	2051825	15432
19971201	2986	24	0	96	0.8	0.0	2054811	15456
19980101	2939	0	0	95	0.0	0.0	2057750	15456
19980201	2575	6	0	92	0.2	0.0	2060325	15462
19980301	2806	10	0	91	0.3	0.0	2063131	15472
19980401	2569	9	0	86	0.3	0.0	2065700	15481
19980501	2193	13	0	71	0.4	0.0	2067893	15494
19980601	1877	20	0	63	0.7	0.0	2069770	15514
19980701	2116	16	0	68	0.5	0.0	2071886	15530
19980801	1789	8	0	58	0.3	0.0	2073675	15538
19980901	2277	23	0	76	0.8	0.0	2075952	15561
19981001	2564	18	0	83	0.6	0.0	2078516	15579
19981101	2297	14	0	77	0.5	0.0	2080813	15593
19981201	2428	15	0	78	0.5	0.0	2083241	15608
19990101	2839	18	0	92	0.6	0.0	2086080	15626
19990201	2559	18	0	91	0.6	0.0	2088639	15644

WELL NAME :**RINCON UNIT 185E MESAVERDE**

Test Date:

GAS GRAVITY:

CONDENSATE (YES=1):

RESERVOIR TEMP:

SURFACE TEMP:

DEPTH OF ZONE:

% N2

% CO2

% H2S

Pc =

Tc =

ORIGINAL

Aug-95

0.685
1
150 F
60 F
5136 ft
0.38
1.16
0.00
699.95
379.07

Test Date:

GAS GRAVITY:

CONDENSATE (YES=1):

RESERVOIR TEMP:

SURFACE TEMP:

DEPTH OF ZONE:

% N2

% CO2

% H2S

Pc =

Tc =

CURRENT

Jun-98

0.685
1
150 F
60 F
5136 ft
0.38
1.16
0.00
699.95
379.07

SURFACE PRESS

BHP

Z

BHP/Z

300 psia
339 psia
0.9613
353 psia

SURFACE PRESS

BHP

Z

BHP/Z

280 psia
316 psia
0.9638
328 psia

WELL NAME :**RINCON UNIT 185 DAKOTA**

Test Date:

GAS GRAVITY:

CONDENSATE (YES=1):

RESERVOIR TEMP:

SURFACE TEMP:

DEPTH OF ZONE:

% N2

% CO2

% H2S

Pc =

Tc =

ORIGINAL

Mar-63

0.71
1
190 F
60 F
7420 ft
0.20
1.20
0.00
668.66
385.46

Test Date:

GAS GRAVITY:

CONDENSATE (YES=1):

RESERVOIR TEMP:

SURFACE TEMP:

DEPTH OF ZONE:

% N2

% CO2

% H2S

Pc =

Tc =

CURRENT

Jun-98

0.714
1
190 F
60 F
7420 ft
0.20
1.20
0.00
668.66
385.46

SURFACE PRESS

BHP by Buildup Measurement

Z

BHP/Z

1,694 psia
2,109 psig
0.8625
2,445 psia

SURFACE PRESS

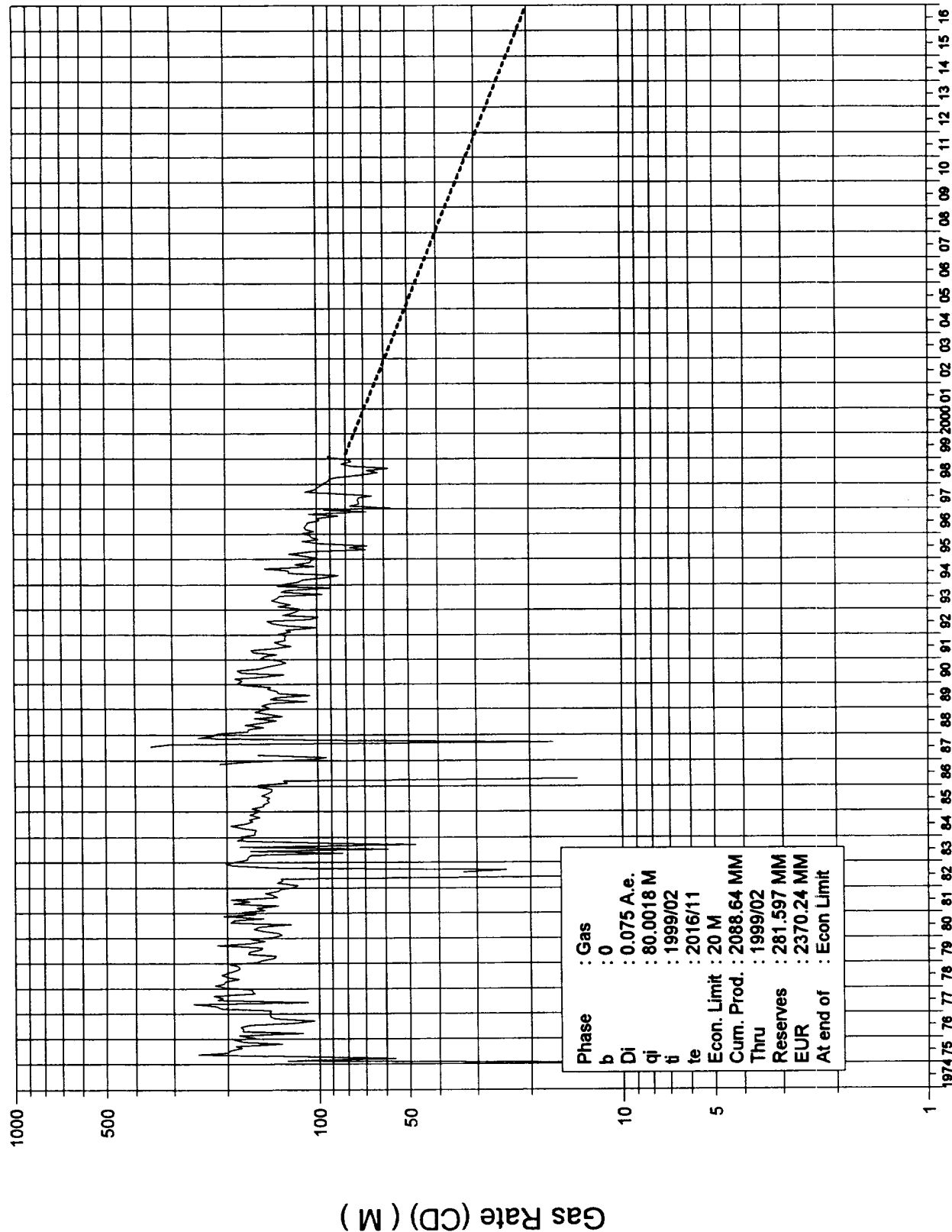
BHP

Z

BHP/Z

320 psia
383 psia
0.9627
398 psia

RINCON UNIT 185:DK



Phase	: Gas
b	: 0
Di	: 0.075 A.e.
qi	: 80.0018 M
ti	: 1999/02
te	: 2016/11
Econ. Limit	: 20 M
Cum. Prod.	: 2088.64 MM
Thru	: 1999/02
Reserves	: 281.597 MM
EUR	: 2370.24 MM
At end of	: Econ Limit

RU 185DK Forecast

Well

Existing Completion Prior to DHC

Annual Decline

Monthly Decline Factor (Annual / 12)

Average Monthly volume (Mcf) prior to DHC

Average Yield (bbls/mcf) Oil

Average Yield (bbls/mcf) Water

Est. Volume Prior to DHC (Mcf) - Sept. 1999

RU 185
DK
7.50%
0.6250
2369
0.005
0.000
2303

1998 Annual Average
1998 Annual Average
1998 Annual Average

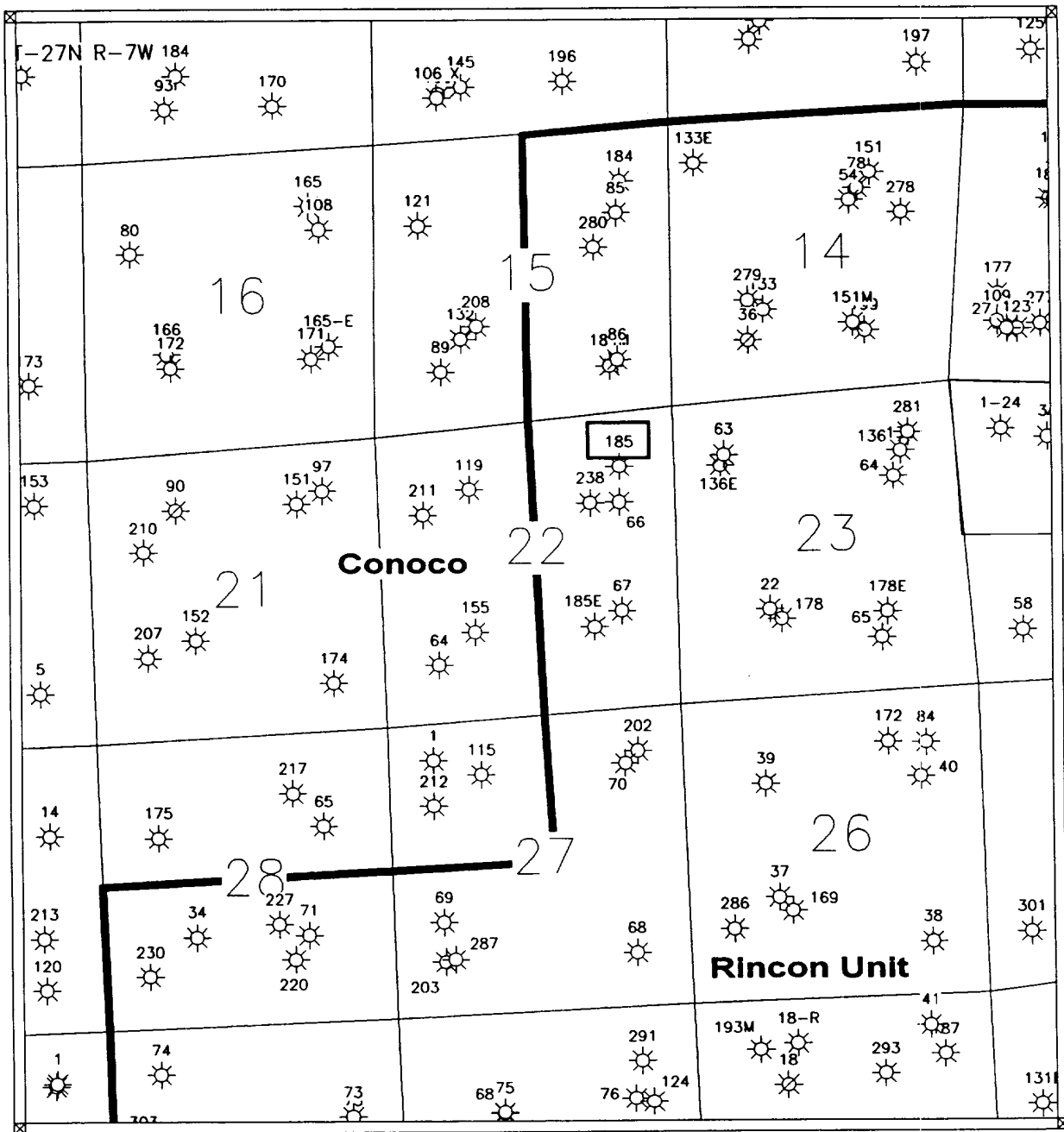
* Forecasted volumes to be adjusted for actual days on production & actual volume prior to commingling

Month	DK Forecast (Mcf/d)	DK Forecast (Mcf)	DK Forecast (Bbls-Oil)	DK Forecast (Bbls-Water)
1	87	2648	13.2	0.0
2	83	2517	12.6	0.0
3	76	2303	11.5	0.0
4	75	2289	11.4	0.0
5	75	2274	11.4	0.0
6	74	2260	11.3	0.0
7	74	2246	11.2	0.0
8	73	2232	11.2	0.0
9	73	2218	11.1	0.0
10	72	2204	11.0	0.0
11	72	2190	11.0	0.0
12	72	2177	10.9	0.0
13	71	2163	10.8	0.0
14	71	2150	10.7	0.0
15	70	2136	10.7	0.0
16	70	2123	10.6	0.0
17	69	2109	10.5	0.0
18	69	2096	10.5	0.0
19	68	2083	10.4	0.0
20	68	2070	10.4	0.0
21	68	2057	10.3	0.0
22	67	2044	10.2	0.0
23	67	2032	10.2	0.0
24	66	2019	10.1	0.0

+ DK flush volume @ 15%
+ DK flush volume @ 10%

RINCON UNIT 185:DK - Gas Forecast @ 7.5% A.E.

DATE	Average Rate Mscf/d	Monthly Volume MMscf	Cumulative Volume MMscf	Remaining Reserves MMscf
1999/ 3	80	2.47	2091.1	279.1
1999/ 4	79	2.38	2093.5	276.7
1999/ 5	79	2.44	2095.9	274.3
1999/ 6	78	2.35	2098.3	272.0
1999/ 7	78	2.41	2100.7	269.6
1999/ 8	77	2.39	2103.1	267.2
1999/ 9	77	2.30	2105.4	264.9
1999/10	76	2.36	2107.7	262.5
1999/11	76	2.27	2110.0	260.2
1999/12	75	2.33	2112.3	257.9
2000/ 1	75	2.32	2114.7	255.6
2000/ 2	74	2.16	2116.8	253.4
2000/ 3	74	2.28	2119.1	251.1
2000/ 4	73	2.20	2121.3	248.9
2000/ 5	73	2.25	2123.6	246.7
2000/ 6	72	2.17	2125.7	244.5
2000/ 7	72	2.23	2128.0	242.3
2000/ 8	71	2.21	2130.2	240.1
2000/ 9	71	2.13	2132.3	237.9
2000/10	70	2.18	2134.5	235.8
2000/11	70	2.10	2136.6	233.7
2000/12	70	2.15	2138.7	231.5
2001/ 1	69	2.14	2140.9	229.4
2001/ 2	69	1.93	2142.8	227.4
2001/ 3	68	2.11	2144.9	225.3
2001/ 4	68	2.04	2147.0	223.3
2001/ 5	67	2.09	2149.0	221.2
2001/ 6	67	2.01	2151.0	219.2
2001/ 7	66	2.06	2153.1	217.1
2001/ 8	66	2.05	2155.2	215.1
2001/ 9	66	1.97	2157.1	213.1
2001/10	65	2.02	2159.1	211.1
2001/11	65	1.95	2161.1	209.1
2001/12	64	1.99	2163.1	207.2
2002/ 1	64	1.98	2165.1	205.2
2002/ 2	64	1.78	2166.8	203.4
2002/ 3	63	1.95	2168.8	201.4
2002/ 4	63	1.88	2170.7	199.6
2002/ 5	62	1.93	2172.6	197.6
2002/ 6	62	1.86	2174.5	195.8
2002/ 7	61	1.90	2176.4	193.9
2002/ 8	61	1.89	2178.3	192.0
2002/ 9	61	1.82	2180.1	190.1
2002/10	60	1.87	2182.0	188.3
2002/11	60	1.80	2183.8	186.5
2002/12	59	1.84	2185.6	184.6
2003/ 1	59	1.83	2187.4	182.8
2003/ 2	59	1.65	2189.1	181.2
2003/ 3	58	1.80	2190.9	179.3
2003/ 4	58	1.74	2192.6	177.6
2003/ 5	58	1.78	2194.4	175.8
2003/ 6	57	1.72	2196.1	174.1
2003/ 7	57	1.76	2197.9	172.3
2003/ 8	57	1.75	2199.6	170.6
2003/ 9	56	1.69	2201.3	168.9
2003/10	56	1.73	2203.1	167.2
2003/11	55	1.66	2204.7	165.5
2003/12	55	1.71	2206.4	163.8
2004/ 1	55	1.70	2208.1	162.1
2004/ 2	54	1.58	2209.7	160.5



Scale 1:34567.08

1000. 0. 1000. 2000. 3000. 4000. 5000. feet



0.1 0.1 0.2 0.3 0.4 0.5 miles



LEASE MAP		
RINCON UNIT NO. 185		
OPERATOR: UNION OIL CO. OF CALIFORNIA		
Scale 1:34567.08		
HADWIGER	5/19/1999	185-07



SPIRIT ENERGY 76

New Name. Same Spirit.

A Business Unit of Unocal

May 20, 1999

Conoco
10 Desta Dr. W, Suite 100W
Midland, TX 79705

Gentlemen:

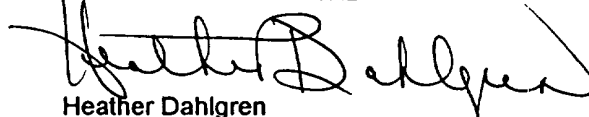
Union Oil Company of California (UNOCAL) has requested from the State of New Mexico Oil Conservation Division, approval to down hole commingle production from the Blanco Mesaverde and Basin Dakota formations in the following Rincon Unit wells, Rio Arriba County, New Mexico.

Well	Lease	Legal Location
178	Federal	1450' FSL, 1850' FWL, SW Sec 23, T27N, R7W
185	Federal	990' FNL, 990' FEL, NE Sec 22, T27N, R7W

If Conoco, as an offset operator, has an objection to these proposals, please notify NMOCD within twenty days. If you have any questions regarding these applications, please contact Heather Dahlgren at 915/685-7665.

Sincerely,

Spirit Energy 76
A Business Unit of UNOCAL


Heather Dahlgren
Senior Engineering Technician