

1-17-95



December 28, 1994

New Mexico Oil Conservation Division
Attn.: Mr. William J. LeMay
PO 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

Dear Sirs:

Union Oil Company of California d.b.a. UNOCAL requests permission to downhole commingle production from the Blanco Mesa Verde and Basin Dakota formations in the following Rincon Unit wells, Rio Arriba County, New Mexico.

Well	Legal Location
303	2180' FNL, 535' FWL, S33, T27N, R6W

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

In 1993, UNOCAL tested twenty two Blanco Mesa Verde / Basin Dakota wells for downhole commingling potential in the Rincon Unit. Each well qualified for an administrative downhole commingle; UNOCAL requested and received approval for thirteen of these wells. In 1994, UNOCAL received, prior to spud, administrative approval to downhole commingle nine Blanco Mesa Verde / Basin Dakota wells based on bottom hole pressure data obtained from the twenty two wells tested in 1993. Four of these wells were drilled.

UNOCAL calculates an allocation factor for each horizon based on individual production tests as requested by BLM letter "Rincon Unit (GC) 3162.3-2 (07327)".

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

1. Acreage dedication plat showing offset lease ownership.
2. Proposed wellbore schematic with completion detail.
3. Bottomhole pressure data, for twenty two wells tested in 1993 and nine new wells tested in 1994, adjusted to datum.
4. Gas analysis summary sheet.
5. Copies of notification letters sent to all offset operators (if any) and BLM.

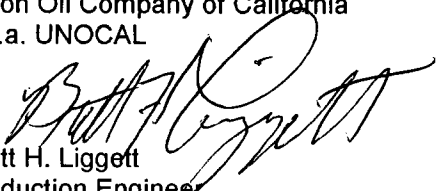
A well drilled as a stand alone Blanco Mesa Verde is uneconomic. To develop these reserves, a commingled completion is required. We estimate an ultimate recovery of 530 MMcf per well from the Mesa Verde horizon which would otherwise remain undeveloped. UNOCAL has experienced a significant reduction in liquid loading problems by producing the Mesa Verde and Dakota zones through one tubing string. Pressure data indicates that cross flow between commingled zones will not occur.

Both zones produce gas with some oil and water. Oil and water production from both zones will not exceeded 50 bbl/day. To date UNOCAL has not experienced any fluid compatibility problems from commingled wells drilled in 1993 and 1994.

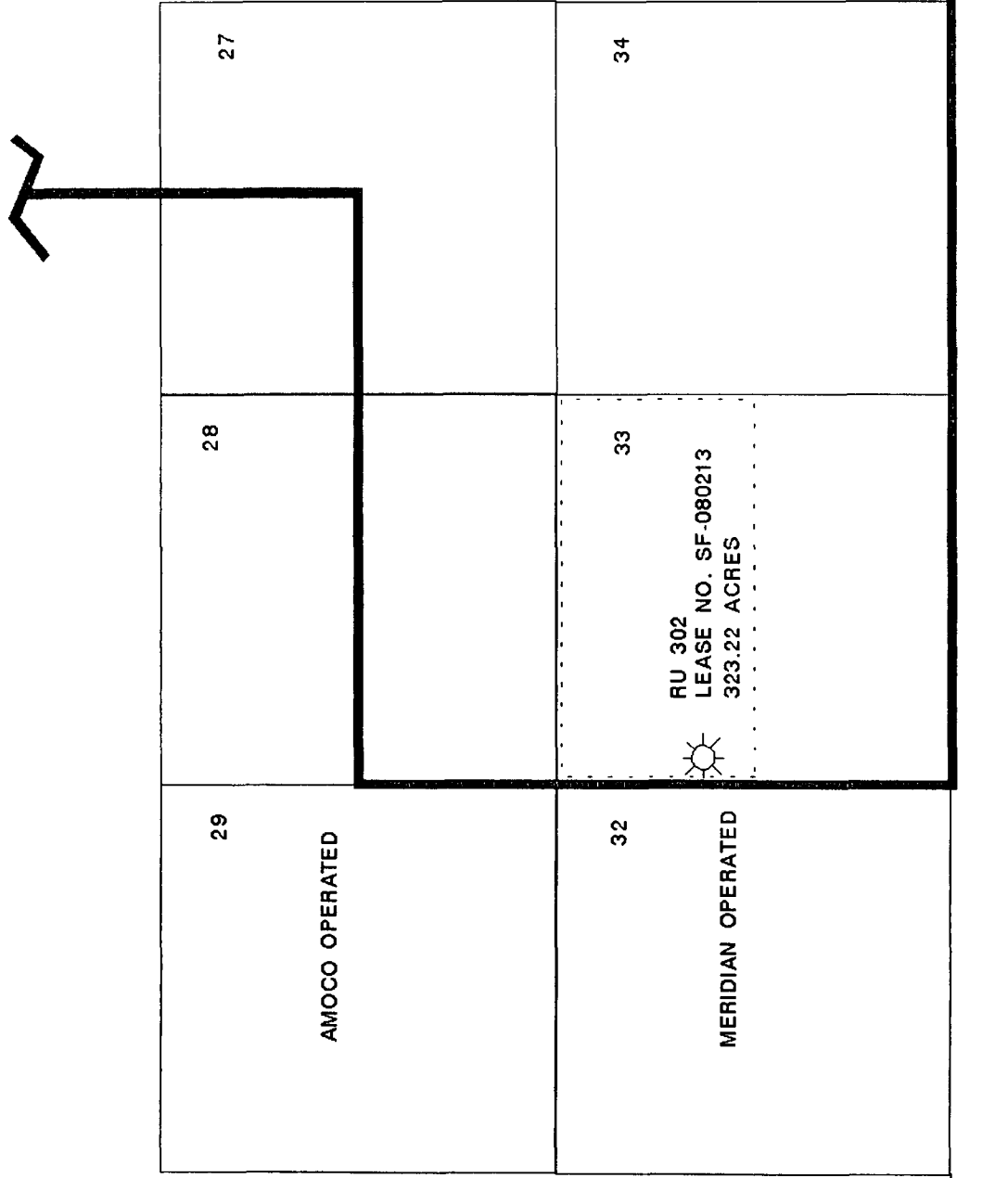
If you have any questions, please contact me at (505) 632-1811 ext. 21. Thank you for your consideration in this matter.

Sincerely,

Union Oil Company of California
d.b.a. UNOCAL



Brett H. Liggett
Production Engineer



T27N R7W
T26N R7W

RINCON UNIT BOUNDARY

SECTION

TOWNSHIP / RANGE

DEDICATED ACREAGE

RINCON UNIT 303

PRESENT COMPLETION

PROPOSED COMPLETION

KB = 12

8-5/8", 24 #, J-55 @ 365' W/ 250 SXS CIRC TO SURFACE

PROPOSED
MESA VERDE 5310' - 28'
STIMULATE W/ 120,000 LB 20/40 BRADY

DAKOTA 7428' - 569' @ 4 SPF
STIMULATED W/ 252,000 LB 40/40 BRADY

DAKOTA 7428' - 569' @ 4 SPF
STIMULATED W/ 252,000 LB 40/40 BRADY

2-3/8", 4.7 #, J-55, EUE 8RD, 7546' FHD

2-3/8", 4.7 #, J-55, EUE 8RD, 7546' FHD

PBTD = 7537'

5-1/2", 15.5 & 17 #, J-55 @ 7738' W/ 1540 SX CIRC TO
SURFACE

RINCON UNIT DK/MV COMMINGLE BOTTOMHOLE PRESSURE DATA

	<u>WELL</u>	<u>MV BHP (PSI)</u>	<u>DK BHP (PSI)</u>	<u>% DIFF</u>
*	1E	1156	1690	32
*	125M	789	1548	49
*	126	660	850	22
*	126M	921	1607	43
*	127	512	580	12
*	127M	716	1280	44
*	128	801	781	2
**	128M	1001	1000	0
*	129	806	836	4
*	129M	1053	935	11
*	130	586	622	6
*	135	481	736	35
*	136E	1139	2199	48
*	137	400	686	42
**	138E	684	1100	38
**	139E	761	1300	41
*	149	471	521	10
*	151M	1228	1862	34
*	158M	1231	766	38
*	159M	603	583	3
*	167M	1007	1909	47
*	170M	940	1752	46
*	175M	735	1108	34
*	180M	585	788	26
*	184M	1753	1708	3
**	302	654	1225	47

DK ZONE TAKEN AS DATUM

* 1993 TEST DATA

** 1994 TEST DATA

GAS ANALYSIS

WELL NAME	ZONE	TEST DATE	NITROGEN	CO2	METHANE	ETHANE	PROPANE	I-BUTANE	N-BUTANE	I-PENTANE	N-PENTANE	HEXANE+	BTU'S	GPM	SPEC GRAV
RINCON #1E	DK	11/23/94	0.310	1.150	86.570	6.980	2.760	0.500	0.730	0.270	0.20	0.530	1159.0	3.424	0.670
	MV	11/23/94	0.310	1.150	86.570	6.980	2.760	0.500	0.730	0.270	0.20	0.530	1159.0	3.424	0.670
	DK	06/10/94	0.260	1.160	85.010	7.670	3.250	0.630	0.850	0.350	0.23	0.590	1184.0	3.890	0.685
RINCON #125M	MV	06/10/94	0.260	1.160	85.010	7.670	3.250	0.630	0.850	0.350	0.23	0.590	1184.0	3.890	0.685
	DK	11/17/94	0.210	1.320	87.950	6.430	2.000	0.510	0.520	0.280	0.16	0.620	1141.0	3.034	0.680
RINCON #126	MV	11/18/94	0.450	1.070	83.080	8.230	4.220	0.790	1.090	0.370	0.24	0.460	1207.0	4.390	0.701
	DK	12/07/93	0.290	1.050	87.540	6.460	2.770	0.540	0.680	0.270	0.17	0.230	1140.4	3.139	0.656
RINCON #126M	MV	12/07/93	0.290	1.050	87.540	6.460	2.770	0.540	0.680	0.270	0.17	0.230	1140.4	3.139	0.656
	DK	09/15/93	0.280	1.160	84.870	8.010	2.940	0.680	0.800	0.430	0.25	0.580	1182.1	3.927	0.685
RINCON #127	MV	05/13/92	0.390	1.020	81.780	10.520	4.220	0.600	0.840	0.280	0.19	0.160	1199.0	4.679	0.694
	DK	11/17/94	0.300	1.240	84.850	8.010	3.050	0.600	0.800	0.340	0.23	0.580	1180.0	3.892	0.684
RINCON #127M	MV	11/17/94	0.300	1.240	84.850	8.010	3.050	0.600	0.800	0.340	0.23	0.580	1180.0	3.892	0.684
	DK	11/18/94	0.230	1.280	84.060	8.420	3.260	0.640	0.890	0.370	0.25	0.600	1192.0	4.128	0.692
RINCON #128	MV	11/18/94	0.450	0.780	79.710	10.320	5.030	0.880	1.390	0.470	0.35	0.620	1260.0	5.443	0.730
	DK	04/15/94	0.260	1.000	86.830	7.120	2.350	0.520	0.650	0.290	0.19	0.490	1151.0	3.317	0.666
RINCON #129	MV	03/29/94	0.550	0.590	79.100	11.220	5.500	0.640	1.060	0.430	0.35	0.560	1259.0	5.598	0.727
	DK	10/23/94	0.270	1.190	81.230	9.850	4.130	0.780	1.120	0.460	0.31	0.660	1232.0	4.949	0.717
RINCON #129M	MV	10/23/94	0.270	1.190	81.230	9.850	4.130	0.780	1.120	0.460	0.31	0.660	1232.0	4.949	0.717
	DK	04/15/94	0.200	1.180	81.380	10.020	4.020	0.740	1.190	0.470	0.33	0.470	1226.0	4.902	0.712
RINCON #130	MV	04/15/94	0.580	0.730	78.580	10.230	5.830	1.020	1.470	0.480	0.34	0.740	1281.0	5.763	0.744
	DK	04/13/94	0.430	1.240	84.220	8.530	2.970	0.630	0.780	0.340	0.22	0.640	1184.0	4.036	0.688
RINCON #135	MV	04/13/94	0.330	1.210	84.030	8.690	3.110	0.640	0.820	0.350	0.22	0.600	1188.0	4.120	0.690
	DK	06/15/93	0.220	1.080	83.600	9.320	3.440	0.580	0.890	0.330	0.22	0.340	1189.0	4.254	0.687
RINCON #136E	MV	12/12/92	0.219	1.072	84.804	8.487	3.185	0.484	0.824	0.307	0.24	0.378	1177.1	3.930	0.678
	DK	11/11/94	0.210	1.120	84.930	8.400	3.100	0.520	0.850	0.280	0.18	0.410	1175.0	3.896	0.678
RINCON #137	MV	11/11/94	0.440	0.600	77.270	12.190	5.690	0.940	1.600	0.460	0.32	0.490	1286.0	6.138	0.744
	DK	11/18/94	0.380	1.200	88.310	6.080	1.900	0.550	0.890	0.250	0.19	0.450	1134.0	2.905	0.655
RINCON #149	MV	11/30/94	0.380	1.180	84.630	7.900	3.110	0.610	0.950	0.390	0.27	0.580	1166.0	3.964	0.688
	DK	10/07/94	0.230	1.010	82.500	9.610	3.930	0.660	1.020	0.370	0.26	0.410	1210.0	4.600	0.699
RINCON #151M	MV	10/07/94	0.230	1.010	82.500	9.610	3.930	0.660	1.020	0.370	0.26	0.410	1210.0	4.600	0.699
	DK	12/08/93	0.290	1.040	86.780	7.010	2.800	0.550	0.710	0.300	0.19	0.330	1152.0	3.371	0.663
RINCON #159M	MV	12/08/93	0.290	1.040	86.780	7.010	2.800	0.550	0.710	0.300	0.19	0.330	1152.0	3.371	0.663
	DK	11/10/94	0.240	1.090	83.010	9.160	3.690	0.710	0.930	0.380	0.24	0.550	1207.0	4.458	0.698
RINCON #159M	MV	11/10/94	0.240	1.090	83.010	9.160	3.690	0.710	0.930	0.380	0.24	0.550	1207.0	4.458	0.698
	DK	10/14/94	0.230	1.010	86.060	7.620	2.890	0.540	0.770	0.280	0.19	0.410	1165.0	3.805	0.671
RINCON #167M	MV	10/14/94	0.230	1.010	86.060	7.620	2.890	0.540	0.770	0.280	0.19	0.410	1165.0	3.805	0.671
	DK	10/31/94	0.330	1.120	83.640	8.800	3.640	0.670	0.890	0.340	0.21	0.360	1190.0	4.214	0.689
RINCON #170M	MV	10/31/94	0.330	1.120	83.640	8.800	3.640	0.670	0.890	0.340	0.21	0.360	1190.0	4.214	0.689
	DK	11/26/94	0.360	1.140	82.250	9.290	3.880	0.710	1.040	0.410	0.28	0.640	1217.0	4.644	0.707
RINCON #175M	MV	11/26/94	0.360	1.140	82.250	9.290	3.880	0.710	1.040	0.410	0.28	0.640	1217.0	4.644	0.707
	DK	09/26/94	0.270	1.170	85.810	7.490	2.830	0.600	0.740	0.310	0.19	0.590	1171.0	3.652	0.677
RINCON #180M	MV	09/26/94	0.270	1.170	85.810	7.490	2.830	0.600	0.740	0.310	0.19	0.590	1171.0	3.652	0.677
	DK	12/30/93	0.250	1.010	81.930	9.580	4.090	0.680	1.060	0.400	0.29	0.710	1228.0	4.807	0.711
RINCON #184M	MV	12/30/93	0.250	1.010	81.930	9.580	4.090	0.680	1.060	0.400	0.29	0.710	1228.0	4.807	0.711

UNOCAL 76

December 28, 1994

Amoco Production Co.
200 Amoco Ct.
Farmington, New Mexico 87401

Greetings:

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

Well	Legal Location
303.	2180' FNL, 535' FWL, S33, T27N, R6W

If you have any objections to this proposal, please notify NMOCD within twenty days. If you have any questions regarding this application, please contact me at (505) 532-1811 ext. 21.

Sincerely,

Union Oil Company of California
d.b.a. UNOCAL



Brett H. Liggett
Production Engineer



December 28, 1994

Meridian Oil Co.
3535 E. 30th St.
Farmington, New Mexico 87402

Greetings:

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

Well	Legal Location
303	2180' FNL, 535' FWL, S33, T27N, R6W

If you have any objections to this proposal, please notify NMOCD within twenty days. If you have any questions regarding this application, please contact me at (505) 532-1811 ext. 21.

Sincerely,

Union Oil Company of California
d.b.a. UNOCAL

A handwritten signature in black ink, appearing to read "Brett H. Liggett".

Brett H. Liggett
Production Engineer



STATE OF NEW MEXICO
ENERGY, MINERALS and NATURAL RESOURCES DIVISION

OIL CONSERVATION DIVISION
AZTEC DISTRICT OFFICE

OIL CONSERVATION DIVISION
RECEIVED
95 JAN 20 AM 8 52

BRUCE KING
GOVERNOR

ANITA LOCKWOOD
CABINET SECRETARY

1000 RIO BRAZOS ROAD
AZTEC, NEW MEXICO 87410
(505) 334-6174

Date: _____

DHC-1086

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

RE: Proposed MC _____
Proposed NSL _____
Proposed WFX _____
Proposed NSP _____

Proposed DHC α _____
Proposed SWD _____
Proposed PMX _____
Proposed DD _____

Gentlemen:

I have examined the application received on 12/30/94
for the Unocal Rimov Unit #303
OPERATOR LEASE & WELL NO.

E-33-27N-6W and my recommendations are as follows:
UL-S-T-R

Approve

Yours truly,

S. J. G.