

SPiRiT ENERGY 76

New Name. Same Spirit.
A Business Unit of Unocal

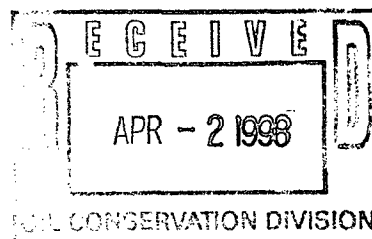
4/22/98

1918

March 31, 1998

U.S. Department of the Interior
Bureau of Land Management
1235 La Plata Highway
Farmington, NM 87401

Commissioner of Public Lands
State of New Mexico
310 Old Santa Fe Trail
Santa Fe, NM 87504



New Mexico Oil Conservation Division
2040 S. Pacheco Street
Santa Fe, NM 87505
Cc: NMOCD, Aztec, NM

Gentlemen,

Union Oil Company of California (UNOCAL) requests approval to down hole commingle production in the following Rincon Unit wells, Rio Arriba County, New Mexico.

Well	Lease	Legal Location
169 DK/MV	Federal	1650' FSL, 1840' FWL, SW Sec 26, T27N, R7W
192 DK/GL	Federal	1700' FSL, 1700' FWL, SW Sec 1, T26N, R7W
192E DK/GL/MV	Federal	1020' FNL, 970' FWL, NW Sec 1, T26N, R7W

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

Form C-107-A with supporting data is attached.

If you have any questions please contact Heather Dahlgren at 915/685-7665.

Sincerely,

Spirit Energy 76
A Business Unit of UNOCAL

A handwritten signature in cursive script, appearing to read "Heather Dahlgren".

Heather Dahlgren
Engineering Technician

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
167M	C S 13 T 27 N R 7 W	DHC-863	11/5/92
175M	F S 20 T 27 N R 6 W	DHC-864	11/24/92
158M	J S 22 T 27 N R 6 W	DHC-909	4/27/93
159M	F S 18 T 27 N R 6 W	DHC-904	6/18/93
129M	P S 29 T 27 N R 6 W	DHC-903	6/18/93
1E	G S 30 T 27 N R 6 W	DHC-902	6/18/93
127M	D S 28 T 27 N R 6 W	DHC-916	8/17/93
184M	P S 15 T 27 N R 7 W	DHC-911	8/25/93
170M	I S 20 T 27 N R 6 W	DHC-920	9/17/93
126M	P S 27 T 27 N R 6 W	DHC-914	9/17/93
151M	O S 14 T 27 N R 7 W	DHC-918	9/17/93
136E	D S 23 T 27 N R 7 W	DHC-912	9/17/93
125M	F S 26 T 27 N R 6 W	DHC-95	9/17/93
137E	J S 24 T 27 N R 7 W	DHC-913	9/17/93
180M	D S 21 T 27 N R 6 W	DHC-940	10/25/93
174M	F S 19 T 27 N R 6 W	DHC-966	1/31/94
128M	O S 28 T 27 N R 6 W	DHC-1042	8/31/94
133E	D S 14 T 27 N R 7 W	DHC-1043	8/31/94
185E	J S 22 T 27 N R 7 W	DHC-1038	8/31/94
178E	I S 23 T 27 N R 7 W	DHC-1040	8/31/94
138E	P S 25 T 27 N R 7 W	DHC-1044	8/31/94
139E	F S 25 T 27 N R 7 W	DHC-1041	8/31/94
149M	F S 30 T 27 N R 7 W	DHC-1037	8/31/94
131E	C S 36 T 27 N R 7 W	DHC-1039	8/31/94
302	C S 11 T 26 N R 7 W	DHC-1050	11/3/94
303	E S 33 T 27 N R 6 W	DHC-1086	2/3/95
171M	J S 21 T 27 N R 6 W	DHC-1101	3/7/95
229E	M S 34 T 27 N R 7 W	DHC-1124	5/16/95
186M	L S 33 T 27 N R 6 W	DHC-1176	12/21/95
187E	P S 35 T 27 N R 7 W	DHC-1176	12/21/95
134	B S 12 T 26 N R 7 W	DHC-1190	3/7/96
170	M S 20 T 27 N R 6 W	DHC-1192	3/7/96
168E	I S 36 T 27 N R 7 W	DHC-1191	3/7/96
203	M S 27 T 27 N R 7 W	DHC-1261	5/23/96
183	K S 31 T 27 N R 6 W	DHC-1376	10/16/96
168	A S 36 T 27 N R 7 W	DHC-1778	2/4/98
139	K S 25 T 27 N R 6 W	DHC-1777	2/4/98
181	G S 22 T 27 N R 6 W	DHC-1779	2/4/98
166E	F S 32 T 27 N R 6 W	DHC-1784	2/24/98



United States Department of the Interior

BUREAU OF LAND MANAGEMENT

Farmington District Office
1235 La Plata Highway
Farmington, New Mexico 87401

IN REPLY REFER TO:
NMSF079160 etal (WC)
3162.7 (07400)

April 14, 1998

Ms. Heather Dahlgren
Union Oil Company of California (UNOCAL)
1004 N. Big Spring
Midland, Texas 79702

RE: Downhole Commingling Applications

Dear Ms: Dahlgren:

We have received and reviewed your Applications for Downhole Commingling on the following wells:

WELL	Lease	Legal Location	Proposed Commingled Formations
57 Rincon Unit	NMSF079160	990' FNL & 990' FEL Sec 1, T26N, R7W	Mesaverde & Dakota
137 Rincon Unit	NMSF079298D	1500' FSL & 1800' FWL Sec. 24, T27N, R7W	Mesaverde & Dakota
131 Rincon Unit	State (In Dakota PA)	1800' FSL & 1550' FWL Sec. 36, T27N, R7W	Mesaverde & Dakota
169 Rincon Unit	NMSF080385	1650' FSL & 1840' FWL Sec. 26, T27N,, R7W	Mesaverde & Dakota
192 Rincon Unit	NMSF079160	1700' FSL & 1700' FWL Sec. 1, T26N, R7W	Gallup & Dakota

We are in concurrence with your method of allocating production by extrapolating the decline rate on the Dakota and allocating the remainder of the production volume to the other formation. We are also in agreement with your Dakota decline rates and yield factors for allocating liquids. We hereby approve your applications for downhole commingling on the above wells. The effective date will be the date downhole commingling occurs.

When fixed allocation factors are determined, submit the factors for **approval**. This approval is not for operational activities. Operational approval must be obtained by submitting a Notice of Intent Sundry Notice.

If you have any questions please contact Wayne Townsend with this office at (505) 599-6359.

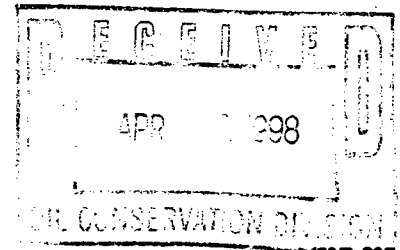
Sincerely,

/S/ Duane W. Spencer

Duane Spencer
Team Leader, Petroleum Management



4/22/98



(505) 827-5760
FAX (505) 827-5766

RAY POWELL, M.S., D.V.M.
COMMISSIONER

State of New Mexico
Commissioner of Public Lands

310 OLD SANTA FE TRAIL P.O. BOX 1148

SANTA FE, NEW MEXICO 87504-1148

April 7, 1998

Union Oil Company of California (UNOCAL)
1004 North Big Spring
Midland, Texas 79702

Attn: Ms. Heather Dahlgren

Re: Downhole Commingling Application
Rincon Unit Well No. 169
Unit Letter K, Section 26-27N-07W
Blanco Mesaverde and Basin Dakota Pools
Rincon Unit Well No. 192
Unit Letter K, Section 1-26N-07W
Largo Gallup and Basin Dakota Pools
Rincon Unit Well No. 192E
Unit Letter D, Section 1-26N-07W
Blanco Mesaverde, Largo Gallup and Basin Dakota Pools
Rio Arriba County, New Mexico

Dear Ms. Dahlgren:

Your applications to downhole commingle the production within the wellbores of the above-captioned wells was received on April 2, 1998.

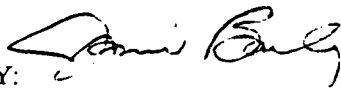
Since it appears that all the New Mexico Oil Conservation Division's rules and regulations have been complied with, and there will be no loss of revenue to the State of New Mexico as a result of your proposed operation, your request for downhole commingling is hereby approved. Any deviation from the substance of your request will be sufficient grounds for rescinding our approval. Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Please submit your \$30.00 filing fee.

If you have any questions or if we may be of further help, please contact Pete Martinez at (505) 827-5791.

Very truly yours,

RAY POWELL, M.S., D.V.M.
COMMISSIONER OF PUBLIC LANDS

BY: 
JAMI BAILEY, Director
Oil, Gas and Minerals Division
(505) 827-5744

RP/JB/cpm

Enclosure

pc: Reader File

OCD--Attention: David Catanach, Ben Stone

BLM

DISTRICT I

P.O. Box 1980, Hobbs, NM 88241-1980

DISTRICT II

811 South First St., Artesia, NM 88210-2835

DISTRICT III

1000 Rio Brazos Rd, Aztec, NM 87410-1693

State of New Mexico
Energy, Minerals and Natural Resources Department

OIL CONSERVATION DIVISION

2040 S. Pacheco
Santa Fe, New Mexico 87505-6429Form C-107-A
New 3-12-96

APPROVAL PROCESS:

☒ Administrative ☐ Hearing

EXISTING WELLBORE

☒ YES ☐ NO

APPLICATION FOR DOWNHOLE COMMINGLING

UNION OIL COMPANY OF CALIFORNIA (UNOCAL) 1004 N. BIG SPRING MIDLAND TX 79702

Operator

Address

RINCON UNIT

192

K 1-T26N-R7W

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. 30-039-20497 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	LARGO GALLUP 80000		BASIN DAKOTA 71599
2. Top and Bottom of Pay Section (Perforations)	Proposed 6530 - 6623		7048 - 7240
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) 789 psig b. (Original) 789 psig	a. b.	a. 668 psia b. 3011 psia
6. Oil Gravity (°API) or Gas BTU Content	1270 BTU		1113 BTU
7. Producing or Shut-In?	NEW COMPLETION		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	Date: SEE ATTACHED Rates:	Date: Rates:	Date: Rates:
* If Producing, give date and oil/gas/water rates of recent test (within 60 days)	Date: Rates:	Date: Rates:	Date: 1-98 86 mcf/d Rates: .4 bopd, .4 bwpd
8. Fixed Percentage Allocation Formula - % for each zone	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? R 9893 ☐ Yes ☒ No
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 Engineering Tech. DATE 3-31-98TYPE OR PRINT NAME HEATHER DAHLGREN TELEPHONE NO. (915) 685 7665

March 31, 1998

Supplemental Data for C-107-A, Rincon Unit Well No. 192

Well History: The Rincon Unit Well No. 192 was drilled and completed as a Dakota gas producer in December 1968. Gallup reserves would be developed most economically at this time with a downhole commingled completion. An estimated completion date for the Gallup is late April or May 1998.

Production History: Current gas production is 86 Mcfpd from the Dakota with trace oil and water production. An estimated initial rate for the first 30 days of Gallup production is 412 Mcfd and 2 Bopd. This estimate is an average of initial production volumes from three Gallup completions that offset the 192 (201E, 192E and 57E).

Pressure Data: Original and current Dakota bottom hole pressures were calculated from surface shut-in casing pressures. The offset Rincon Unit well #192E Gallup was used for estimating original pressure for the #192 Gallup. The 192E was completed in December 1991 and the pressure data was obtained by bottom hole pressure survey following a 7 day shut-in. Please see attachments for the bottom hole calculation, date and duration of these tests.

Allocation of Production: Unocal proposes to use an allocation based on an established Dakota annual decline rate of 4.27%. Dakota production will be extrapolated monthly using Bureau of Land Management recommended allocation methods with the remainder of the commingled production being allocated to the Gallup formation. Please see attachments for the Dakota forecast. Initial flush production volumes have been added to the Dakota due to the anticipated extended shut-in during the workover. While tabular data has been provided for the first five years of the Dakota forecast, we anticipate being able to convert to a fixed allocation factor within 12 to 24 months. Unocal also proposes to use a yield factor for allocating liquid production. This factor based on the average oil and water yield for 1997.

District I
PO Box 1980, Hobbs, NM 88241-1980
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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-20497		² Pool Code 80000	³ Pool Name LARGO GALLUP
⁴ Property Code 011510	⁴ Property Name RINCON UNIT		⁶ Well Number 192
⁷ OGRID No. 023708	⁸ Operator Name UNION OIL COMPANY OF CALIFORNIA (UNOCAL)		⁹ Elevation 6466'

¹⁰ Surface Location

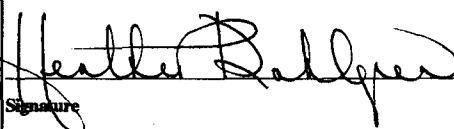
UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	1	26N	7W		1700	S	1700	W	Rio Arriba

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 160	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					¹⁷ OPERATOR CERTIFICATION I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief  Signature Printed Name HEATHER DAHLGREN Title ENGINEERING TECHNICIAN Date 3-25-98
					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

District I
PO Box 1980, Hobbs, NM 88241-1980
District II
811 South First, Artesia, NM 88210
District III
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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

☐ AMENDED REPORT

WELL LOCATION AND ACREAGE DEDICATION PLAT

¹ API Number 30-039-20497		² Pool Code 71599	³ Pool Name BASIN DAKOTA
⁴ Property Code 011510	⁵ Property Name RINCON UNIT		⁶ Well Number 192
⁷ OGRID No. 023708	⁸ Operator Name UNION OIL COMPANY OF CALIFORNIA (UNOCAL)		⁹ Elevation 6466'

¹⁰ Surface Location

UL or lot no.	Section	Township	Range	Lot Idn	Feet from the	North/South line	Feet from the	East/West line	County
K	1	26N	7W		1700	S	1700	W	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 320.20	¹³ Joint or Infill Y	¹⁴ Consolidation Code U	¹⁵ Order No. Unitization
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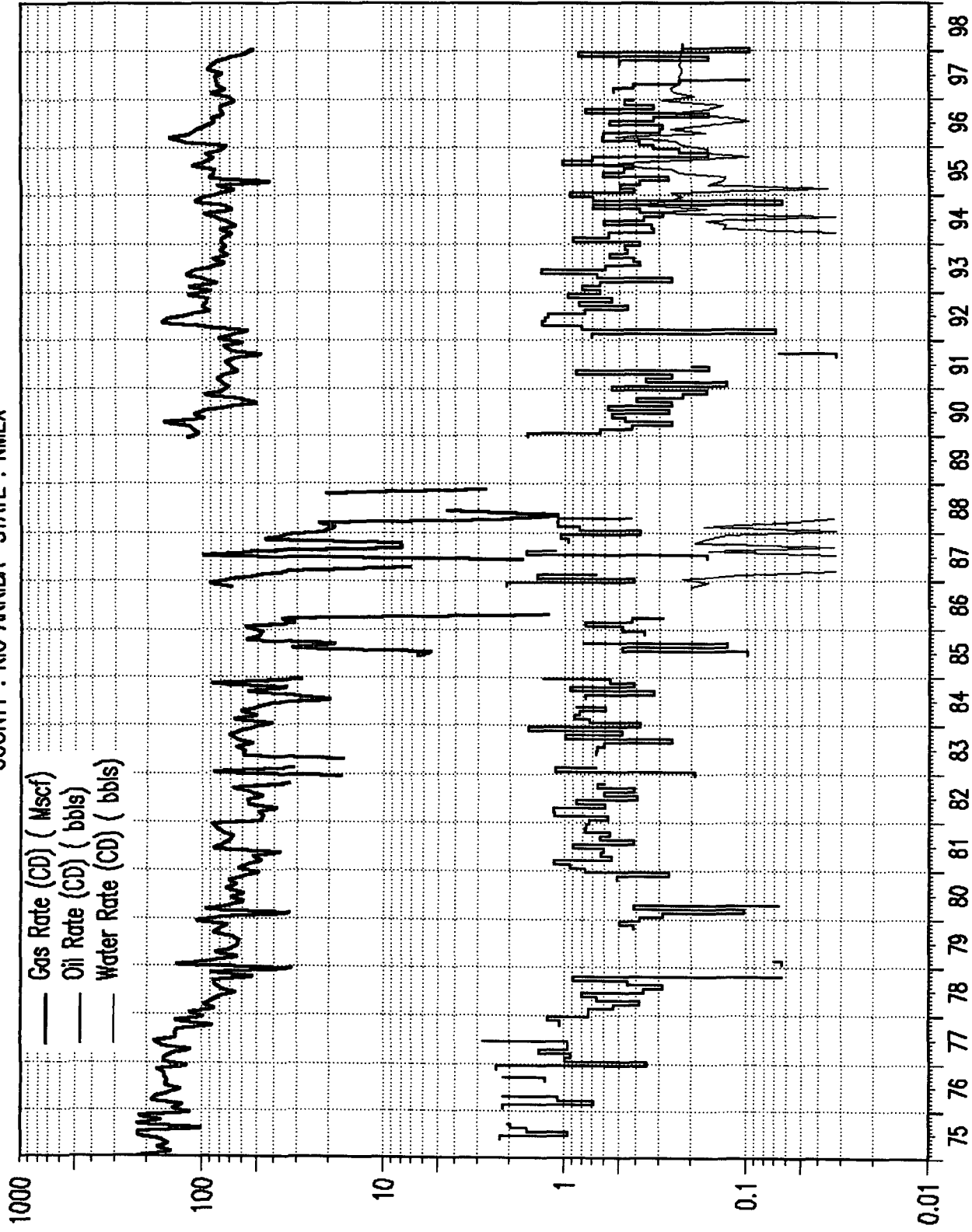
NO ALLOWABLE WILL BE ASSIGNED TO THIS COMPLETION UNTIL ALL INTERESTS HAVE BEEN CONSOLIDATED OR A NON-STANDARD UNIT HAS BEEN APPROVED BY THE DIVISION

6 <!-- Well location diagram: a circle with an arrow pointing to it from the bottom -->	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 3-25-98			
	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			

WELL: RINCON UNIT 192:DK

LOCATION : N026 W007 1 SWNESW

COUNTY : RIO ARriba STATE : NMEX



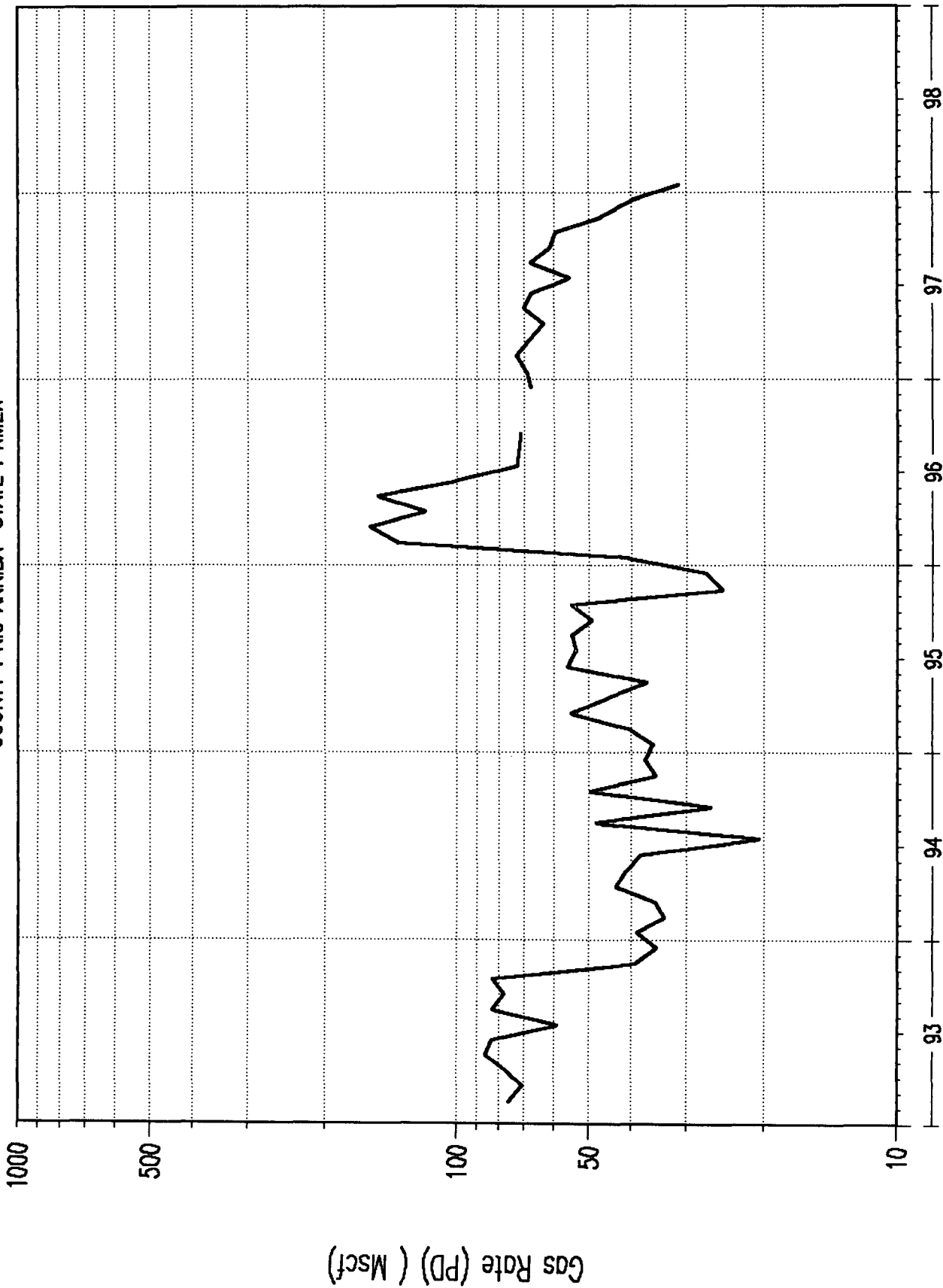
WELL: RINCON UNIT 192:DK

LOCATION : N026 W007 1 SWNESW

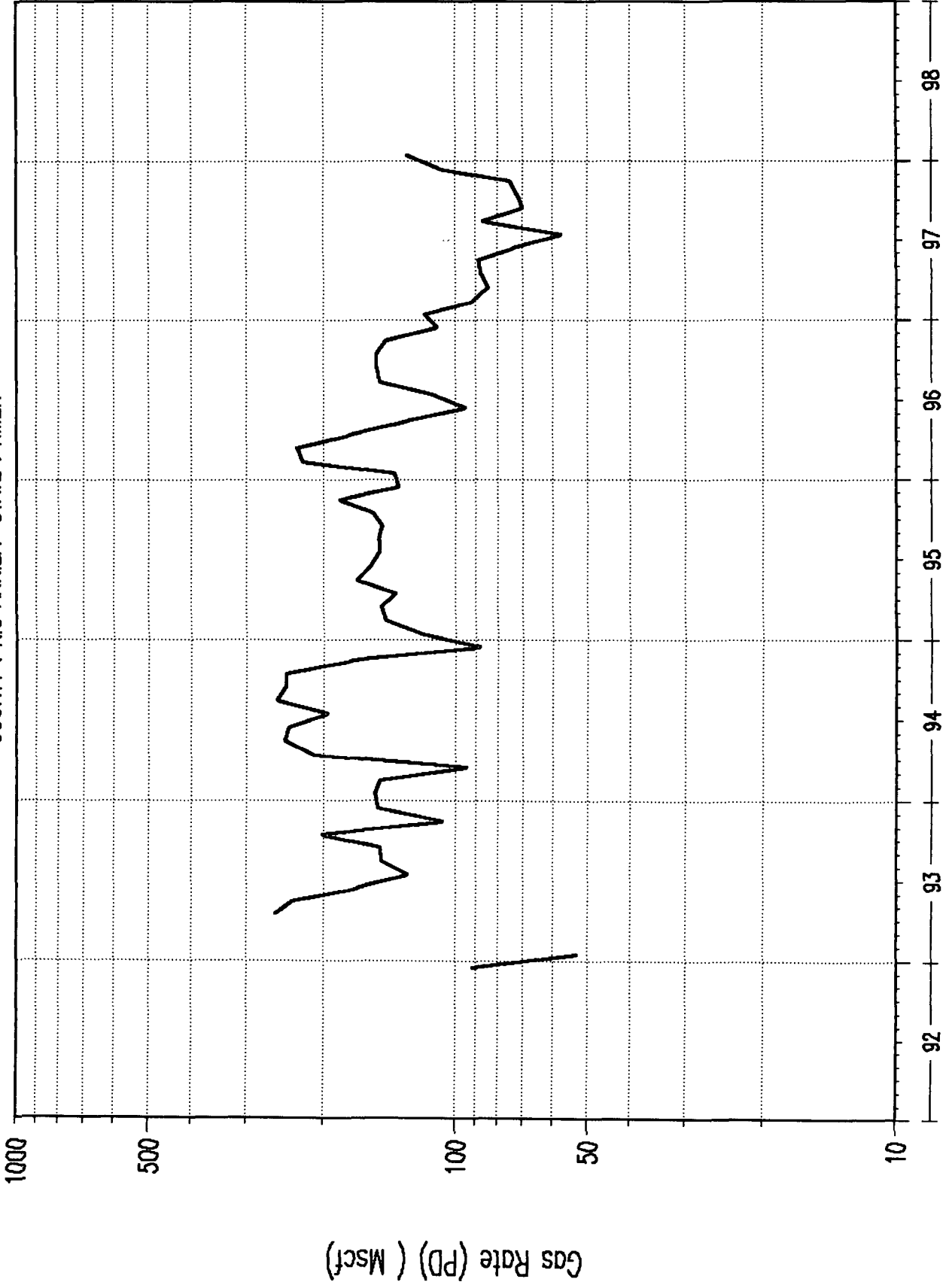
COUNTY : RIO ARRIBA STATE : NMEX

DATE	DAYS ON PROD Days	OIL VOL PROD bbls	GAS VOL PROD Mscf	WATER VOL PROD bbls	GAS RATE (PD) Mscf	OIL RATE (PD) bbls	WATER RATE (PD) bbls	CUM OIL PROD bbls	CUM GAS PROD Mscf
9601	31	12	2280	7	74	0.4	0.2	7464	823970
9602	29	18	3593	7	124	0.6	0.2	7482	827563
9603	31	19	4642	16	150	0.6	0.5	7501	832205
9604	30	9	3490	5	116	0.3	0.2	7510	835695
9605	31	9	3351	8	108	0.3	0.3	7519	839046
9606	30	17	2904	5	97	0.6	0.2	7536	841950
9607	31	10	2648	3	85	0.3	0.1	7546	844598
9608	31	5	2716	4	88	0.2	0.1	7551	847314
9609	25	23	2306	8	92	0.9	0.3	7574	849620
9610	31	10	2455	5	79	0.3	0.2	7584	852075
9611	30	14	2366	4	79	0.5	0.1	7598	854441
9612	31	13	2056	9	66	0.4	0.3	7611	856497
9701	31	0	2216	6	71	0.0	0.2	7611	858713
9702	28	15	2454	7	88	0.5	0.3	7626	861167
9703	31	13	2313	8	75	0.4	0.3	7639	863480
9704	30	7	2488	7	83	0.2	0.2	7646	865968
9705	30	3	2614	7	87	0.1	0.2	7649	868582
9706	30	0	2548	7	85	0.0	0.2	7649	871130
9707	31	97	2414	7	78	3.1	0.2	7746	873544
9708	31	0	2875	7	93	0.0	0.2	7746	876419
9709	31	15	2654	7	86	0.5	0.2	7761	879073
9710	31	5	2551	7	82	0.2	0.2	7766	881624
9711	30	25	2137	7	71	0.8	0.2	7791	883761
9712	30	3	1792	7	60	0.1	0.2	7794	885553
9801	19	7	1636	7	86	0.4	0.4	7801	887189

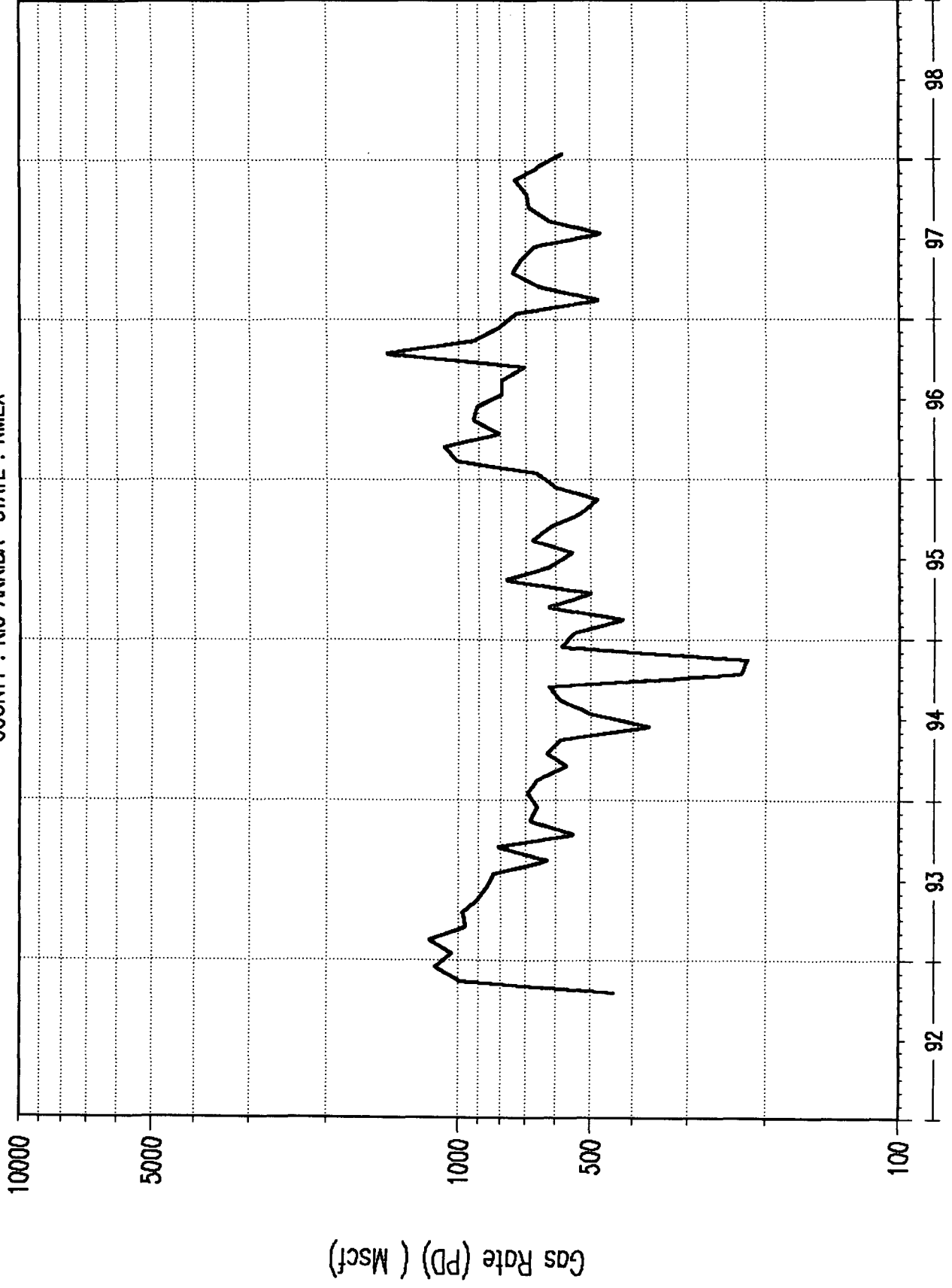
WELL: RINCON UNIT 192E:GL
LOCATION : N026 W007 1 SENWNW
COUNTY : RIO ARriba STATE : NMEX



WELL: RINCON UNIT 201E:GL
LOCATION : N026 W007 2 SENWSE
COUNTY : RIO ARRIBA STATE : NMEX



WELL: RINCON UNIT 57E:GL
LOCATION : N026 W007 1 NESWSE
COUNTY : RIO ARriba STATE : NMEX



--BHPCALC--

Calculated BHP and Z-factor from surface shut-in pressure

TEST DATE: Jul-97

WELL NAME : Rincon Unit 192 DK (Current Pressure)

GAS GRAVITY: 0.64 % N2 0.71
CONDENSATE (YES=1): 1 % CO2 1.06 %
RESERVOIR TEMP: 190 F % H2S 0.00 %
SURFACE TEMP: 60 F Pc = 672.15 %
DEPTH OF ZONE: 7144 Foot Tc = 367.02

SURFACE PRES	BHP	Z	BHP/Z
Psia	psia		psia
570	668	0.9479	705

Current pressure obtained after 5 day shut-in.

--BHPCALC--

Calculated BHP and Z-factor from surface shut-in pressure

TEST DATE: Jun-72

WELL NAME : Rincon Unit 192 DK (Original Pressure)

GAS GRAVITY:	0.64	% N2	0.71
CONDENSATE (YES=1):	1	% CO2	1.06 %
RESERVOIR TEMP:	190 F	% H2S	0.00 %
SURFACE TEMP:	60 F	Pc =	672.15 %
DEPTH OF ZONE:	7144 Foot	Tc =	367.02

SURFACE PRES	BHP	Z	BHP/Z
Psia	psia		psia
2515	3,011	0.8996	3,347

Original pressure obtained after 7 day shut-in following completion.

UNOCAL CORPORATION
P. O. BOX 350
BLOOMFIELD, NEW MEXICO 87413

DATE 12-20-81

WELL NAME: RINCON UNIT NO. 192E
FORMATION: GALLUP
FIELD:
COUNTY: RIO ARriba
STATE: NEW MEXICO

TYPE TEST: STATIC GRADIENT

ELEVATION:
TOTAL DEPTH:
PERFORATIONS:
TUBING SIZE:
CASING SIZE:
PACKER:
OTHER:

CASING PRESSURE: 654 DWT
TUBING PRESSURE: 649 DWT
OIL LEVEL: NONE
WATER LEVEL: NONE
TEMPERATURE: 134 DEGREES @ 6653'
AMERADA ELEMENT NUMBER: 64656
RANGE: 0-4000

INDIVIDUAL WELL DATA SHEET

WELL STATUS: SHUT-IN

=====

STATIC GRADIENT TRAVERSE

DEPTH IN FEET	PRESSURE PSIG	GRADIENT PSI/FOOT
0	647	
1000	667	0.020
2000	690	0.023
3000	710	0.020
4000	732	0.022
5000	752	0.020
6000	773	0.021
6253	773	0.020
6453	784	0.030
6653	789	0.025

H & H WIRELINE SERVICE
P. O. BOX 399
FLORA VISTA, N. MEX. 87415
OPERATOR: RICK BAIRD
UNIT NO. T-7

RU 192DK Forecast

Well	RU 192
Existing Completion Prior to DHC	DK
Annual Decline	4.27%
Monthly Decline Factor (Annual / 12)	0.3557
Average Monthly volume (Mcf) prior to DHC	2421
Average Yield (bbls/mcf) Oil	0.006
Average Yield (bbls/mcf) Water	0.003
Volume Prior to DHC (Mcf)	
	97 annual average
	97 annual average
	97 annual average

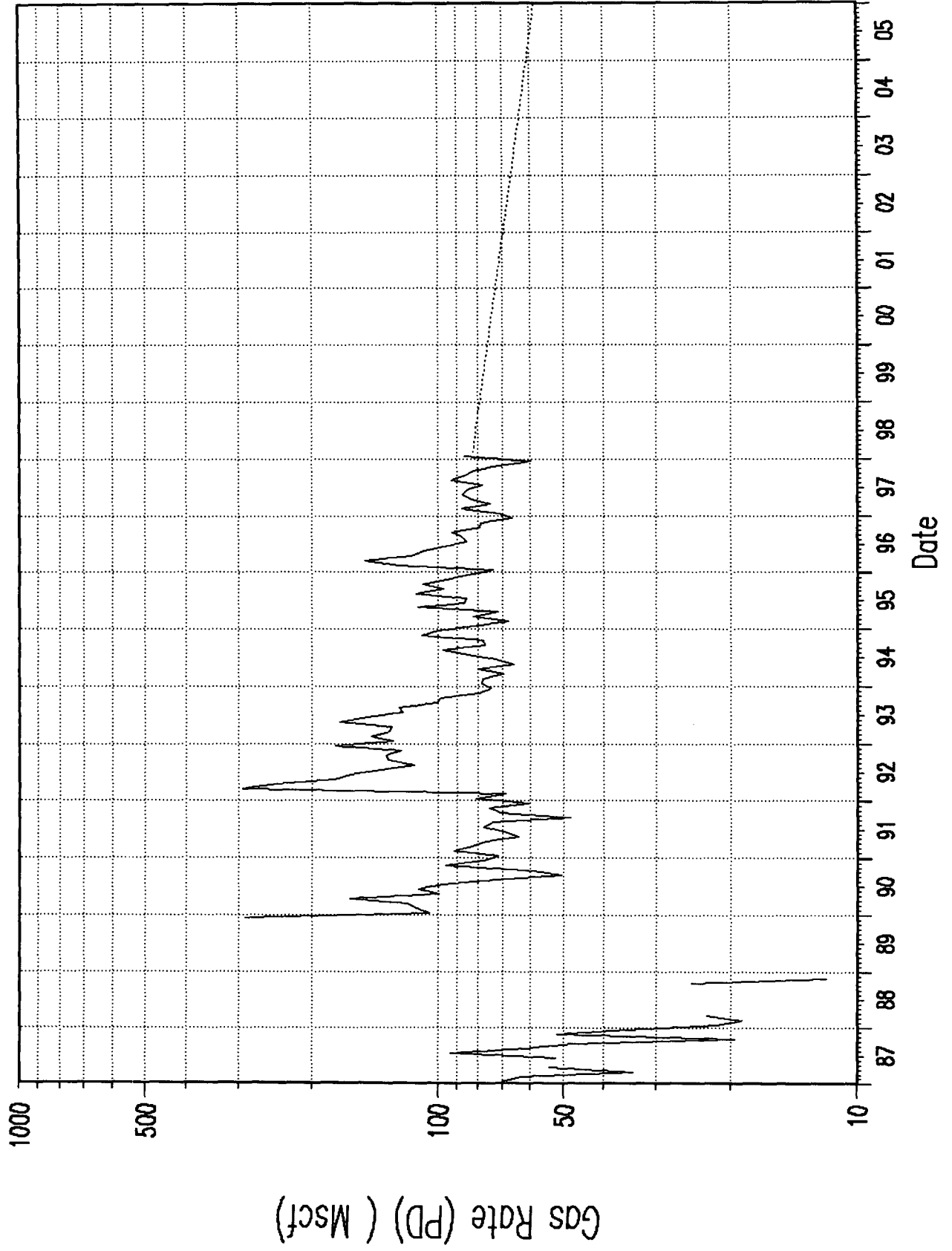
* Forecasted volumes to be adjusted for actual days on production

Month	DK Forecast (Mcf)	DK Forecast (Bbls-Oil)	DK Forecast (Bbls-Water)	
1	2784	16.7	8.4	
2	2663	16.0	8.0	
3	2492	15.0	7.5	
4	2483	14.9	7.4	
5	2474	14.8	7.4	
6	2466	14.8	7.4	
7	2457	14.7	7.4	
8	2448	14.7	7.3	
9	2439	14.6	7.3	
10	2431	14.6	7.3	
11	2422	14.5	7.3	
12	2413	14.5	7.2	
13	2405	14.4	7.2	
14	2396	14.4	7.2	
15	2388	14.3	7.2	
16	2379	14.3	7.1	+ DK flush volume
17	2371	14.2	7.1	+ DK flush volume
18	2362	14.2	7.1	
19	2354	14.1	7.1	
20	2346	14.1	7.0	
21	2337	14.0	7.0	
22	2329	14.0	7.0	
23	2321	13.9	7.0	
24	2312	13.9	6.9	

WELL: RINCON UNIT 192:DK

LOCATION : N026 W007 1 SWNESW

COUNTY : RIO ARriba STATE : NMEX



WELL: RINCON UNIT 192:DK
 LOCATION : N026 W007 1 SWNESW
 COUNTY : RIO ARRIBA STATE : NMEX

Cum. Gas Production: 887189.00 Mscf
 Remaining Recoverable Gas Reserves: 474062.72 Mscf
 Ultimate Recoverable Gas Reserves: 1361251.72 Mscf

SCHEDULE 1

Qi: 224.66 Mscf
 Di: 0.003635
 Hyperbolic B: 0.0000
 Start Date: 1998/02
 Monthly Nominal Decline (Dn): 0.003635
 Monthly Effective Decline (De): 0.003629
 Yearly Effective Decline (De): 0.042687
 Initial Forecast Rate: 82.37 Mscf
 Economic Limit: 20.00 Mscf
 Cumulative Produced: 887189.00 Mscf
 Total Forecasted Reserves: 474062.72 Mscf
 Total Recovered Reserves: 1361251.72 Mscf

DATE	AVERAGE DAILY RATE Mscf	MONTHLY FORECAST PROD. Mscf	CUM. PROD. Mscf	REMAINING RECOV. RESERVES Mscf
1998/02	82.22	2302.16	889491.19	471760.56
1998/03	81.92	2539.58	892030.75	469220.97
1998/04	81.63	2448.78	894479.50	466772.19
1998/05	81.33	2521.17	897000.69	464251.03
1998/06	81.03	2430.97	899431.69	461820.06
1998/07	80.74	2502.96	901934.63	459317.09
1998/08	80.45	2493.85	904428.44	456823.25
1998/09	80.15	2404.65	906833.13	454418.59
1998/10	79.86	2475.76	909308.88	451942.84
1998/11	79.57	2387.21	911696.06	449555.63
1998/12	79.28	2457.80	914153.88	447097.81
1999/01	79.00	2448.96	916602.88	444648.88
1999/02	78.71	2203.91	918806.75	442444.97
1999/03	78.42	2431.13	921237.88	440013.81
1999/04	78.14	2344.21	923582.13	437669.63
1999/05	77.86	2413.57	925995.69	435256.06
1999/06	77.58	2327.27	928322.94	432928.78
1999/07	77.29	2396.07	930719.00	430532.72
1999/08	77.01	2387.35	933106.38	428145.38
1999/09	76.73	2302.03	935408.38	425843.34
1999/10	76.46	2370.11	937778.50	423473.22
1999/11	76.18	2285.28	940063.75	421187.94
1999/12	75.90	2352.93	942416.69	418835.00
2000/01	75.62	2344.35	944761.06	416490.66
2000/02	75.35	2185.18	946946.25	414305.50
2000/03	75.08	2327.43	949273.69	411978.06
2000/04	74.80	2244.11	951517.75	409733.94
2000/05	74.53	2310.58	953828.38	407423.38

2000/06

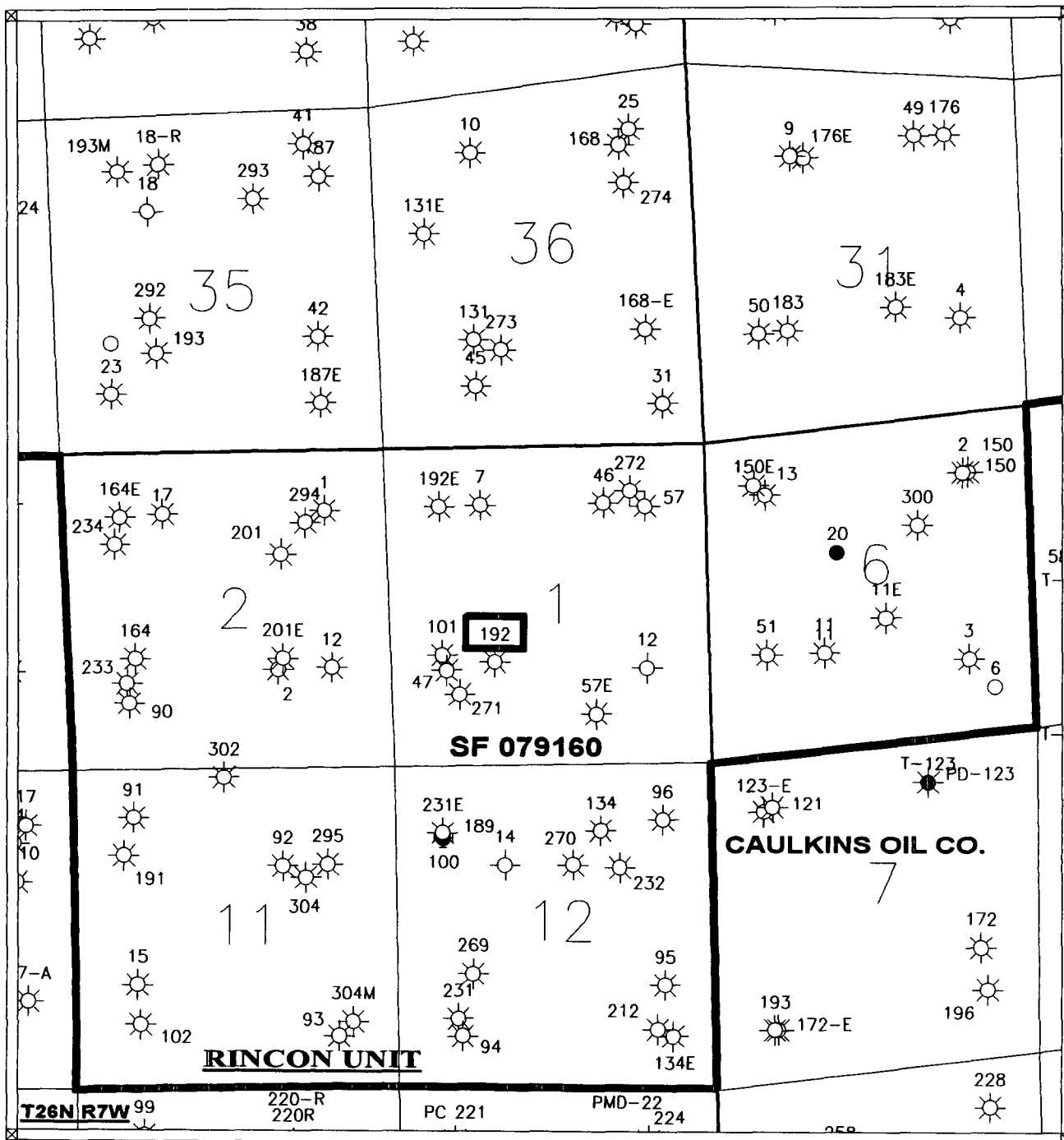
74.26

2227.86

956056.19

405195.50

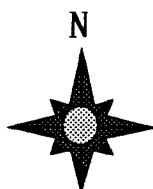
DATE	AVERAGE DAILY RATE Mscf	MONTHLY FORECAST PROD. Mscf	CUM. PROD. Mscf	REMAINING RECOV. RESERVES Mscf
2000/07	73.99	2293.80	958350.00	402901.72
2000/08	73.72	2285.47	960635.50	400616.25
2000/09	73.46	2203.74	962839.25	398412.50
2000/10	73.19	2268.88	965108.13	396143.63
2000/11	72.93	2187.76	967295.88	393955.88
2000/12	72.66	2252.48	969548.38	391703.38
2001/01	72.40	2244.35	971792.69	389459.03
2001/02	72.13	2019.75	973812.44	387439.28
2001/03	71.87	2228.02	976040.50	385211.25
2001/04	71.61	2148.34	978188.81	383062.91
2001/05	71.35	2211.95	980400.75	380850.94
2001/06	71.09	2132.73	982533.50	378718.22
2001/07	70.83	2195.88	984729.38	376522.34
2001/08	70.58	2187.95	986917.31	374334.38
2001/09	70.32	2109.63	989026.94	372224.75
2001/10	70.07	2172.07	991199.00	370052.69
2001/11	69.81	2094.39	993293.44	367958.31
2001/12	69.56	2156.33	995449.75	365801.97
2002/01	69.31	2148.52	997598.25	363653.44
2002/02	69.05	1933.49	999531.75	361719.97
2002/03	68.81	2132.97	1001664.75	359587.00
2002/04	68.55	2056.62	1003721.38	357530.38
2002/05	68.31	2117.49	1005838.81	355412.88
2002/06	68.06	2041.75	1007880.56	353371.13
2002/07	67.81	2102.14	1009982.75	351269.00
2002/08	67.57	2094.52	1012077.25	349174.47
2002/09	67.32	2019.59	1014096.88	347154.88
2002/10	67.08	2079.37	1016176.19	345075.50
2002/11	66.83	2004.98	1018181.19	343070.53
2002/12	66.59	2064.27	1020245.50	341006.25
2003/01	66.35	2056.80	1022302.25	338949.44



Scale 1:31093.33

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

0.1 0. 0.1 0.2 0.3 0.4 0.5 miles



SPIRIT ENERGY

New Name. Same Spirit. Spirit Unlimited.

OFFSET DATA & LEASE
RINCON UNIT NO. 192
OPERATOR: UNION OIL CO. OF CALIFORNIA

Scale 1:31093.33

Sandra M. Thoma

3/20/98

RU192.GPJ



New Name. Same Spirit.

A Business Unit of Unocal

March 20, 1998

Caulkins Oil Co.
P.O. Box 340
Bloomfield, NM 87413

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 Largo Gallup and Basin Dakota formations in the following Rincon Unit well, Rio Arriba County, New Mexico.

<u>Well</u>	<u>Lease</u>	<u>Legal Location</u>
192	SF 079160	1700' FSL, 1700' FWL, SW 1, T26N, R7W

If Caulkins, as an offset operator, has an objection to this proposal, please notify NMOCD within twenty days. If you have any questions regarding this application, please contact Tom Baiar at 915/685-6836.

Sincerely,

Spirit Energy 76
A Business Unit of UNOCAL

A handwritten signature in dark ink, appearing to read "Thomas E. Baiar".

Thomas E. Baiar
Petroleum Engineer