

2031

**KEVIN O. BUTLER & ASSOCIATES, INC.**

**500 W. Texas, Suite 955, Midland, Texas 79701 (915) 682-1178 / FAX (915) 687-5725**

September 23, 1996

Oil Conservation Division  
Energy & Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Re: 1996 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

Kevin O. Butler & Associates, Inc. ("KOB"), as Unit Operator for the South Caprock Queen Unit, respectfully submits for approval this 1996 Plan of Development for the period ending December 31, 1996.

Summary of 1995 Operations

No new wells were drilled in 1995. Oil production for 1995 was 1753 barrels. The current approximate daily production/status for each well is listed below:

<u>Well No.</u>	<u>Current Production/Status</u>
30-5	Shut-in producer
30-11	Shut-in producer
30-15	Shut-in producer
30-17	Shut-in producer
31-3	Shut-in producer
33-3	Shut-in producer, Plan to replace motor & bring back on production
33-12	2 BOPD + 4 BWPD
33-14	2 BOPD + 4 BWPD
28-15	Injects approx. 8 BWPD
30-10	Shut-in injector
30-16	Shut-in injector

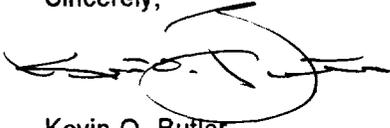
1996 Plan of Development

KOBA's plans for the property during 1996 include the following:

- Bring #33-3 well back on production at approximately 2-3 BOPD + 20 BWPD.
- Evaluate the status of all inactive wells for their potential to be returned to production.
- Evaluate the potential for injection to be re-established on a limited basis.
- Evaluate selected infill drilling potential.

Depending on the results of these evaluations and product pricing, some of this work may be done in the second half of the year. No development drilling is expected to occur in 1996. This plan may be modified or supplemented from time to time with the approval needed, when necessary, to meet changed conditions or to protect the interest of all parties to the Unit Agreement.

Sincerely,



Kevin O. Butler

KOB/ks

2031

KEVIN O. BUTLER & ASSOCIATES, INC.

500 W. Texas, Suite 955, Midland, TX 79701 (915) 682-1178 / FAX (915) 687-5725

OIL CONSERVATION DIVISION  
RECEIVED

October 12, 1995

195 00 24 8 52

Oil Conservation Division  
Energy & Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Re: 1995 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

Kevin O. Butler & Associates, Inc. ("KOB"), as Unit Operator for the South Caprock Queen Unit, respectfully submits for approval this 1995 Plan of Development for the period ending December 31, 1995.

Summary of 1994 Operations

No new wells were drilled in 1994. Oil production for 1994 was 1615 barrels. The current approximate daily production/status for each well is listed below:

<u>Well No.</u>	<u>Current Production/Status</u>
30-5	Shut-in producer
30-11	Shut-in producer
30-15	Shut-in producer
30-17	Shut-in producer
31-3	Shut-in producer
33-3	Shut-in producer
33-12	2 BOPD + 4 BWPD
33-14	2 BOPD + 4 BWPD
28-15	Injects approx. 8 BWPD
30-10	Shut-in injector
30-16	Shut-in injector

1995 Plan of Development

KOBA's plans for the property during 1995 include the following:

- Evaluate the status of all inactive wells for their potential to be returned to production.
- Evaluate the potential for injection to be re-established on a limited basis.
- Evaluate selected infill drilling potential.

Depending on the results of these evaluations and product pricing, some of this work may be done in the second half of the year. No development drilling is expected to occur in 1995. This plan may be modified or supplemented from time to time with the approval needed, when necessary, to meet changed conditions or to protect the interest of all parties to the Unit Agreement.

Sincerely,



Kevin O. Butler

KOB/ks

c:\wpw\ntscqupod

500 W. Texas, Suite 955, Midland, Texas 79701 (915) 682-1178

OIL CONSERVATION DIVISION  
RECEIVED  
APR 26 1994 10 50

April 26, 1994

Oil Conservation Division  
Energy & Minerals Division  
P.O. Box 2088  
Santa fe, NM 87504-2088

Re: 1994 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

Kevin O. Butler and Associates ("KOBA") as Unit Operator for the South Caprock Queen Unit, respectfully submits for approval this 1994 Plan of Development for the period ending December 31, 1994.

Summary of 1993 Operations

No new wells were drilled in 1993. Cumulative oil production for 1993 was 1106 barrels. The current approximate daily production/status for each well is listed below:

<u>Well No.</u>	<u>Current Production/Status</u>
30-5	Shut-in producer
30-11	Shut-in producer
30-15	Shut-in producer
30-17	Shut-in producer
31-3	Shut-in producer
33-3	1 BOPD + 11 BWPD
33-12	2 BOPD + 15 BWPD
33-14	2 BOPD + 19 BW
28-5	Injects 45 BWPD
30-0	Shut-in injector
30-6	Shut-in injector

1994 Plan of Development

The previous operator, Unocal, has sold their interest in the property to KOBA, effective 2/1/94. KOBA's plans for the property during 1994 include the following:

Evaluate the status of all inactive wells for their potential to be returned to production.

Evaluate the potential for injection to be reestablished on a limited basis.

Evaluate selected infill drilling potential.

Depending on the results of these evaluations and product pricing, some of this work may be done in the second half of the year. No development drilling is expected to occur in 1994. This plan may be modified or supplemented from time to time with the approval needed, when necessary, to meet changed conditions or to protect the interest of all parties to the Unit Agreement.

Sincerely,

Kevin O. Butler

/lg



2031

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

November 14, 1994

State of New Mexico  
Commissioner of Public Lands

310 OLD SANTA FE TRAIL P.O. BOX 1148

SANTA FE, NEW MEXICO 87504-1148

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

Kevin O. Butler & Associates  
500 W. Texas  
Suite 955  
Midland, Texas 79701

Attention: Ms. Kaye Smith

Re: Designation of Successor Unit Operator  
South Caprock Unit  
Chaves County, New Mexico

Dear Ms. Smith:

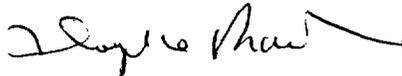
This office is in receipt of a designation of successor unit operator, wherein UNOCAL has resigned as unit operator of the South Caprock Queen Unit and designated Kevin O. Butler & Associates as the successor unit operator of the South Caprock Unit Area, Chaves County, New Mexico.

The Commissioner of Public Lands has this date approved the resignation of UNOCAL and the designation of Kevin O. Butler & Associates as the successor unit operator of this unit. This change in operators is effective February 1, 1994. In accordance with this approval, Kevin O. Butler & Associates is now responsible for all operations and the reporting of all production from the unit.

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: 

FLOYD O. PRANDO, Director  
Oil/Gas and Minerals Division  
(505) 827-5744

RP/FOP/pm

Enclos.

cc: Reader File

Oxy USA, Inc.

OCD

TRD

**Unocal North American  
Oil & Gas Division**  
Unocal Corporation  
1004 North Big Spring Street, Suite 300  
P.O. Box 3100  
Midland, Texas 79702  
Telephone (915) 684-8231

2031



Southwestern Region

March 23, 1993

Oil Conservation Division  
Energy & Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay, Director

1993 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

Union Oil Company of California as Unit Operator for the South Caprock Queen Unit, respectfully submits for approval this 1993 Plan of Development for the period ending December 31, 1993.

Summary of 1992 Operations

No new wells were drilled in 1992. Cumulative oil production for 1992 was 1595 barrels. The current daily production/status for each well is listed below:

<u>Well No.</u>	<u>Current Production/Status</u>
30-5	Shut-in producer
30-11	Shut-in producer
30-15	Shut-in producer
30-17	Shut-in producer
31-3	Shut-in producer
33-3	0.8 BO + 19 BW
33-12	0.8 BO + 29 BW
33-14	0.8 BO + 18 BW
28-5	Injects 66 BWPM
30-0	Shut-in injector
30-6	Shut-in injector

Oil Conversation Division  
March 23, 1993  
Page 2

1993 Plan of Development

No development drilling is planned for 1993. This plan may be modified or supplemented from time to time with the approval needed, when necessary, to meet changed conditions or to protect the interest of all parties to the Unit Agreement

Submitted this 23rd day of March, 1993.

Sincerely,

UNION OIL COMPANY OF CALIFORNIA  
dba UNOCAL

A handwritten signature in cursive script that reads "Linda H. Hicks".

Linda H. Hicks  
Supervisor of Contracts

LHH/jb  
Enclosures

UNION OIL CO OF CAL

SOUTH CAPROCK QUEEN UNIT TRACT

WELL#3

State	Dist	County	Location
NM(30)	2	005 CHAVES	33C 14S 31E

API #	Field (#8011274 )				Reservoir	
30-005-01190	CAPROCK (QUEEN)				QUEEN	
Month	Oil bbls	Cum Oil bbls	Gas mcf	Cum Gas mcf	Water bbls	No.of Wells
January	21	118784	0	1860	498	1
February	17	118801	0	1860	463	1
March	29	118830	0	1860	350	1
April	42	118872	0	1860	577	1
May	30	118902	0	1860	622	1
June	40	118942	0	1860	411	1
July	37	118979	0	1860	527	1
August	53	118979	0	1860	837	1
September	32	119011	0	1860	424	1
October	58	119069	0	1860	682	1
November	72	119141	0	1860	450	1
December	48	119189	0	1860	558	1
Total 1992	<del>426</del> 479	<del>119189</del> 119242	0	1860	<del>5562</del> 6399	1

UNION OIL CO OF CAL

SOUTH CAPROCK QUEEN UNIT TRACT

WELL#12

State	Dist	County	Location
NM(30)	2	005 CHAVES	33L 14S 31E

API #	Field (#8011274 )				Reservoir	
30-005-01180	CAPROCK (QUEEN)				QUEEN	
Month	Oil bbls	Cum Oil bbls	Gas mcf	Cum Gas mcf	Water bbls	No.of Wells
January	30	110680	0	1613	277	1
February	17	110697	0	1613	370	1
March	29	110726	0	1613	525	1
April	43	110769	0	1613	706	1
May	31	110800	0	1613	458	1
June	40	110840	0	1613	473	1
July	36	110876	0	1613	352	1
August	52	110876	0	1613	558	1
September	48	110924	0	1613	658	1
October	57	110981	0	1613	620	1
November	72	111053	0	1613	630	1
December	48	111101	0	1613	837	1
Total 1992	<del>451</del> 503	<del>111101</del> 111153	0	1613	<del>5906</del> 6464	1

UNION OIL CO OF CAL

SOUTH CAPROCK QUEEN UNIT TRACT

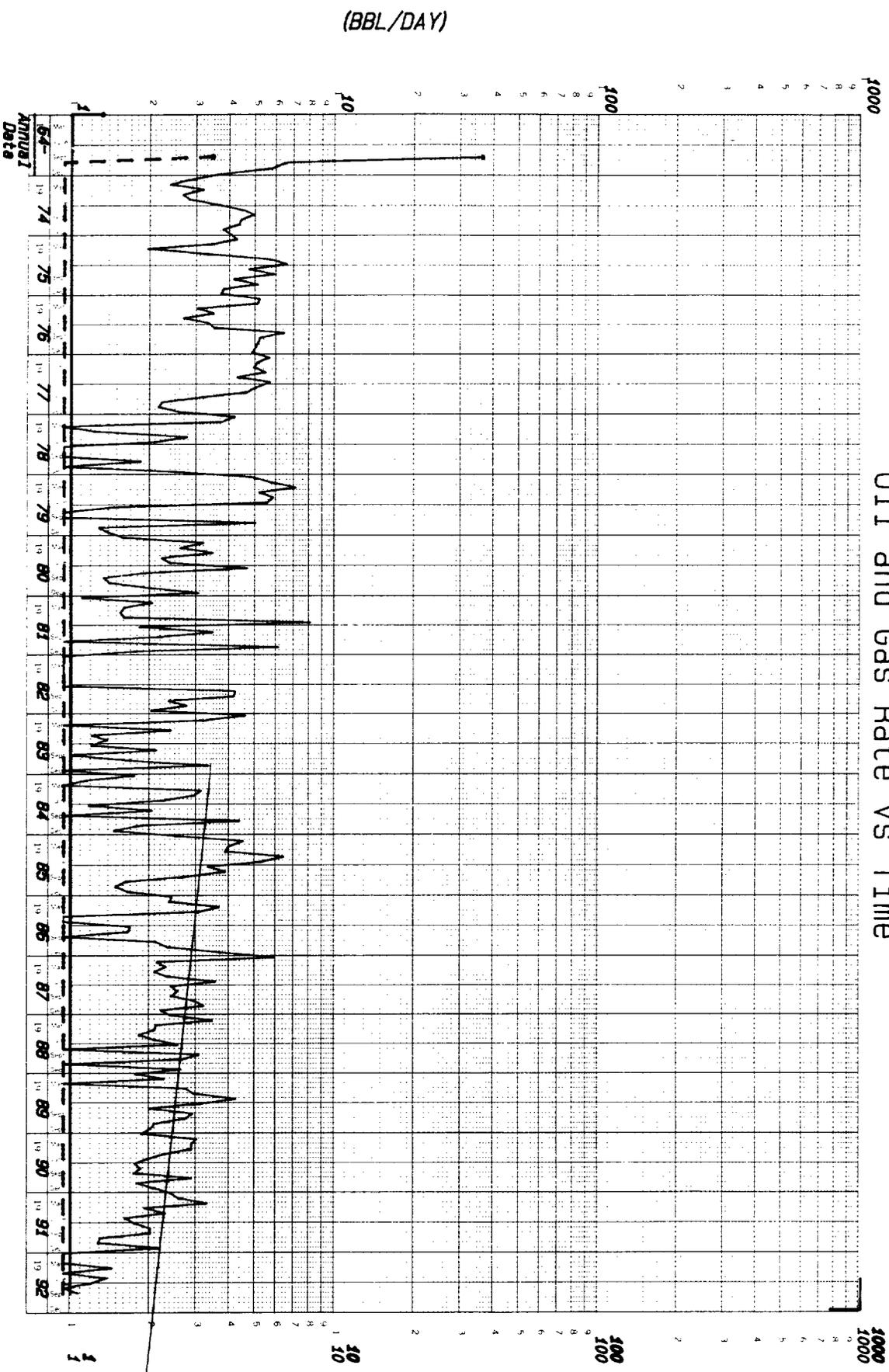
WELL#14

State	Dist	County	Location
NM(30)	2	005 CHAVES	33N 14S 31E

API #	Field (#8011274 )	Reservoir
30-005-01193	CAPROCK (QUEEN)	QUEEN

Month	Oil bbls	Cum Oil bbls	Gas mcf	Cum Gas mcf	Water bbls	No. of Wells
January	30	214663	0	26604	460	1
February	26	214689	0	26604	259	1
March	30	214719	0	26604	613	1
April	43	214762	0	26604	449	1
May	30	214792	0	26604	752	1
June	41	214833	0	26604	329	1
July	37	214870	0	26604	488	1
August	<del>55</del>	214870	0	26604	<del>961</del>	1
September	32	214902	0	26604	705	1
October	172	215074	0	26604	1736	1
November	71	215145	0	26604	720	1
December	48	215193	0	26604	527	1
Total 1992	<del>560</del> 613	<del>215193</del> 215246	0	26604	<del>7038</del> 7999	1

# Oil and Gas Rate vs Time



1 GEND  
 WELLS: \_\_\_\_\_  
 OIL \_\_\_\_\_  
 GAS - - - -

**UNOCAL** **ANDREWS DISTRICT**

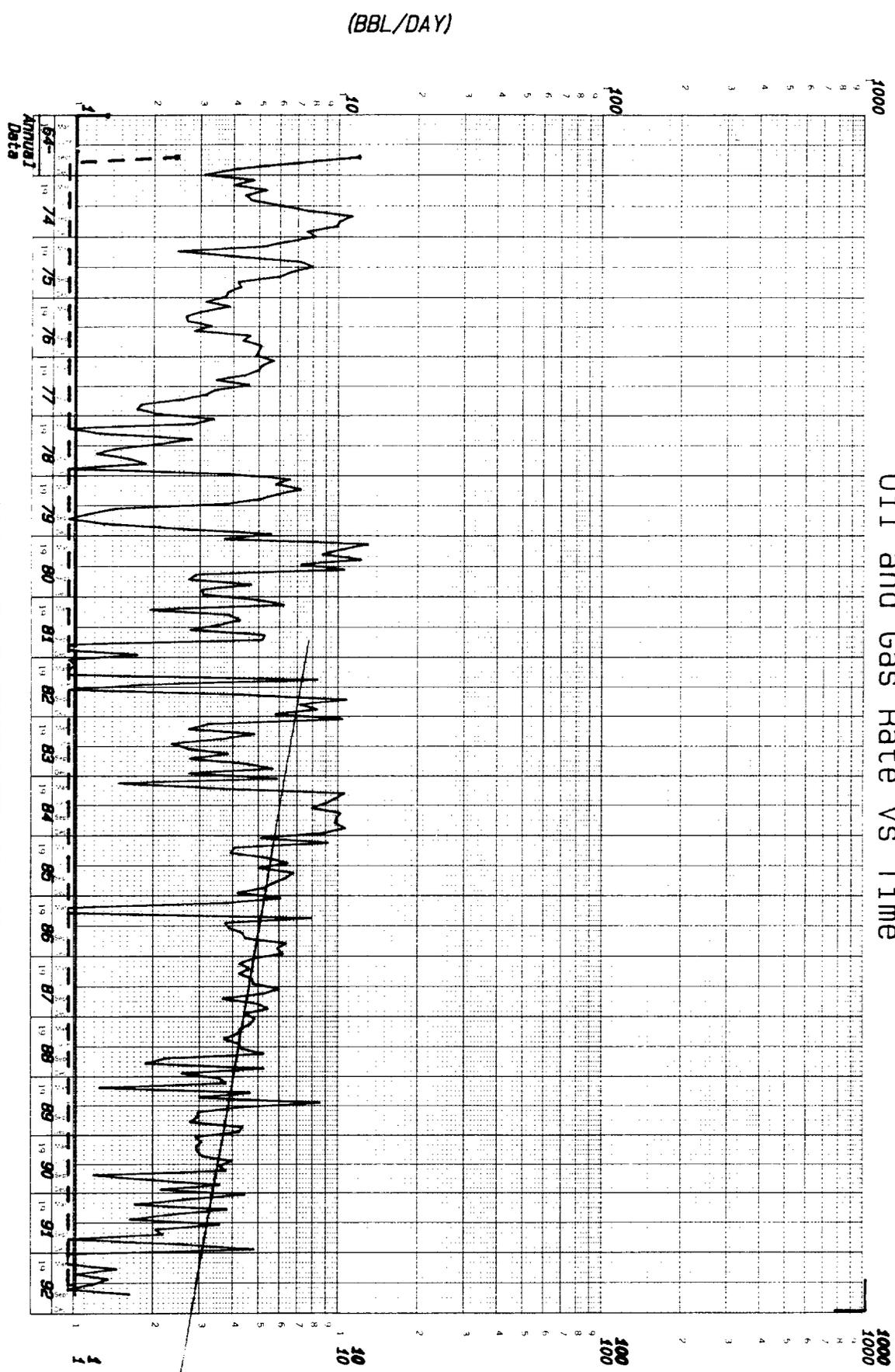
Lease: SOUTH CAPROCK QUEEN UNIT TRACT  
 Field: CAPROCK (QUEEN)  
 County: CHAVES NM  
 Operator: UNION OIL CO OF CAL  
 Retrieval Code: 150, 005, 14531E33N00GN

GN

Date: 01-22-93  
 Cumulative Bo : 214902  
 Cumulative Mcf: 26604

(MCF/DAY) (COUNT)  
 1000 1000  
 100 100  
 10 10  
 1

# Oil and Gas Rate vs Time



LEGEND	
WELLS	_____
OIL	_____
GAS	- - - - -

<b>UNOCAL</b>	<b>76</b>	<b>ANDREWS DISTRICT</b>
Lease:	SOUTH CARROCK QUEEN UNIT TRACT	
Field:	CARROCK (QUEEN)	
County:	CHAVES NM	
Operator:	UNION OIL CO OF CAL	
Retrieval Code:	150, 005, 14531E33L00GN	

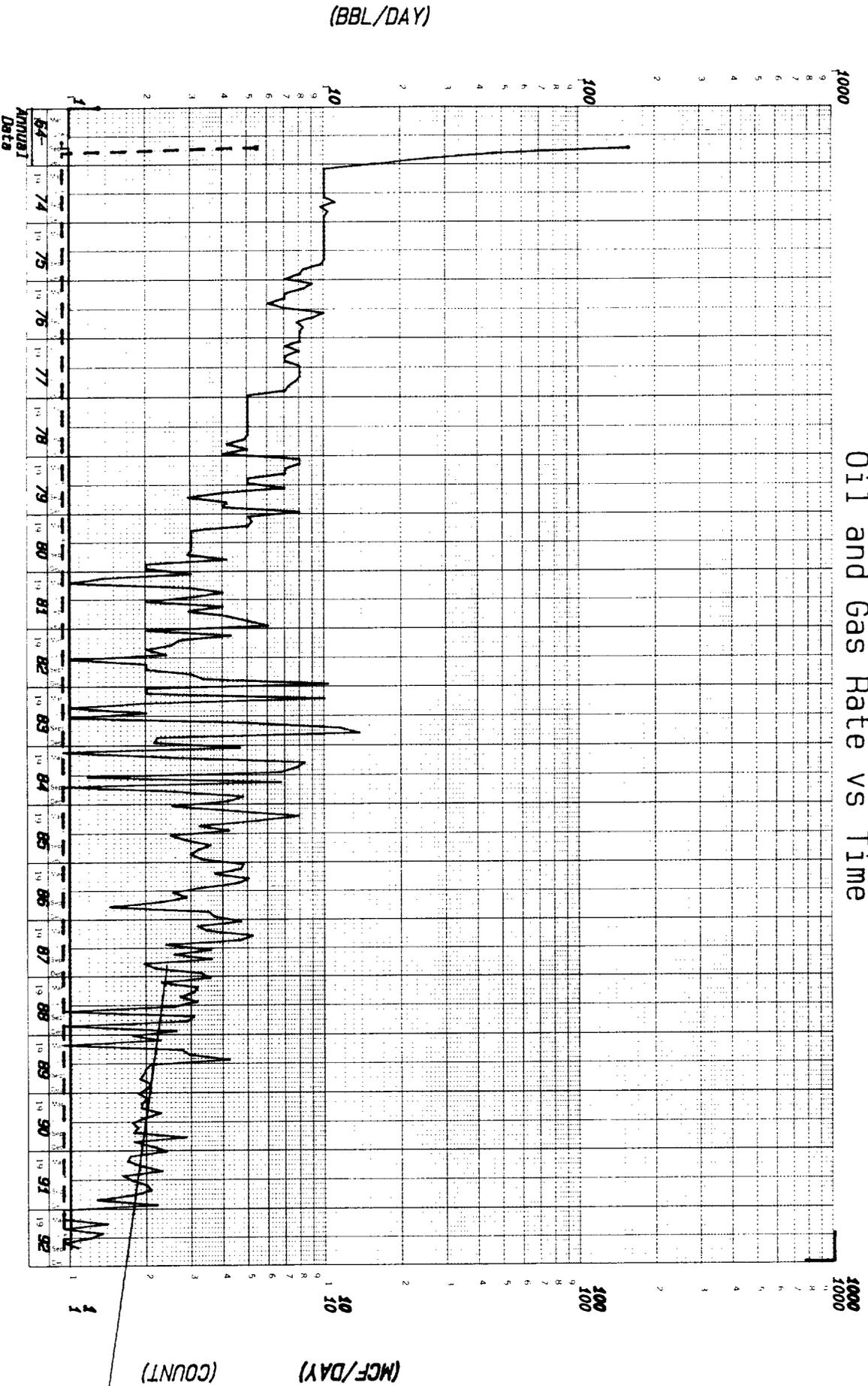
GN

Cumulative Bo : 140824

Cumulative Mcf: 1613

Date: 01-22-93

# Oil and Gas Rate vs Time



**LEGEND**

WELLS \_\_\_\_\_  
 OIL \_\_\_\_\_  
 GAS \_\_\_\_\_

**UNOCAL**

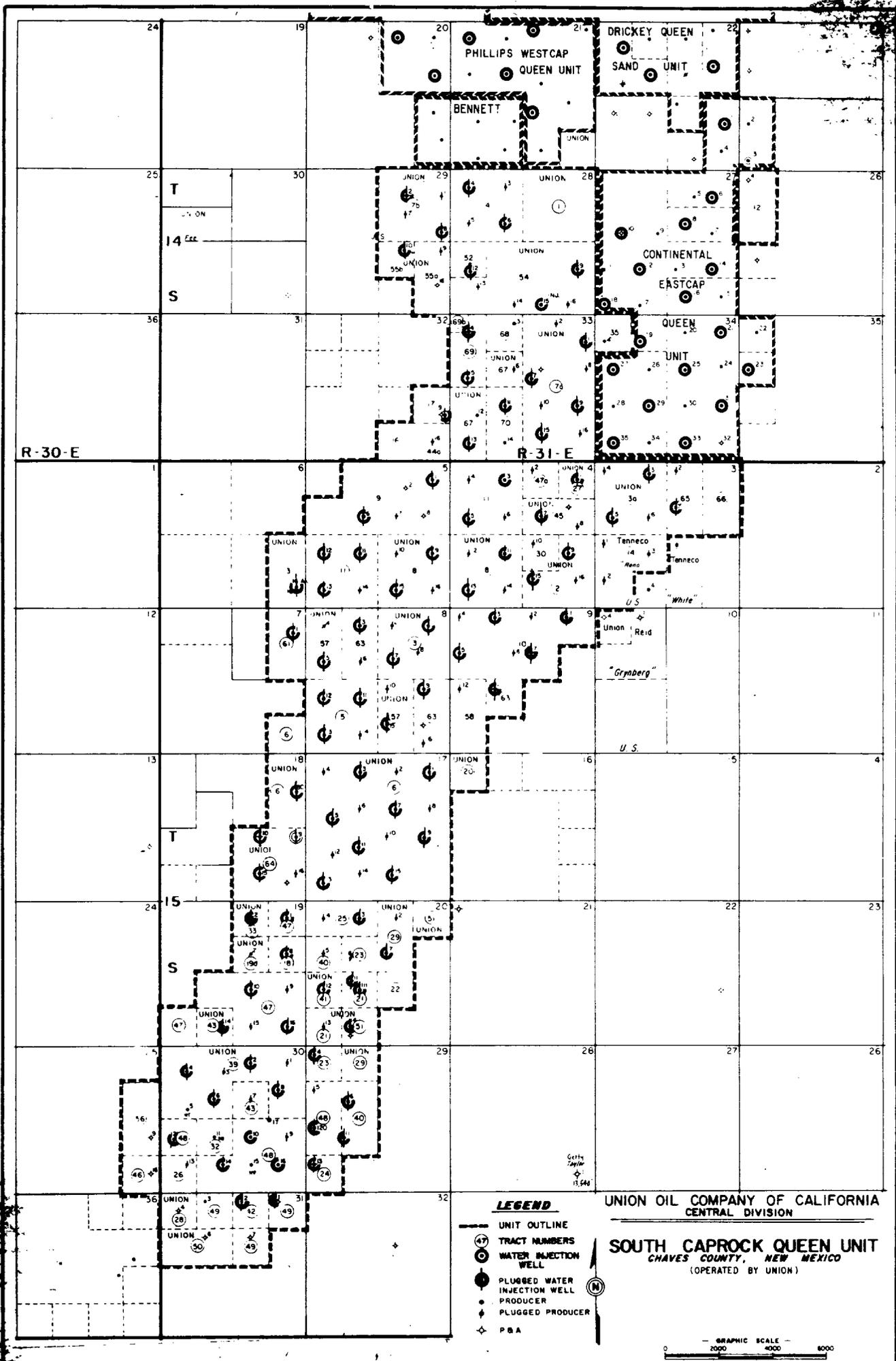


**ANDREWS DISTRICT**

Lease: SOUTH CAPROCK QUEEN UNIT TRACT  
 Field: CAPROCK (QUEEN)  
 County: CHAVES NM  
 Operator: UNION OIL CO OF CAL  
 Retrieval Code: 150, 005, 14S31E33C000AN

ON

Date: 01-22-93  
 Cumulative Bo : 119011  
 Cumulative Mcf: 10860



R-30-E

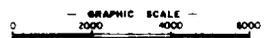
R-31-E

**LEGEND**

- UNIT OUTLINE
- ① TRACT NUMBERS
- ⊕ WATER INJECTION WELL
- ⊖ PLUGGED WATER INJECTION WELL
- PRODUCER
- ⚡ PLUGGED PRODUCER
- ⚡ P & A

UNION OIL COMPANY OF CALIFORNIA  
CENTRAL DIVISION

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO  
(OPERATED BY UNION)





JIM BACA  
COMMISSIONER

State of New Mexico  
OFFICE OF THE  
Commissioner of Public Lands  
Santa Fe

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

SLO REF NO. OG-1280

April 2, 1993

UNOCAL  
P.O. Box 3100  
Midland, Texas 79702

Attn: Ms. Linda H. Hicks

Re: 1993 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

The Commissioner of Public Lands has this date approved the above captioned Plan of Development. Our approval is subject to like approval by all other appropriate agencies.

The possibility of drainage by wells outside of the Unit Area and the need for further development of the unit may exist. You will be contacted at a later date regarding these possibilities.

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

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd Prando*  
FLOYD O. PRANDO, Director  
Oil and Gas Division  
(505) 827-5744

JB/FOP/pm  
cc: OCD ✓  
BLM



JIM BACA  
COMMISSIONER

State of New Mexico  
OFFICE OF THE  
Commissioner of Public Lands  
Santa Fe

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

SLO REF NO. OG-1300

May 5, 1993

UNOCAL  
P.O. Box 3100  
Midland, Texas 79702

Attn: Ms. Linda H. Hicks

Re: 1992 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

The Commissioner of Public Lands has this date approved the above captioned Plan of Development. Our approval is subject to like approval by all other appropriate agencies.

The possibility of drainage by wells outside of the Unit Area and the need for further development of the unit may exist. You will be contacted at a later date regarding these possibilities.

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

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd O. Prando*  
FLOYD O. PRANDO, Director  
Oil and Gas Division  
(505) 827-5744

JB/FOP/pm  
cc: OCD  
BLM

OIL CONSERVATION DIVISION  
RECEIVED

'92 MAR 27 AM 9 24

**UNOCAL** 

**Unocal North American  
Oil & Gas Division**  
Unocal Corporation  
1004 North Big Spring Street, Suite 300  
P.O. Box 3100  
Midland, Texas 79702  
Telephone (915) 684-8231

Southwestern Region

#2031

March 24, 1992

Oil Conservation Division  
Energy & Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 88201-2088

Attn: Mr. William J. LeMay, Director  
Oil & Gas Division

**RE: 1992 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico**

Gentlemen:

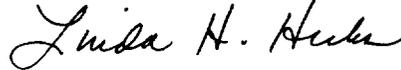
Please be advised that Union is in the process of selling its interest in referenced Unit, to be effective on or about May 1, 1992.

Union requests your permission to waive the April 1, 1992 deadline for filing a Plan of Development so that the new Operator can file the 1992 Plan at such time as Union resigns as Operator.

Please advise immediately if you do not approve this delay.

Sincerely,

UNION OIL COMPANY OF CALIFORNIA



Linda H. Hicks  
Supervisor of Contracts

LHH/jb  
HICKS/SCAPROCK



JIM BACA  
COMMISSIONER

State of New Mexico  
OFFICE OF THE  
Commissioner of Public Lands  
Santa Fe

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

April 8, 1992

UNOCAL Oil & Gas Division  
P. O. Box 3100  
Midland, Texas 79702

Attn: Ms. Linda Hicks

Re: South Caprock Queen Unit  
1992 Plan of Development  
Possible Change of Operator  
Chaves County, New Mexico

Dear Ms. Hicks:

This office is in receipt of your letter of March 24, 1992, wherein you have requested an extension in time within which to submit your 1992 Plan of Development for the South Caprock Queen Unit, Chaves County, New Mexico. Please be advised that you are hereby granted an extension to May 1, 1992 within which time to submit your 1992 Plan of Development for the above mentioned unit. Our approval is subject to like approval by the Bureau of Land Management.

Your letter also advises this office that UNOCAL is in the process of selling its interest in this Unit. Please be advised that pursuant to Sections 8 and 9 of the South Caprock Queen Unit, a copy of which has been enclosed, any change in unit operators must be approved by the Commissioner and the Bureau of Land Management. Please also be advised that we can not approve a change in unit operators until a Surface Improvement Damage Bond has been filed with this office by the successor operator.

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

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Floyd O. Prando*  
FLOYD O. PRANDO, Director  
Oil/Gas and Minerals Division  
(505) 827-5744  
JB/FOP/pm  
encls.  
cc: Reader File  
OCD

Unocal North American  
Oil & Gas Division  
Unocal Corporation  
1004 North Big Spring Street, Suite 300  
P.O. Box 3100  
Midland, Texas 79702  
Telephone (915) 684-8231

**UNOCAL** 76

4-5-92  
D-Unit letter  
Thx  
Ry

Southwestern Region

April 28, 1992

Oil Conservation Division  
Energy & Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay, Director

1992 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

Union Oil Company of California as Unit Operator for the South Caprock Queen Unit, respectfully submits for approval this 1992 Plan of Development for the period ending December 31, 1992.

Summary of 1991 Operations

No new wells were drilled in 1991. Cumulative oil production for 1991 was 2227 barrels. The current daily production/status for each well is listed below:

<u>Well No.</u>	<u>Current Production/Status</u>
30-5	Shut-in producer
30-11	Shut-in producer
30-15	Shut-in producer
30-17	Shut-in producer
31-3	Shut-in producer
33-3	1 BO + 17 BW
33-12	1 BO + 9 BW
33-14	1 BO + 15 BW
28-5	Injects 1235 BWPM @ 1000 psi
30-0	Shut-in injector
30-6	Shut-in injector

Bureau of Land Management  
April 28, 1992  
Page 2

1992 Plan of Development

No development drilling is planned for 1992. This plan may be modified or supplemented from time to time with the approval needed, when necessary, to meet changed conditions or to protect the interest of all parties to the Unit Agreement

Submitted this 28th day of April, 1992.

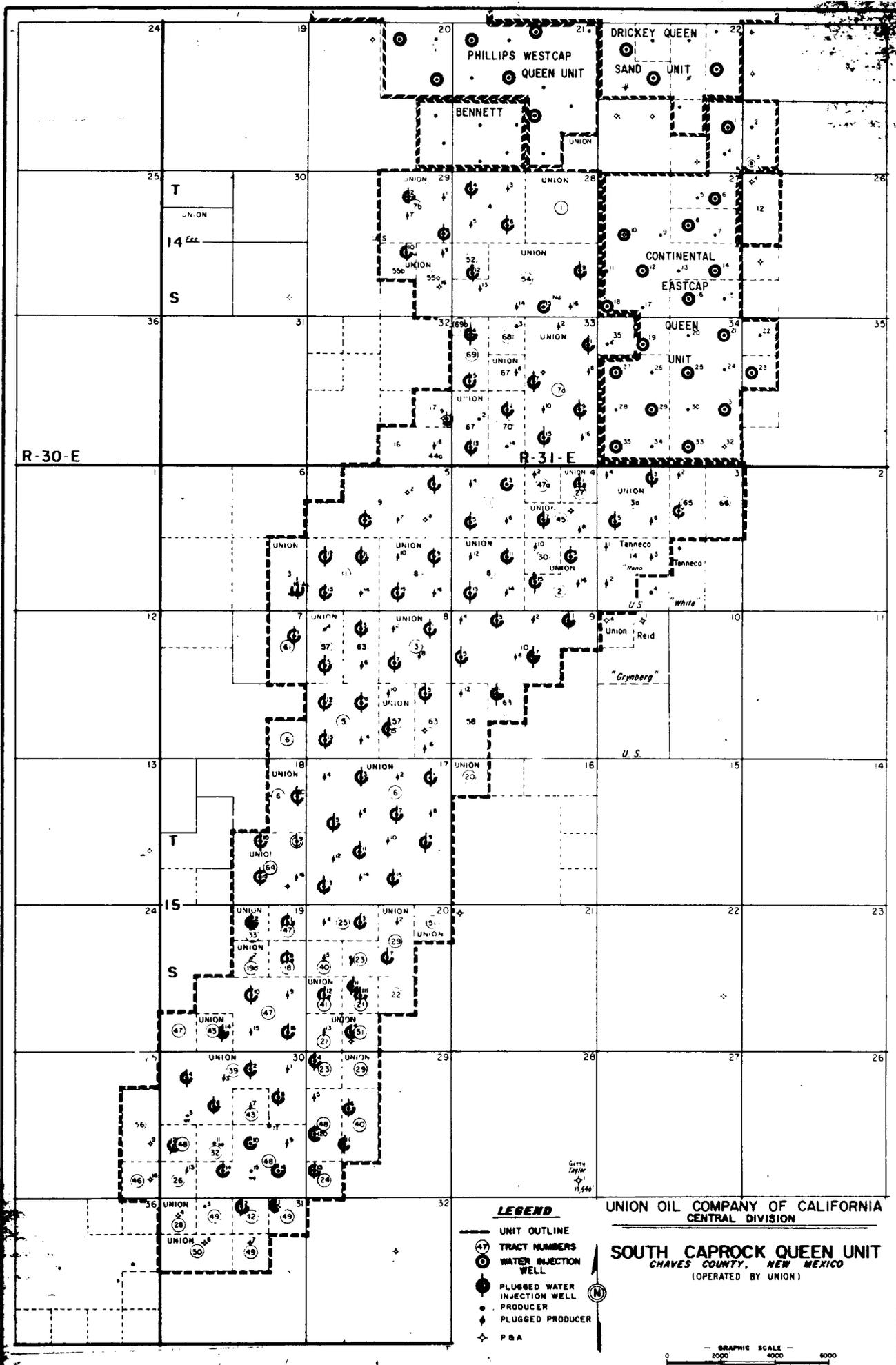
Sincerely,

UNION OIL COMPANY OF CALIFORNIA  
dba UNOCAL



Linda H. Hicks  
Supervisor of Contracts

LHH/jb  
Enclosures



**LEGEND**

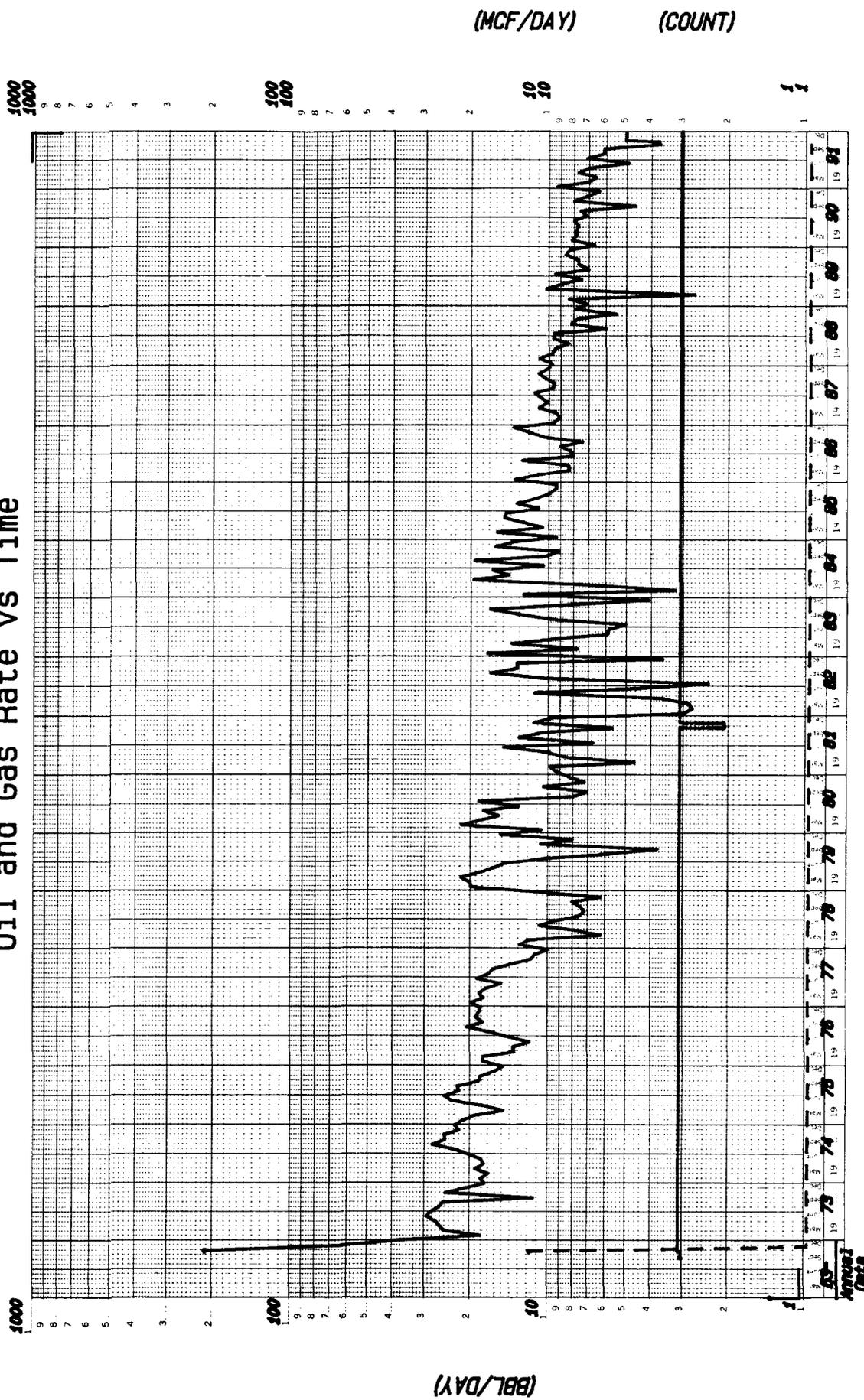
- UNIT OUTLINE
- ④ TRACT NUMBERS
- WATER INJECTION WELL
- PLUGGED WATER INJECTION WELL
- PRODUCER
- / PLUGGED PRODUCER
- ◆ P.B.A.

UNION OIL COMPANY OF CALIFORNIA  
CENTRAL DIVISION

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO  
(OPERATED BY UNION)



# Oil and Gas Rate vs Time



**UNOCAL**  **ANDREWS DISTRICT**

Lease: SOUTH CARROCK QUEEN UNIT  
 Field: WELLS 33-3, 33-12, 33-14  
 County: CHAVES NW  
 Operator:  
 Retrieval Code: 150, 005, 14S31E33

**LEGEND**

WELLS ———  
 OIL ———  
 GAS - - -

Date: 03-09-92  
 Cumulative Bo : 443739  
 Cumulative Mcf: 30077

OIL CONSERVATION DIVISION  
RECEIVED  
'91 AUG 22 AM 9 21

Unocal North American  
Oil & Gas Division  
Unocal Corporation  
1004 North Big Spring Street, Suite 300  
P.O. Box 3100  
Midland, Texas 79702  
Telephone (915) 684-8231

#2031

8-26-91  
D-Unit letter  
Thx  
Ry



Southwestern Region

August 19, 1991

Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay  
Director

RE: 1991 PLAN OF DEVELOPMENT  
SOUTH CAPROCK QUEEN UNIT  
CHAVES COUNTY, NEW MEXICO

Gentlemen:

Union Oil Company of California as Unit Operator for the South Caprock Queen Unit, respectfully submits for approval this 1991 Plan of Development for the period ending December 31, 1991.

Summary of 1990 Operations

No new wells were drilled in 1990. Cumulative oil production for 1990 was 2590 barrels. The current daily production/status for each well is listed below:

<u>Well No.</u>	<u>Current Production/Status</u>
30-5	Shut-in producer
30-11	Shut-in producer
30-15	Shut-in producer
30-17	Shut-in producer
31-3	Shut-in producer
33-3	3 BO + 18 BW
33-12	3 BO + 14 BW
33-14	3 BO + 23 BW
28-5	Injects 1650 BWPM @ 1000 psi
30-0	Shut-in injector
30-6	Shut-in injector

Oil Conservation Division  
August 19, 1991  
Page 2

1991 Plan of Development

No development drilling is planned for 1991. This plan may be modified or supplemented from time to time with the approval needed, when necessary, to meet changed conditions or to protect the interest of all parties to the Unit Agreement.

Submitted this 19 day of August, 1991.

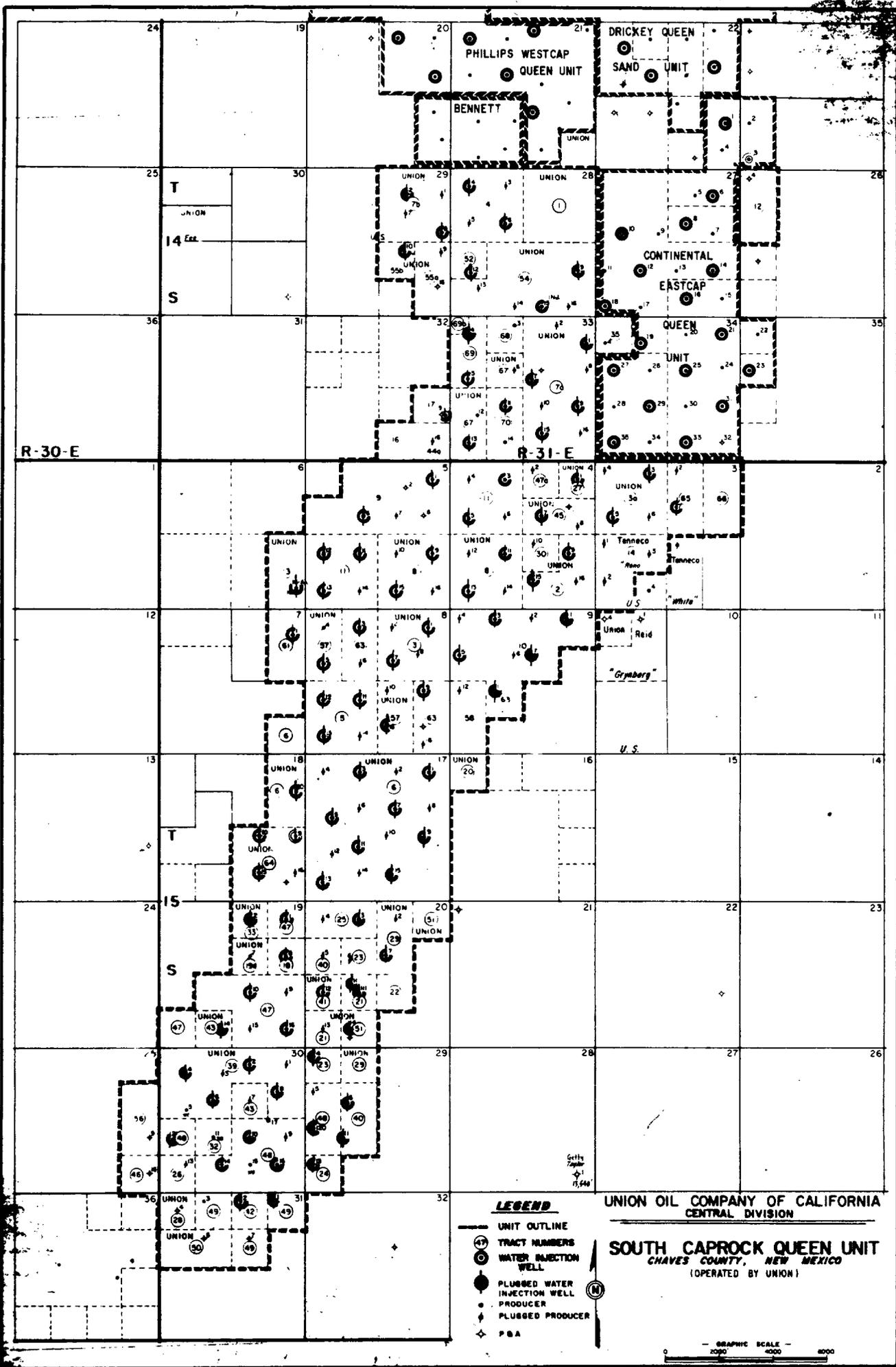
Sincerely,

UNION OIL COMPANY OF CALIFORNIA  
dba UNOCAL



Linda H. Hicks  
Supervisor of Contracts

LHH/jb



R-30-E

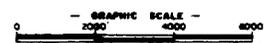
R-31-E

**LEGEND**

- UNIT OUTLINE
- ④ TRACT NUMBERS
- ⊙ WATER INJECTION WELL
- PLUGGED WATER INJECTION WELL
- ⊕ PRODUCER
- ⊖ PLUGGED PRODUCER
- ⋄ P & A

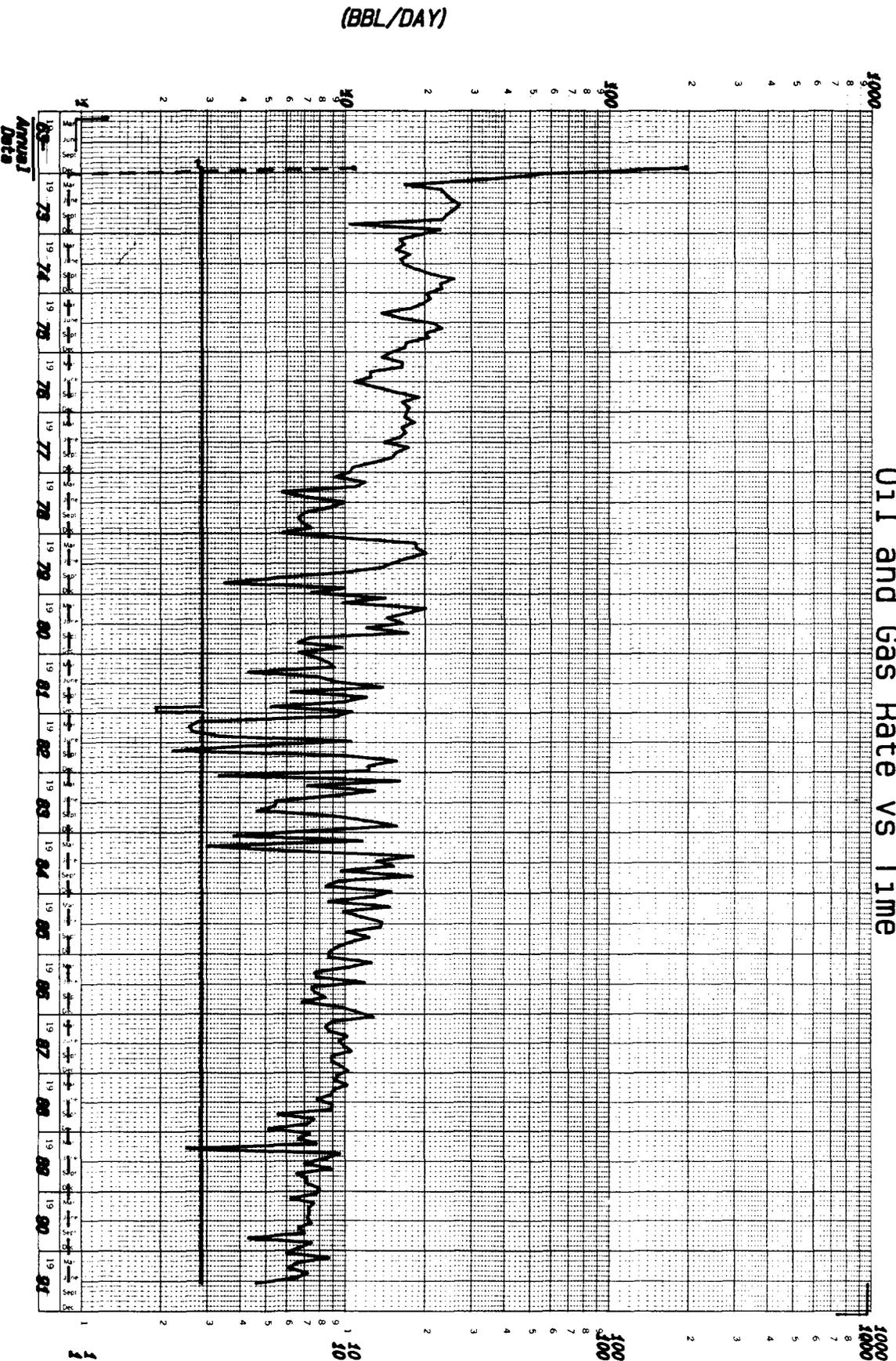
UNION OIL COMPANY OF CALIFORNIA  
CENTRAL DIVISION

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO  
(OPERATED BY UNION)



Getty  
Taylor  
1964

# Oil and Gas Rate vs Time



LEGEND	
WELLS	_____
OIL	_____
GAS	_____

<b>UNOCAL</b>		<b>MIDLAND DISTRICT</b>
Lessee:	SOUTH CARROCK QUEEN UNIT	
Field:	CARROCK QUEEN	
County:	CHAVES NM	
Operator:	UNION OIL CO OF CALIF	
Retrieval Code:	150, 005, 14S31E33...	

Date: 08-08-91  
 Cumulative Bo : 443041  
 Cumulative Mcf: 30077

(MCF/DAY) (COUNT)

Dwight's Energydata, Inc. DLOOK 4.20  
 Production data from file: CAPROCK.IND  
 Lease: SOUTH CAPROCK QUEEN UNIT

Record # 1 Run date: 08/08/91  
 Retrieval code: 150,005,14S31E33  
 Well #:

Month	Oil bbls	Cum Oil bbls	Gas mcf	Cum Gas mcf	Water bbls	No. of Wells
August	291	432141	0	30077	3820	3
September	288	432429	0	30077	4102	3
October	302	432731	0	30077	2297	3
November	322	433053	0	30077	2253	3
December	304	433357	0	30077	1680	3
Total 1987	3613	433357	0	30077	35800	3
January	296	433653	0	30077	1666	3
February	299	433952	0	30077	1678	3
March	293	434245	0	30077	1871	3
April	277	434522	0	30077	1835	3
May	253	434775	0	30077	2196	3
June	281	435056	0	30077	2994	3
July	290	435346	0	30077	1965	3
August	180	435526	0	30077	2774	3
September	249	435775	0	30077	2250	3
October	227	436002	0	30077	2258	3
November	161	436163	0	30077	2285	3
December	240	436403	0	30077	1563	3
Total 1988	3046	436403	0	30077	25335	3
January	217	436620	0	30077	1898	3
February	230	436850	0	30077	2086	3
March	82	436932	0	30077	2189	3
April	302	437234	0	30077	1878	3
May	273	437507	0	30077	4698	3
June	220	437727	0	30077	1261	3
July	288	438015	0	30077	1688	3
August	212	438227	0	30077	1688	3
September	232	438459	0	30077	2250	3
October	226	438685	0	30077	1612	3
November	253	438938	0	30077	1860	3
December	253	439191	0	30077	2108	3
Total 1989	2788	439191	0	30077	25216	3
January	202	439393	0	30077	1748	3
February	224	439617	0	30077	1748	3
March	237	439854	0	30077	2120	3
April	230	440084	0	30077	1950	3
May	234	440318	0	30077	2263	3
June	235	440553	0	30077	1944	3
July	217	440770	0	30077	1748	3
August	229	440999	0	30077	1199	3
September	140	441139	0	30077	1410	3
October	236	441375	0	30077	1767	3
November	212	441587	0	30077	1950	3
December	194	441781	0	30077	1547	3
Total 1990	2590	441781	0	30077	21394	3

Dwight's Energydata, Inc. DLOOK 4.20  
Production data from file: CAPROCK.IND  
Lease: SOUTH CAPROCK QUEEN UNIT

Record # 1 Run date: 08/08/91  
Retrieval code: 150,005,14S31E33  
Well #:

Month	Oil bbls	Cum Oil bbls	Gas mcf	Cum Gas mcf	Water bbls	No.of Wells
January	284	442065	0	30077	2077	3
February	193	442258	0	30077	1399	3
March	199	442457	0	30077	1678	3
April	227	442684	0	30077	2130	3
May	213	442897	0	30077	1798	3
June	144	443041	0	30077	1650	3
Total 1991	1260	443041	0	30077	10732	3



State of New Mexico  
Commissioner of Public Lands

W. R. Humphries  
COMMISSIONER April 27, 1990

# 2031

Advisory Board

George Clark  
Chairman

Kristin Conniff  
Vice Chairman

Melvin Cordova

Joe Kelly

Robert Portillos

Nancy Lynch Vigil

Rex Wilson

UNOCAL  
P.O. Box 3100  
Midland, Texas 79702

ATTN: Ms. Linda Hicks

RE: South Caprock Queen Unit  
1990 Plan of Development

Gentlemen:

The Commissioner of Public Lands has this date approved the 1990 Plan of Development for the South Caprock Queen Unit. Our approval is subject to like approval by all other appropriate agencies.

The possibility of drainage by wells outside of the Unit Area and the need for further development of the Unit may exist. You will be contacted at a later date regarding these possibilities.

Enclosed is an approved copy of the 1990 Plan of Development for your files. If we may be of further help, please do not hesitate to contact this office at (505) 827-5746.

Very truly yours,

W.R. HUMPHRIES,  
COMMISSIONER OF PUBLIC LANDS

BY:

FLOYD O. PRANDO, Director  
Oil and Gas Division  
(505) 827-5746

cc: OCD - Santa Fe, New Mexico  
BLM  
Unit Correspondence File  
Unit P.O.D. File

WRH/FOP/SMH

UNOCAL DIVISION  
1990 FEB 29 AM 9 33

**Unocal North American  
Oil & Gas Division**  
Unocal Corporation  
1004 North Big Spring Street, Suite 300  
P.O. Box 3100  
Midland, Texas 79702  
Telephone (915) 684-8231

**UNOCAL** 76

#2031

Southwestern Region

**March 28, 1990**

**Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088**

**Attn: Mr. William J. LeMay,  
Director**

**Re: 1990 Plan of Development  
~~South Caprock Queen Unit~~  
Chaves County, New Mexico  
Caprock Queen Prospect  
(7381)**

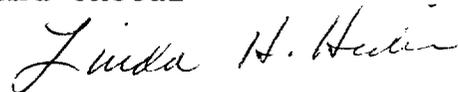
**Gentlemen:**

Please find enclosed for your approval two copies of Union's 1990 Plan of Development for the South Caprock Queen Unit.

Should you have any questions, please let me know.

Sincerely yours,

Union Oil Company of California  
dba Unocal



**Linda H. Hicks  
Supervisor of Contracts**

LHH:jpp

Enclosures

1990 PLAN OF DEVELOPMENT  
SOUTH CAPROCK QUEEN UNIT  
CHAVES COUNTY, NEW MEXICO

TO: Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay,  
Director

Union Oil Company of California as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960 (No. 14-08-0001-7284) respectfully submits for approval this 1990 Plan of Development for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1990.

Summary of 1989 Operations

No new wells were drilled in 1989. Cumulative oil production in 1989 was 4844 BO. The current production for each well in the Unit is listed below.

<u>Well No.</u>	<u>Current Production</u>
5-30	Shut-in
11-30	Shut-in
15-30	Shut-in
17-30	Shut-in
3-31	Shut-in
3-33	2 BO + 27 BW
12-33	3 BO + 17 BW
14-33	3 BO + 30 BW

PLAN OF DEVELOPMENT FOR 1990

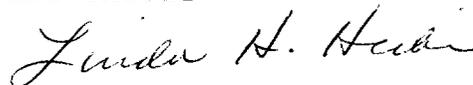
No development drilling is planned for 1990. The Unit area is currently under review for possible deep potential.

This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

Submitted this 27 day of March, 1990.

Sincerely yours,

Union Oil Company of California  
dba Unocal

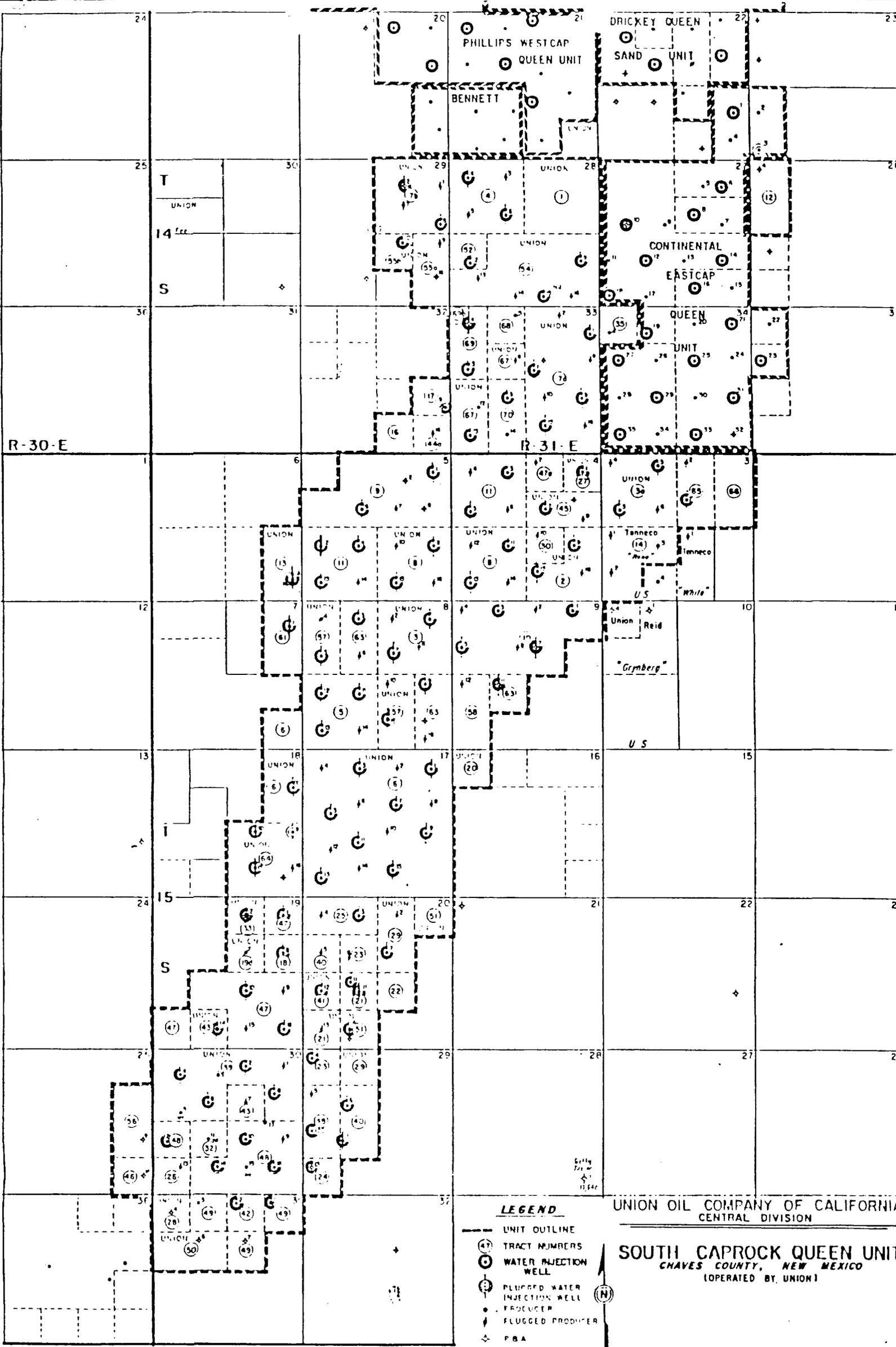


Linda H. Hicks  
Supervisor of Contracts

LHH:jpp

South Caprock Queen Unit

	<u>Oil</u> <u>(Bbls)</u>	<u>Gas</u> <u>(MCF)</u>
<u>1988</u>		
Jan.	707	0
Feb.	765	0
Mar.	782	0
Apr.	770	0
May	1466	0
June	874	0
July	764	0
Aug.	710	0
Sept.	667	0
Oct.	651	0
Nov.	668	0
Dec.	635	0
<u>1989</u>		
Jan.	652	0
Feb.	584	0
Mar.	293	0
Apr.	732	0
May	461	0
June	641	0
July	288	0
Aug.	212	0
Sept.	240	0
Oct.	248	0
Nov.	240	0
Dec.	253	0



**LEGEND**

- UNIT OUTLINE
- (17) TRACT NUMBERS
- (G) WATER INJECTION WELL
- (P) PLUGGED WATER INJECTION WELL
- PRODUCER
- P PLUGGED PRODUCER
- ◇ PBA

UNION OIL COMPANY OF CALIFORNIA  
CENTRAL DIVISION

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO  
(OPERATED BY UNION)



GRAPHIC SCALE  
0 2000 4000 6000

1990 PLAN OF DEVELOPMENT  
SOUTH CAPROCK QUEEN UNIT  
CHAVES COUNTY, NEW MEXICO

TO: Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay,  
Director

Union Oil Company of California as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960 (No. 14-08-0001-7284) respectfully submits for approval this 1990 Plan of Development for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1990.

Summary of 1989 Operations

No new wells were drilled in 1989. Cumulative oil production in 1989 was 4844 BO. The current production for each well in the Unit is listed below.

Well No.                      Current Production

5-30	Shut-in
11-30	Shut-in
15-30	Shut-in
17-30	Shut-in
3-31	Shut-in
3-33	2 BO + 27 BW
12-33	3 BO + 17 BW
14-33	3 BO + 30 BW

PLAN OF DEVELOPMENT FOR 1990

No development drilling is planned for 1990. The Unit area is currently under review for possible deep potential.

This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

Submitted this 27 day of March, 1990.

Sincerely yours,

Union Oil Company of California  
dba Unocal

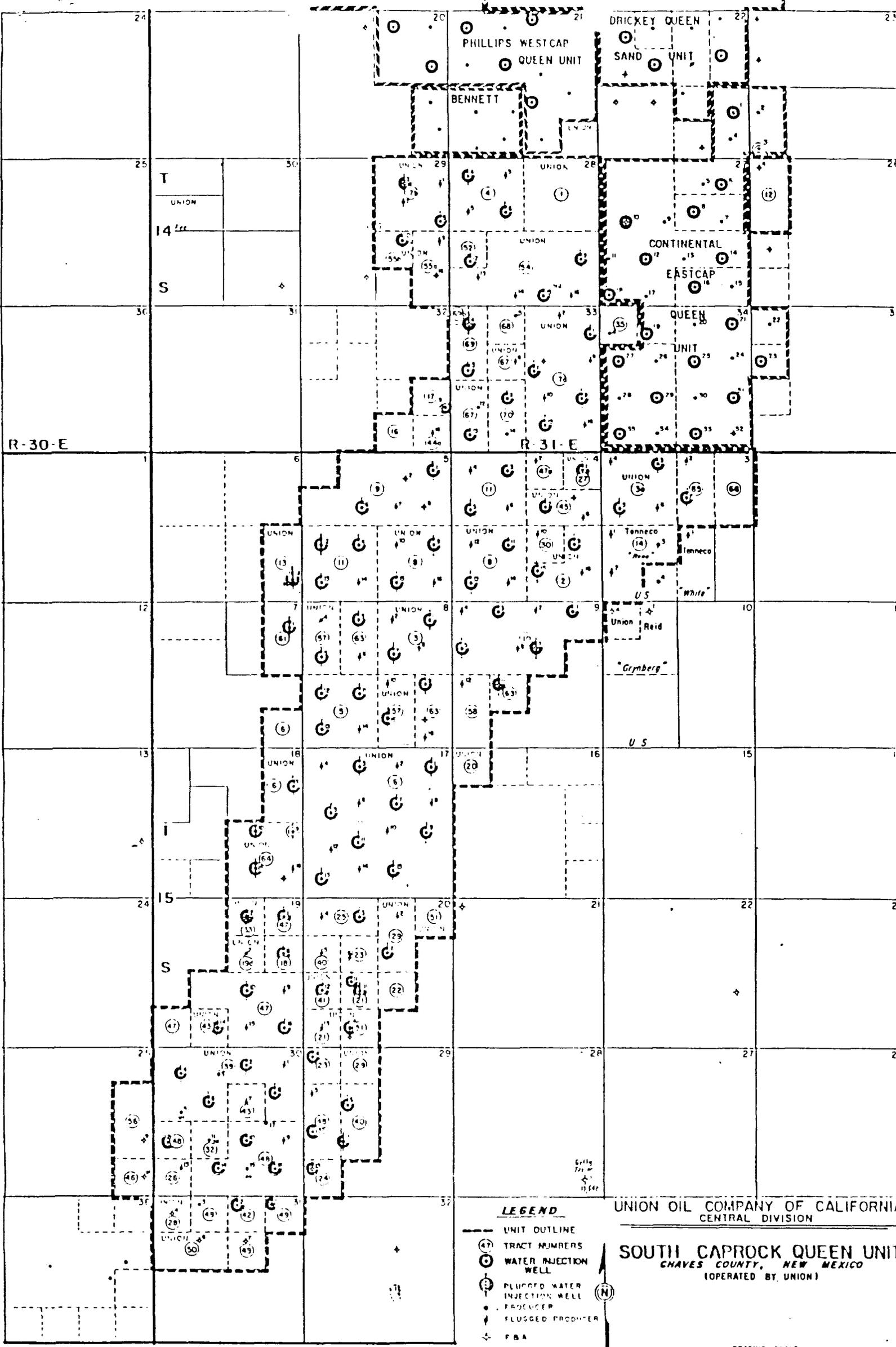


Linda H. Hicks  
Supervisor of Contracts

LHH:jpp

South Caprock Queen Unit

	<u>Oil</u> <u>(Bbls)</u>	<u>Gas</u> <u>(MCF)</u>
<u>1988</u>		
Jan.	707	0
Feb.	765	0
Mar.	782	0
Apr.	770	0
May	1466	0
June	874	0
July	764	0
Aug.	710	0
Sept.	667	0
Oct.	651	0
Nov.	668	0
Dec.	635	0
<u>1989</u>		
Jan.	652	0
Feb.	584	0
Mar.	293	0
Apr.	732	0
May	461	0
June	641	0
July	288	0
Aug.	212	0
Sept.	240	0
Oct.	248	0
Nov.	240	0
Dec.	253	0



R-30-E

R-31-E

**LEGEND**

- UNIT OUTLINE
- (17) TRACT NUMBERS
- (G) WATER INJECTION WELL
- (G) PLUGGED WATER INJECTION WELL
- PRODUCER
- PLUGGED PRODUCER
- F&A

UNION OIL COMPANY OF CALIFORNIA  
CENTRAL DIVISION

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO  
(OPERATED BY UNION)

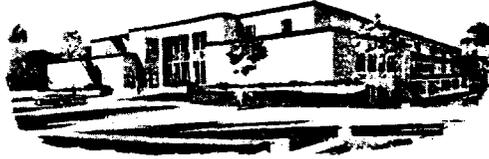


GRAPHIC SCALE  
0 2000 4000 8000

State of New Mexico



W.R. HUMPHRIES  
COMMISSIONER



Commissioner of Public Lands

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

June 16, 1989

Unocal Oil and Gas Division  
P.O. Box 671  
Midland, Texas 79702

#2031

ATTN: Linda Hicks  
  
RE: 1989 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

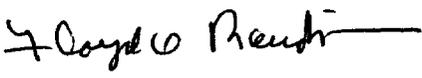
Gentlemen:

We received your initial Plan of Development (letter of February 27, 1989) and the additional information provided in your letter of June 5, 1989 for the South Caprock Queen Unit. The Commissioner of Public Lands has this date approved the above captioned 1989 Plan of Development. Our approval is subject to like approval by all other appropriate agencies.

Enclosed is an approved copy for your files. If we may be of further help, please do not hesitate to contact us.

Very truly yours,

W.R. HUMPHRIES  
COMMISSIONER OF PUBLIC LANDS

BY:   
FLOYD O. PRANDO, Director  
Oil and Gas Division  
(505) 827-5749

cc: OCD - Santa Fe, New Mexico  
BLM  
Unit Correspondence File

WRH/FOP/SMH

Unocal Oil & Gas Division  
Unocal Corporation  
1004 North Big Spring Street, P.O. Box 67  
Midland, Texas 79702  
Telephone (915) 682-9731



**UNOCAL** 76

#2031

February 27, 1989

Midland District  
Central Region

Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay,  
Director

1989 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico  
Caprock Queen Prospect (7381)

Gentlemen:

Please find enclosed for your approval two copies of Union's 1989 Plan of Development for the South Caprock Queen Unit.

Should you have any questions, please let me know.

Sincerely yours,

Union Oil Company of California

A handwritten signature in cursive script that reads "Linda H. Hicks".

Linda H. Hicks  
Landman

LHH:jpp

Enclosures

1989 PLAN OF DEVELOPMENT  
SOUTH CAPROCK QUEEN UNIT  
CHAVES COUNTY, NEW MEXICO

TO: Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay,  
Director

Union Oil Company of California as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960 (No. 14-08-0001-7284) respectfully submits for approval this 1989 Plan of Development for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1989.

SUMMARY OF 1988 OPERATIONS:

No new wells were drilled in 1988. Production for the past year is summarized in the table below.

<u>Total 1988 Production</u>		<u>Current Test</u>	
<u>Well No.</u>	<u>BO</u>	<u>BOPD</u>	<u>BWPD</u>
5-30	847	3	125
11-30	1613	4	240
15-30	1643	5	350
17-30	1145	3	75
3-31	348	1	40
3-33	947	2	28
12-33	1491	4	15
14-33	<u>766</u>	<u>2</u>	<u>25</u>
Totals	8800	24	898

PLAN OF DEVELOPMENT FOR 1989

Based on the reservoir modeling and simulations performed last year, the various enhanced oil recovery methods will be preliminarily screened for recovery efficiency and economic benefits. No new wells are planned for 1989.

This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

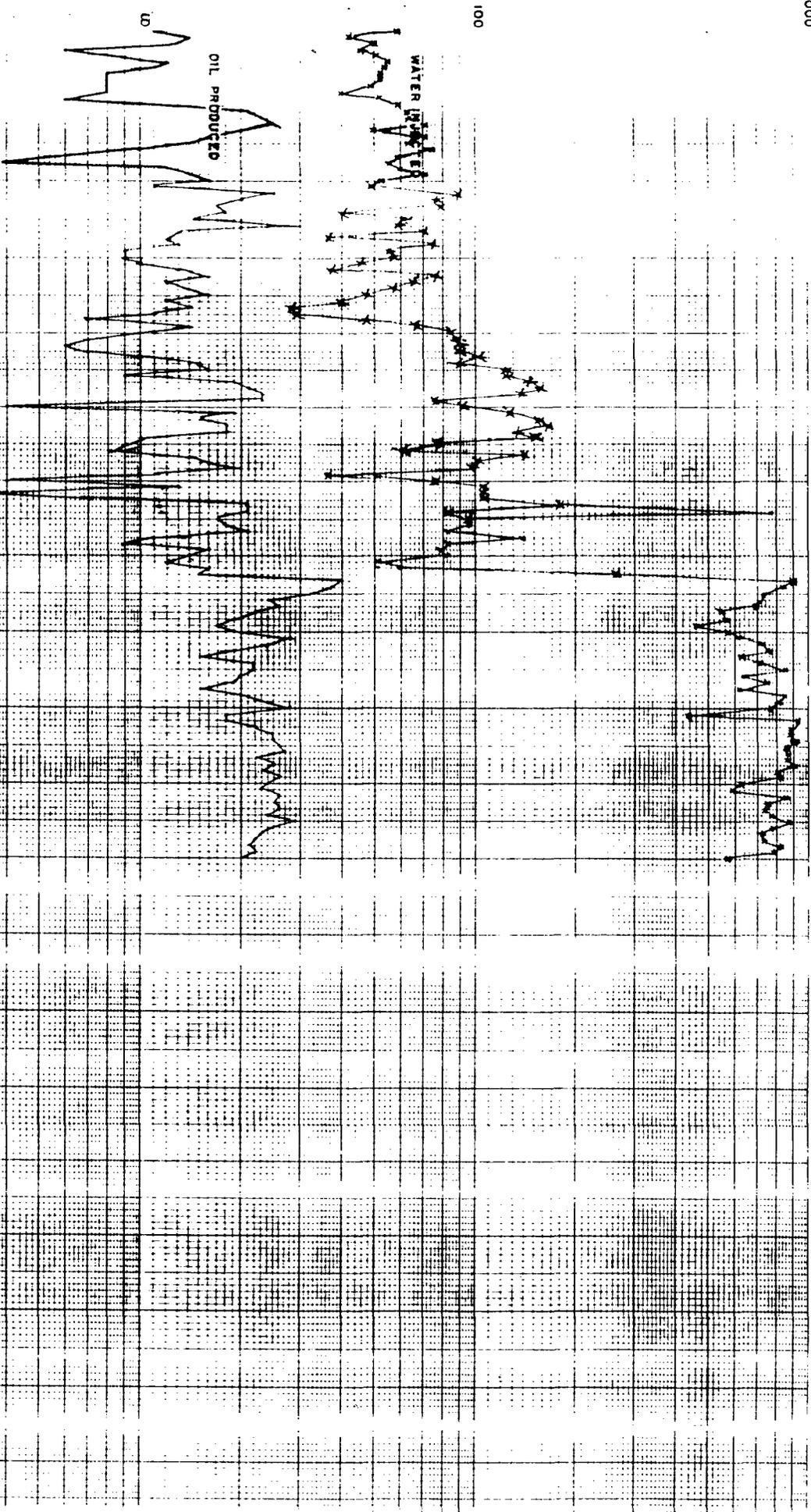
Submitted this 27 day of February, 1989.

Sincerely yours,

Union Oil Company of California

  
Hugh H. Herndon  
District Land Manager

100



78 79 80 81 82 83 84 85 86 1987 88 89 90 91 1992 93 1994 95 96 97

OIL PRODUCED

WATER INJECTED



1989 PLAN OF DEVELOPMENT  
SOUTH CAPROCK QUEEN UNIT  
CHAVES COUNTY, NEW MEXICO

TO: Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87504-2088

Attn: Mr. William J. LeMay,  
Director

Union Oil Company of California as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960 (No. 14-08-0001-7284) respectfully submits for approval this 1989 Plan of Development for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1989.

SUMMARY OF 1988 OPERATIONS:

No new wells were drilled in 1988. Production for the past year is summarized in the table below.

<u>Total 1988 Production</u>		<u>Current Test</u>	
<u>Well No.</u>	<u>BO</u>	<u>BOPD</u>	<u>BWPD</u>
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11-30	1613	4	240
15-30	1643	5	350
17-30	1145	3	75
3-31	348	1	40
3-33	947	2	28
12-33	1491	4	15
14-33	<u>766</u>	<u>2</u>	<u>25</u>
Totals	8800	24	898

PLAN OF DEVELOPMENT FOR 1989

Based on the reservoir modeling and simulations performed last year, the various enhanced oil recovery methods will be preliminarily screened for recovery efficiency and economic benefits. No new wells are planned for 1989.

This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

Submitted this 27 day of February, 1989.

Sincerely yours,

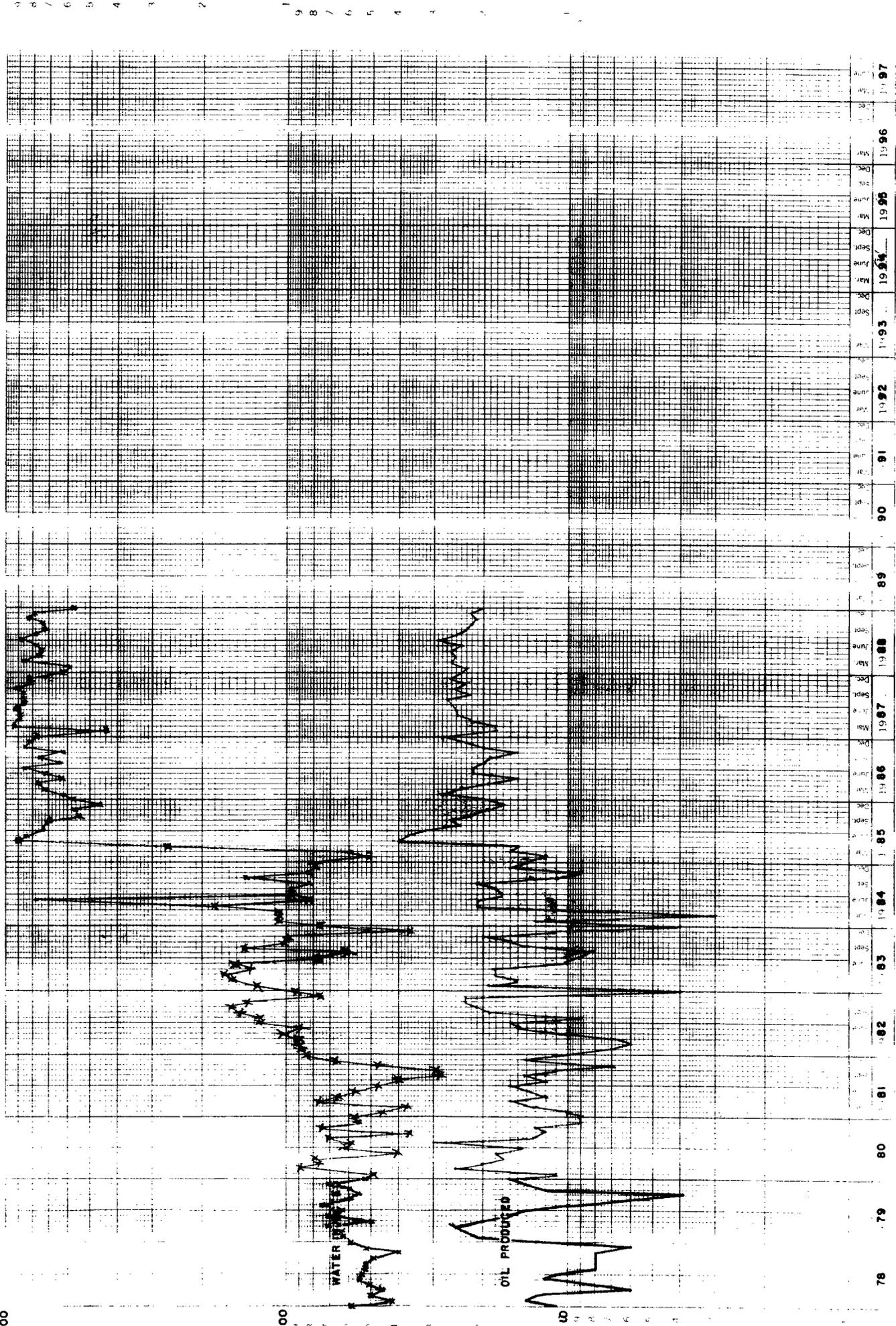
Union Oil Company of California

  
Hugh H. Herndon  
District Land Manager

CAPROCK QUEEN FIELD  
 CHAVES COUNTY, NEW MEXICO  
 OPERATOR: UNION

1000

PRODUCTION & INJECTION RATE B/D



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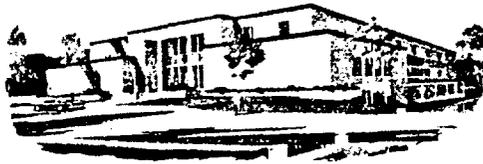
97



State of New Mexico



W.R. HUMPHRIES  
COMMISSIONER



Commissioner of Public Lands

2031

SLO REF NO OG-719

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

March 24, 1988

Unocal Oil & Gas Division  
Attn: Ms. Linda H. Hicks  
P. O. Box 671  
Midland, Texas 79702

Re: 1988 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

The Commissioner of Public Lands has this date approved your 1988 Plan of Development for the above captioned unit area.

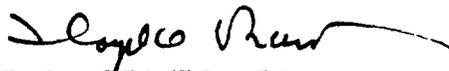
Our approval is subject to like approval by all other appropriate agencies.

Enclosed is an approved copy for your files.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

W. R. HUMPHRIES  
COMMISSIONER OF PUBLIC LANDS

BY:   
FLOYD O. FRANDO, Director  
Oil and Gas Division  
(505) 827-5744

WRH/FOP/pm  
encls.  
cc: OCD  
BLM



STATE OF NEW MEXICO

ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION

GARREY CARRUTHERS  
GOVERNOR

March 7, 1988

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

Unocal  
P. O. Box 671  
Midland, Texas 79702

Attention: Linda H. Hicks

Re: 1988 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico  
Caprock Queen Prospect (7381)

Gentlemen:

The above-referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON,  
Senior Petroleum Geologist

REJ/dr

cc: Commissioner of Public Lands - Santa Fe  
Bureau of Land Management - Albuquerque

**Unocal Oil & Gas Division**  
Unocal Corporation  
500 North Marienfeld, P.O. Box 671  
Midland, Texas 79702  
Telephone (915) 682-9731

**UNOCAL** 

Midland District

March 1, 1988

Oil Conservation Division  
Energy and Minerals Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501  
Attn: Mr. William J. LeLay  
Director

1988 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico  
Caprock Queen Prospect (7381)

Gentlemen:

Please find enclosed for your approval two copies of Union's 1988 Plan of Development for the South Caprock Queen Unit.

Should you have any questions, please let me know.

Sincerely yours,

UNION OIL COMPANY OF CALIFORNIA



Linda H. Hicks  
Landman

LHH/s  
Enclosures



1988 PLAN OF DEVELOPMENT AND OPERATIONS  
FOR  
SOUTH CAPROCK QUEEN UNIT  
CHAVES COUNTY, NEW MEXICO

To: Oil Conservation Division  
Energy and Minerals Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501  
Attn: Mr. William J. LeMay  
Director

UNION OIL COMPANY OF CALIFORNIA, as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960, (No. 14-08-0001-7284) respectfully submits for approval this 1988 Plan of Development and Operations for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1988.

SUMMARY OF 1987 OPERATIONS:

No new wells were drilled in 1987. Production for the past year is summarized in the table below:

<u>Total 1987 Production</u>		<u>Current Test</u>	
<u>Well No.</u>	<u>BO</u>	<u>BOPD</u>	<u>BWPD</u>
5-30	786	2	101
11-30	1291	4	163
15-30	1458	4	290
17-30	1033	3	170
3-31	351	1	8
3-33	1169	3	20
12-33	1489	4	19
14-33	905	2	27
<u>Totals</u>	<u>8482</u>	<u>23</u>	<u>798</u>

PLAN OF DEVELOPMENT AND OPERATIONS FOR 1988:

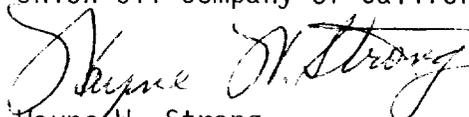
Union plans to screen several enhanced oil recovery methods this year to select the best recovery mechanism. By the second half of 1988, we plan to be ready to do the necessary modeling/simulation, etc. to further evaluate the project. No new wells are planned to be drilled in 1988.

This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

SUBMITTED this 1 day of March, 1988.

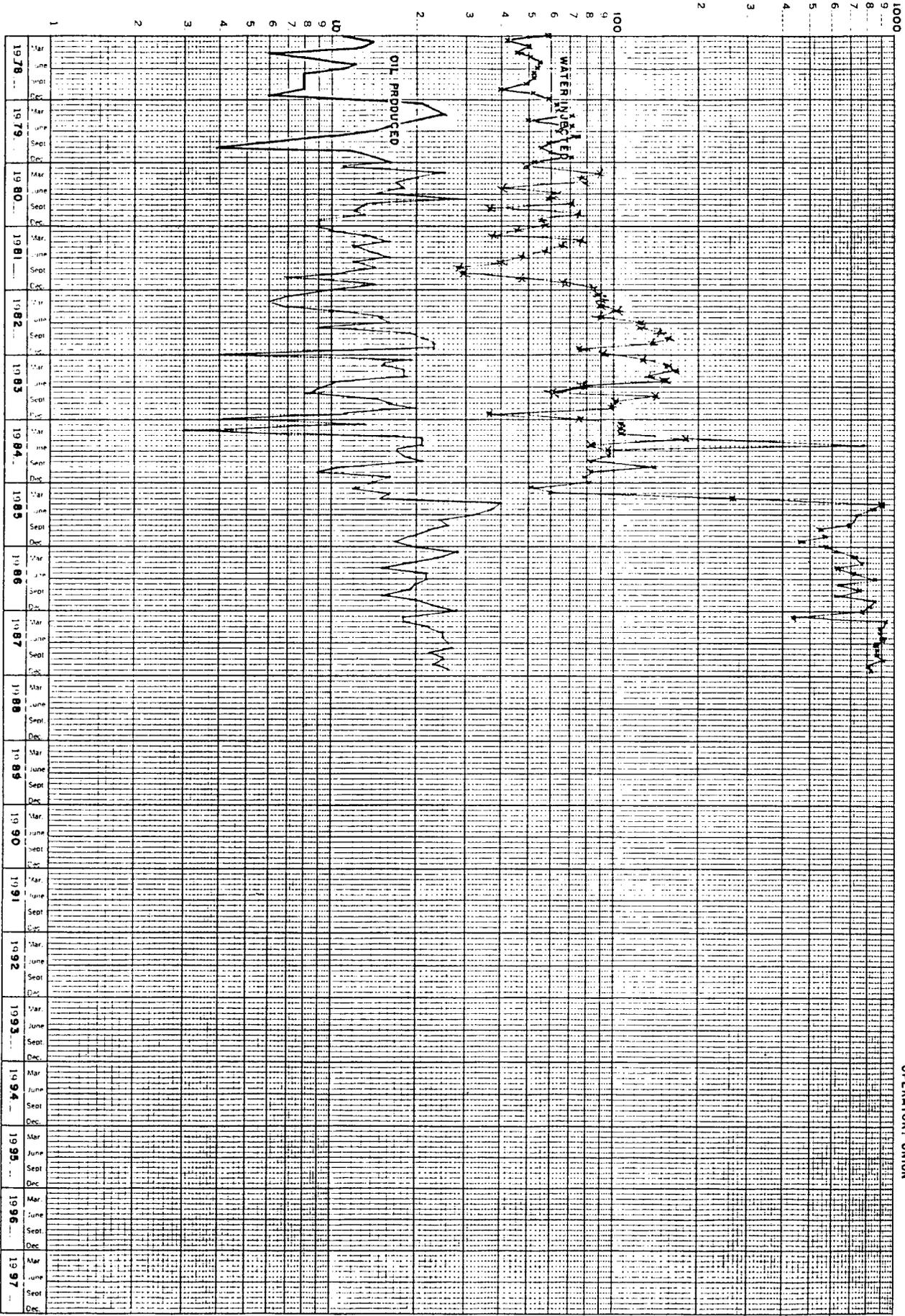
Sincerely yours,

Union Oil Company of California

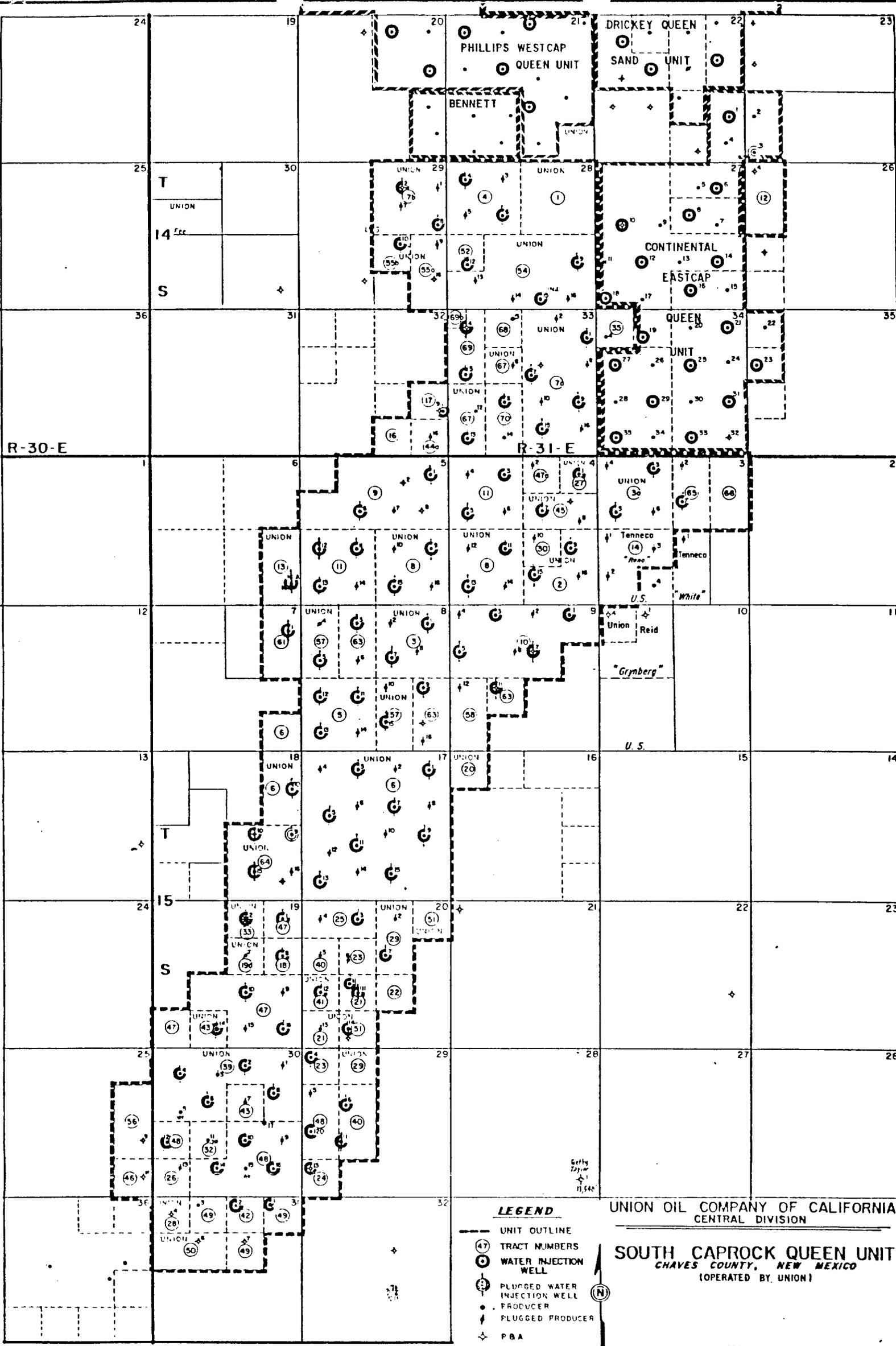


Wayne W. Strong  
District Land Manager

PRODUCTION & INJECTION RATE B/D



SO. CARROCK QUEEN UNIT  
 CARROCK QUEEN FIELD  
 CHAVES COUNTY, NEW MEXICO  
 OPERATOR: UNION



R-30-E

R-31-E

**LEGEND**

- UNIT OUTLINE
- (47) TRACT NUMBERS
- (C) WATER INJECTION WELL
- (P) PLUGGED WATER INJECTION WELL
- PRODUCER
- P PLUGGED PRODUCER
- ◇ P & A

UNION OIL COMPANY OF CALIFORNIA  
CENTRAL DIVISION

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO  
(OPERATED BY UNION)



GRAPHIC SCALE  
0 2000 4000 8000

State of New Mexico

#2031



W.R. HUMPHRIES  
COMMISSIONER

Commissioner of Public Lands

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

March 11, 1987

Unocal Corporation  
ATTENTION: Ms. Linda Hicks  
P. O. Box 671  
Midland, Texas 79702

Re: South Caprock Queen Unit  
Secondary Recovery Unit  
1987 Plan of Operations  
Chaves County, New Mexico

Gentlemen:

The Commissioner of Public Lands has this date approved your 1987 Plan of Operations for the South Caprock Queen Secondary Recovery Unit Area, Chaves County, New Mexico. Such plan calls for evaluating the economics of re-entering an additional abandoned producing well to test production. You also plan to conduct research on enhanced oil recovery potential via Polymer injection.

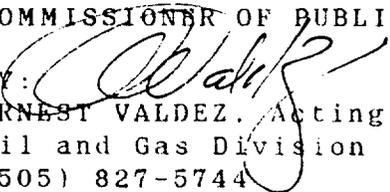
Our approval is subject to like approval by the New Mexico Oil Conservation Division and the Bureau of Land Management.

Enclosed is an approved copy for your files.

If we may be of further help please do not hesitate to call on us.

Very truly yours,

WILLIAM R. HUMPHRIES  
COMMISSIONER OF PUBLIC LANDS

BY:   
ERNEST VALDEZ, Acting Director  
Oil and Gas Division  
(505) 827-5744

WRH/EV/pm

encls.

cc: OCD-Santa Fe, New Mexico

BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

Gulram, Inc.

ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION



February 23, 1987

GARREY CARRUTHERS  
GOVERNOR

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE NEW MEXICO 87501  
(505) 827-5800

#7831

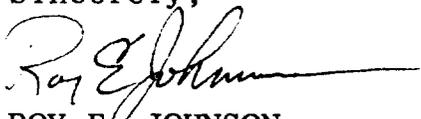
Unocal Oil & Gas Division  
P. O. Box 671  
Midland, Texas 79702  
Attention: Linda H. Hicks

Re: 1987 Plan of Development  
South Caprock Queen Unit  
Caprock Queen Prospect (7831)  
Chaves County, New Mexico

Gentlemen:

The above-referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

  
ROY E. JOHNSON,  
Senior Petroleum Geologist

REJ/dr

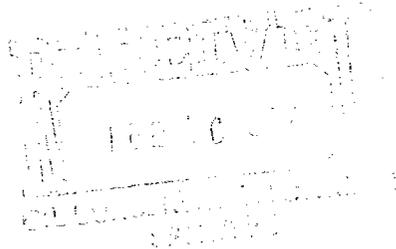
cc: Commissioner of Public Lands - Santa Fe  
Bureau of Land Management - Albuquerque

**Unocal Oil & Gas Division**  
Unocal Corporation  
500 North Marienfeld, P.O. Box 671  
Midland, Texas 79702  
Telephone (915) 682-9731

**UNOCAL** 

February 11, 1987

Midland District



Oil Conservation Division  
Energy and Minerals Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

ATTN: Mr. Dick Stamets, Director

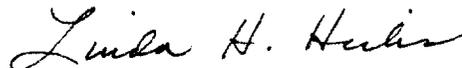
1987 Plan of Development  
South Caprock Queen Unit  
Caprock Queen Prospect (7831)  
Chaves County, New Mexico

Gentlemen:

Please find enclosed two (2) copies of Union's Plan of Development for the South Caprock Queen Unit. We respectfully request your approval of same.

Yours truly,

UNION OIL COMPANY OF CALIFORNIA



Linda H. Hicks  
Landman

LHH:gb

Enclosure

# 1987 PLAN OF DEVELOPMENT AND OPERATIONS

For

South Caprock Queen Unit  
Chaves County, New Mexico

TO: Oil Conservation Division  
Energy and Minerals Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Attn: Mr. Dick Stamets, Director

UNION OIL COMPANY OF CALIFORNIA, as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960, (No. 14-08-0001-7284) respectfully submits for approval this 1987 Plan of Development and Operations for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1987.

## SUMMARY OF 1986 OPERATIONS:

Well No. 10-30, an abandoned injection well in the South end of the Unit, was re-entered and returned to injection. At a rate of 400 BWP/D @ 175 Psi this well will provide injection support for three offset producing wells. Production for the Unit wells during 1986 is shown below:

<u>Well No.</u>	<u>Total 1986 Production</u>		<u>Current Production Rates</u>	
	<u>BO</u>	<u>BOPD</u>	<u>BOPD</u>	<u>BWP/D</u>
5-30	383	2	2	109
11-30	1071	2	2	122
15-30	1274	6	6	308
17-30	1035	2	2	131
3-31	379	1	1	10
3-33	1278	4	4	23
12-33	1596	6	6	30
14-30	765	4	4	30
<u>Totals</u>	<u>7781</u>	<u>27</u>	<u>27</u>	<u>763</u>

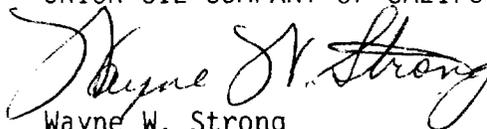
## PLAN OF DEVELOPMENT AND OPERATIONS FOR 1987:

Union plans to evaluate the economics of re-entering an additional abandoned producing well to test production. It is also planned to conduct Union Oil Company of California research on enhanced oil recovery potential via Polymer injection. No new wells are planned to be drilled in 1987.

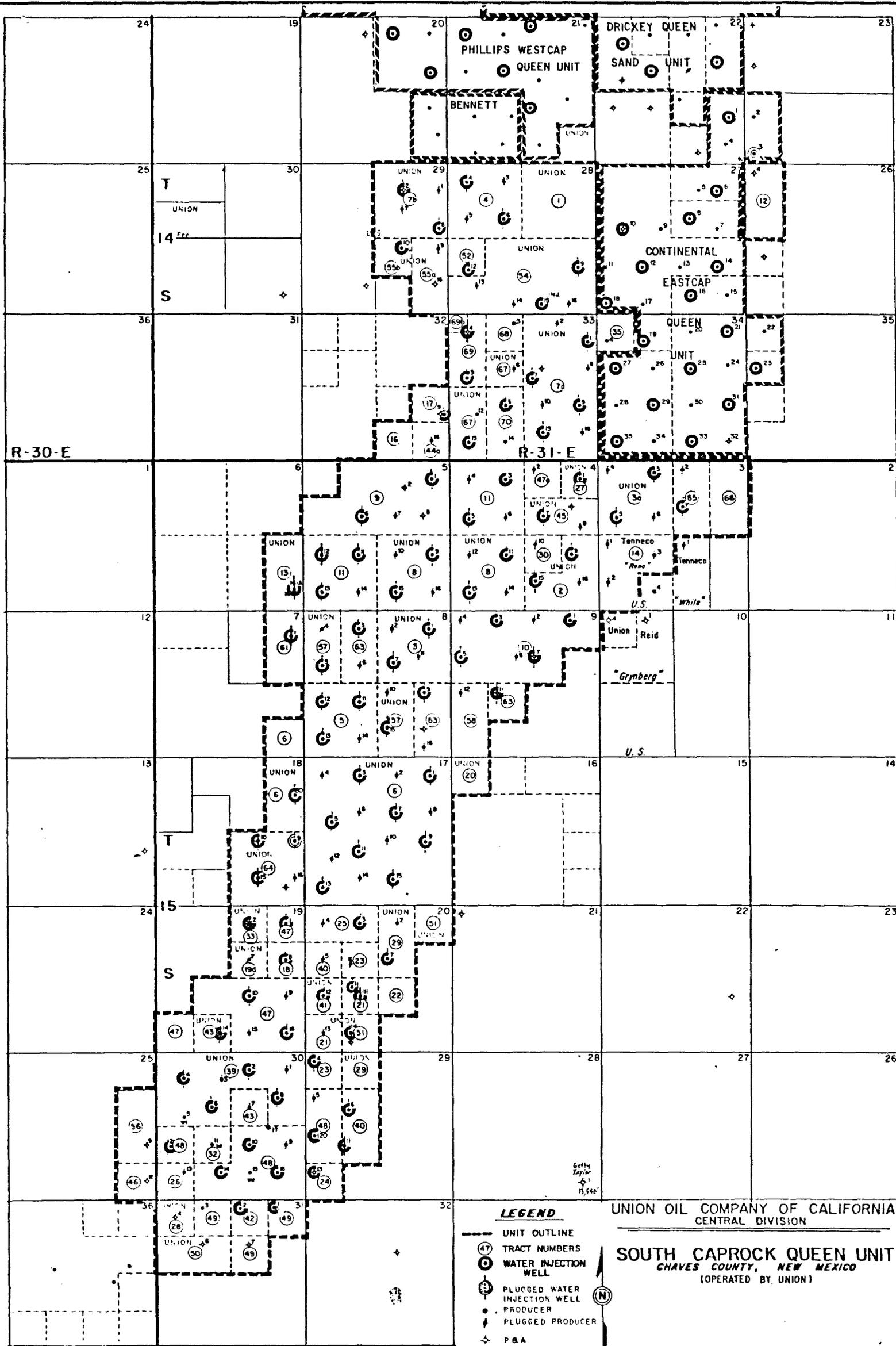
This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

SUBMITTED this 11 day of Feb, 1987.

UNION OIL COMPANY OF CALIFORNIA



Wayne W. Strong  
District Land Manager



R-30-E

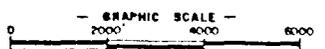
R-31-E

**LEGEND**

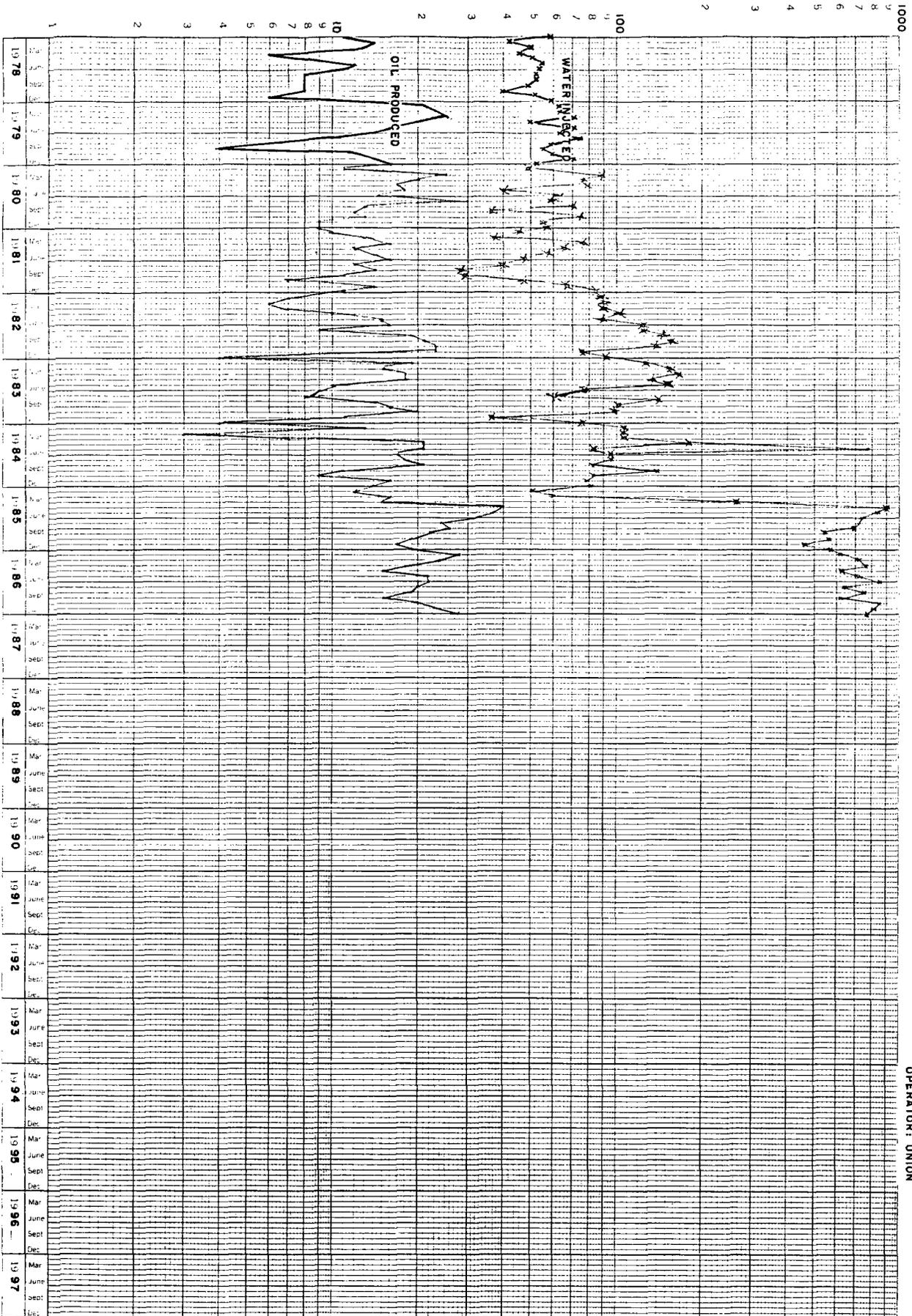
- UNIT OUTLINE
- ① TRACT NUMBERS
- ⊙ WATER INJECTION WELL
- ⊙ PLUGGED WATER INJECTION WELL
- PRODUCER
- ⚡ PLUGGED PRODUCER
- ◇ P & A

UNION OIL COMPANY OF CALIFORNIA  
CENTRAL DIVISION

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO  
(OPERATED BY UNION)



PRODUCTION & INJECTION RATE B/D



SO. CARROCK QUEEN UNIT  
 CARROCK QUEEN FIELD  
 CHAVES COUNTY, NEW MEXICO  
 OPERATOR: UNION

1987 PLAN OF DEVELOPMENT AND OPERATIONS

For

South Caprock Queen Unit  
Chaves County, New Mexico

TO: Oil Conservation Division  
Energy and Minerals Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

Attn: Mr. Dick Stamets, Director

UNION OIL COMPANY OF CALIFORNIA, as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960, (No. 14-08-0001-7284) respectfully submits for approval this 1987 Plan of Development and Operations for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1987.

SUMMARY OF 1986 OPERATIONS:

Well No. 10-30, an abandoned injection well in the South end of the Unit, was re-entered and returned to injection. At a rate of 400 BWPD @ 175 Psi this well will provide injection support for three offset producing wells. Production for the Unit wells during 1986 is shown below:

<u>Well No.</u>	<u>Total 1986 Production</u>		<u>Current Production Rates</u>	
	<u>BO</u>	<u>BOPD</u>	<u>BOPD</u>	<u>BWPD</u>
5-30	383	2		109
11-30	1071	2		122
15-30	1274	6		308
17-30	1035	2		131
3-31	379	1		10
3-33	1278	4		23
12-33	1596	6		30
14-30	765	4		30
<u>Totals</u>	<u>7781</u>	<u>27</u>		<u>763</u>

PLAN OF DEVELOPMENT AND OPERATIONS FOR 1987:

Union plans to evaluate the economics of re-entering an additional abandoned producing well to test production. It is also planned to conduct Union Oil Company of California research on enhanced oil recovery potential via Polymer injection. No new wells are planned to be drilled in 1987.

This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

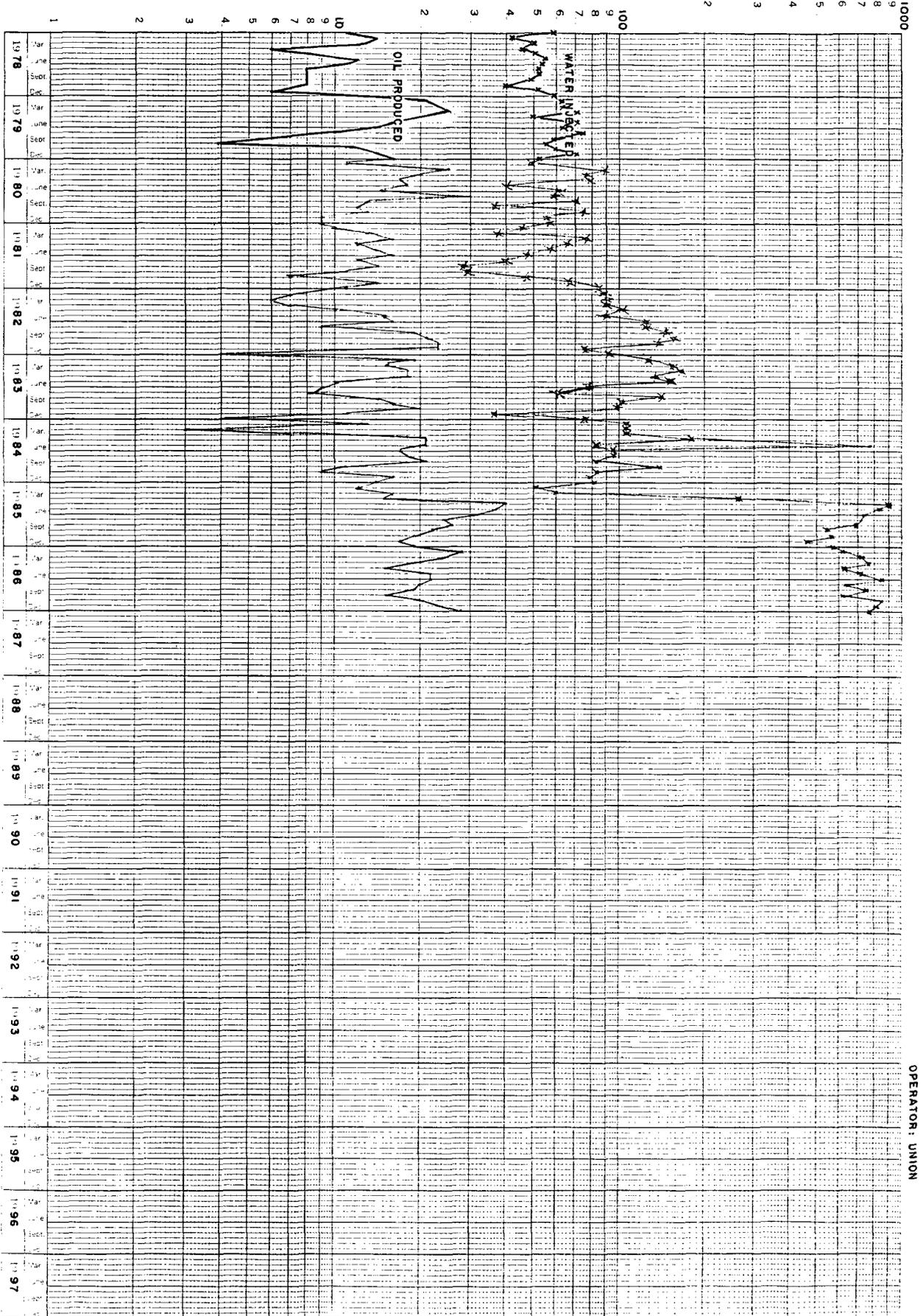
SUBMITTED this 11 day of Feb, 1987.

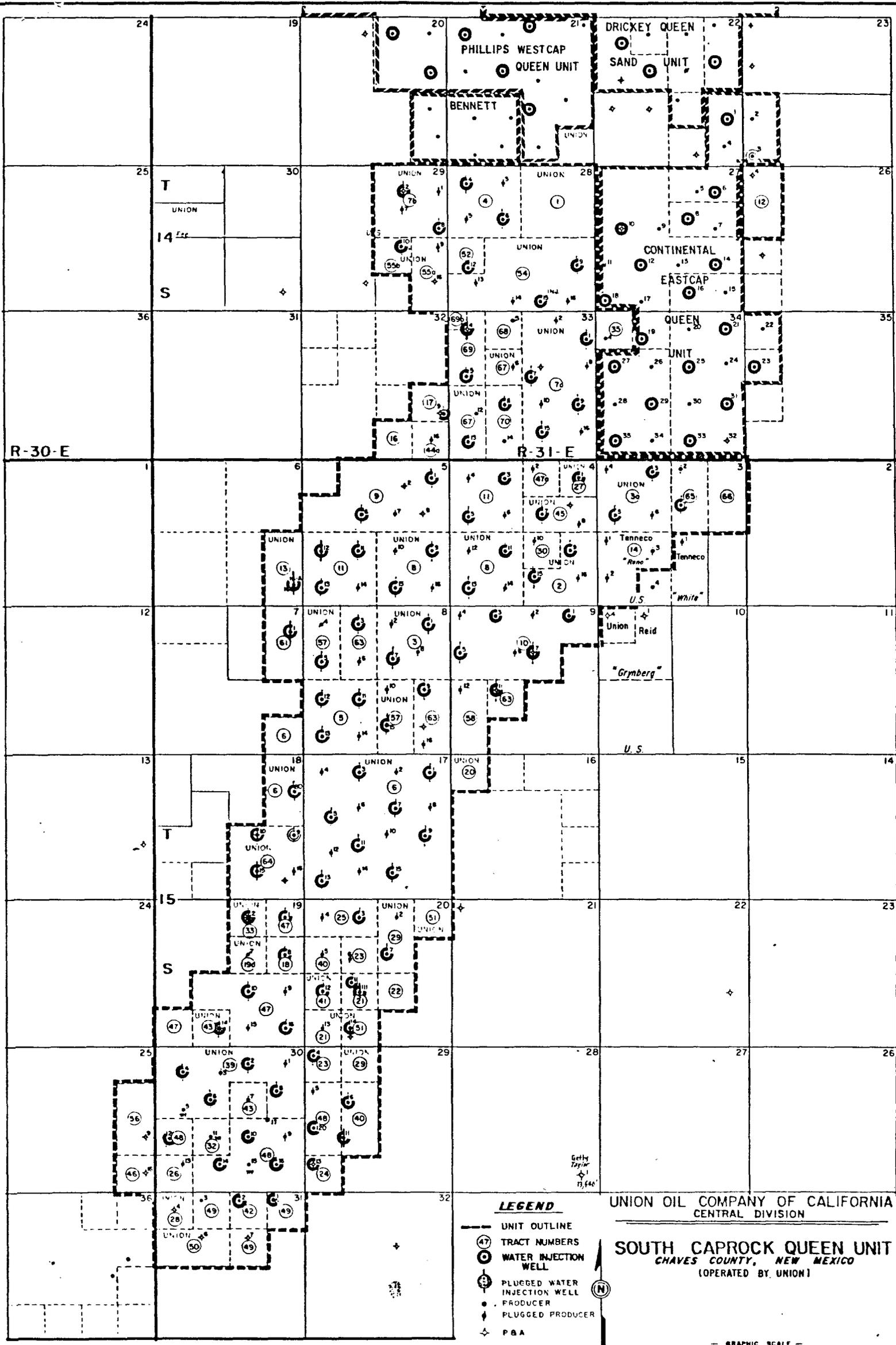
UNION OIL COMPANY OF CALIFORNIA



Wayne W. Strong  
District Land Manager

PRODUCTION & INJECTION RATE B/D





UNION OIL COMPANY OF CALIFORNIA  
CENTRAL DIVISION

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO  
(OPERATED BY UNION)

**LEGEND**

- UNIT OUTLINE
- (47) TRACT NUMBERS
- ⊙ WATER INJECTION WELL
- ⊕ PLUGGED WATER INJECTION WELL
- PRODUCER
- ◆ PLUGGED PRODUCER
- ◆ P & A

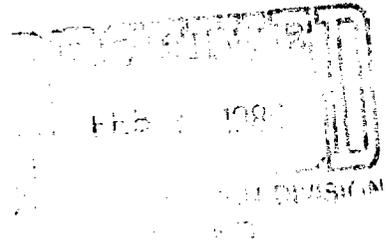
GRAPHIC SCALE  
0 2000 4000 6000

Union Oil and Gas Division: Central Region

Union Oil Company of California  
500 North Marienfeld, Midland, Texas 79701  
P.O. Box 671, Midland, Texas 79702  
Telephone (915) 682-9731



~~#185~~  
#2031



Wayne W. Strong  
District Land Manager  
Midland District

February 17, 1986

Oil Conservation Division  
Energy and Minerals Division  
P.O. Box 2088  
Santa Fe, New Mexico 87501

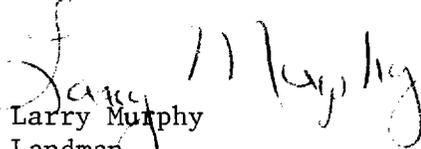
ATTN: Mr. Dick Stamets, Director

1986 Plan of Development  
South Caprock Queen Unit  
Caprock Queen Prospect (7831)  
Chaves County, New Mexico

Please find enclosed two (2) copies of Union's Plan of Development for the South Caprock Queen Unit. We respectfully request your approval of same.

Yours truly,

UNION OIL COMPANY OF CALIFORNIA

  
Larry Murphy  
Landman

LM:bh  
Enclosure  
Cert.#P220602798

1986 PLAN OF DEVELOPMENT AND OPERATIONS

for

South Caprock Queen Unit  
Chaves County, New Mexico

TO: Oil Conservation Division  
Energy and Minerals Division  
P.O. Box 2088  
Santa Fe, NM 87501

ATTN: Mr. Dick Stamets, Director

UNION OIL COMPANY OF CALIFORNIA, as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960, (No. 14-08-0001-7284) respectfully submits for approval this 1986 Plan of Development and Operations for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1986.

SUMMARY OF 1985 OPERATIONS:

In 1985 one infill producing Well, No. 17-30 was drilled in the South end of the Unit and potential pumping 16 BOPD and 172 BWPD from 20 feet of pay in the Permian Queen Formation. Well No. 16-30, an abandoned injection well in the South end of the Unit was reentered and returned to injection in 1985. This well will provide water injection support for the three recently reentered producing wells. Production for the Unit wells during 1985 is shown below:

<u>Well No.</u>	<u>Total 1985 Production</u>		<u>Current Production Rates</u>	
	<u>BO</u>		<u>BOPD</u>	<u>BWPD</u>
3-33	1154		4	62
12-33	1733		5	10
14-33	1055		2	23
5-30	712		2	100
11-30	849		3	121
15-30	1481		3	290
17-30	1097		3	131
3-31	397		1	15
<u>Totals</u>	<u>8460</u>		<u>23</u>	<u>752</u>

PLAN OF DEVELOPMENT AND OPERATIONS FOR 1986:

Further development in 1986 is forecasted to include reentering an additional injector in the South end of the Unit and return it to injection. It is also planned to reenter an additional abandoned producing well to test production. No new wells are planned to be drilled in 1986.

This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

SUBMITTED this 17th day of February, 1986.

UNION OIL COMPANY OF CALIFORNIA



Wayne W. Strong  
District Land Manager

1986 PLAN OF DEVELOPMENT AND OPERATIONS

for

South Caprock Queen Unit  
Chaves County, New Mexico

TO: Oil Conservation Division  
Energy and Minerals Division  
P.O. Box 2088  
Santa Fe, NM 87501

ATTN: Mr. Dick Stamets, Director

UNION OIL COMPANY OF CALIFORNIA, as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960, (No. 14-08-0001-7284) respectfully submits for approval this 1986 Plan of Development and Operations for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1986.

SUMMARY OF 1985 OPERATIONS:

In 1985 one infill producing Well, No. 17-30 was drilled in the South end of the Unit and potentialized pumping 16 BOPD and 172 BWPD from 20 feet of pay in the Permian Queen Formation. Well No. 16-30, an abandoned injection well in the South end of the Unit was reentered and returned to injection in 1985. This well will provide water injection support for the three recently reentered producing wells. Production for the Unit wells during 1985 is shown below:

<u>Well No.</u>	<u>Total 1985 Production</u>		<u>Current Production Rates</u>	
	<u>BO</u>		<u>BOPD</u>	<u>BWPD</u>
3-33	1154		4	62
12-33	1733		5	10
14-33	1055		2	23
5-30	712		2	100
11-30	849		3	121
15-30	1481		3	290
17-30	1097		3	131
3-31	397		1	15
<u>Totals</u>	<u>8460</u>		<u>23</u>	<u>752</u>

PLAN OF DEVELOPMENT AND OPERATIONS FOR 1986:

Further development in 1986 is forecasted to include reentering an additional injector in the South end of the Unit and return it to injection. It is also planned to reenter an additional abandoned producing well to test production. No new wells are planned to be drilled in 1986.

This plan may be modified or supplemented from time to time with the approval needed, when necessary to meet changed conditions or to protect the interest of all parties in the Unit Agreement.

SUBMITTED this 17th day of February, 1986.

UNION OIL COMPANY OF CALIFORNIA



Wayne W. Strong  
District Land Manager

50 YEARS



1935 - 1985



STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

TONEY ANAYA  
GOVERNOR

March 5, 1986

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

Union Oil Company  
P. O. Box 671  
Midland, Texas 79701

Attention: Larry Murphy

Re: 1986 Plan of Development  
South Caprock Queen Unit  
Caprock Queen Prospect (7831)  
Chaves County, New Mexico

Gentlemen:

The above-referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

A handwritten signature in cursive script, appearing to read "Roy E. Johnson".

ROY E. JOHNSON,  
Senior Petroleum Geologist

REJ/dr

cc: Commissioner of Public Lands - Santa Fe  
Bureau of Land Management - Albuquerque  
OCD District Office - Hobbs and Artesia

# State of New Mexico



JIM BACA  
COMMISSIONER



## Commissioner of Public Lands

February 26, 1986

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148  
Express Mail Delivery Uses  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Union Oil Company of California  
P. O. Box 671  
Midland, Texas 79702

Re: 1986 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

ATTENTION: Mr. Larry Murphy

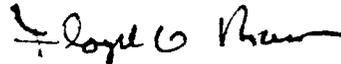
Gentlemen:

The Commissioner of Public Lands has this date approved your 1986 Plan of Development for the South Caprock Queen Unit Area, Chaves County, New Mexico. Such plan proposes to reenter an additional injector in the South end of the Unit and return it to injection and reenter an additional abandoned producing well to test production. Our approval is subject to like approval by the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

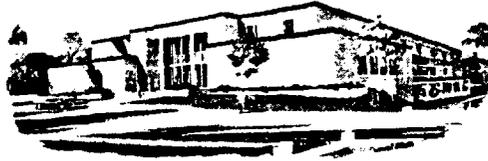
BY:   
FLOYD O. PRANDO, Director  
Oil and Gas Division  
AC 505/827-5744

JB/FOP/pm  
encls.

cc: OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Fluids Branch  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez

State of New Mexico

#2031



Commissioner of Public Lands

August 13, 1985

JIM BACA  
COMMISSIONER

P.O. BOX 1148  
SANTA FE, NEW MEXICO 87504-1148

Express Mail Delivery Use:  
310 Old Santa Fe Trail  
Santa Fe, New Mexico 87501

Union Oil Company of California  
P. O. Box 671  
Midland, Texas 79702

Re: South Caprock Queen Unit  
~~1985 Plan of Development~~  
Chaves County, New Mexico

ATTENTION: Mr. Larry Murphy

Gentlemen:

The Commissioner of Public Lands has this date approved your 1985 Plan of Development for the South Caprock Queen Unit Area, Chaves County, New Mexico. Such plan calls for reentering the Unit Well No. 16-30 and drilling the Unit Well No. 17-30 as an infill well. Our approval is subject to like approval by the Bureau of Land Management.

Enclosed is an approved copy for your files.

Very truly yours,

JIM BACA  
COMMISSIONER OF PUBLIC LANDS

BY: *Ray D. Graham*  
RAY D. GRAHAM, Director  
Oil and Gas Division  
AC 505/827-5744

JB/RDG/pm  
encls.  
cc:

OCD-Santa Fe, New Mexico  
BLM-Albuquerque, New Mexico Attn: Fluids Branch  
BLM-Roswell, New Mexico Attn: Mr. Armando Lopez



# United States Department of the Interior

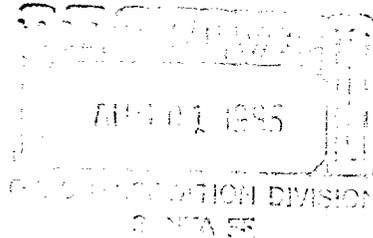
IN REPLY REFER TO

BUREAU OF LAND MANAGEMENT  
Box 1397, Roswell, New Mexico - 88201

14-08-0001-7284  
3180 (065)

July 26, 1985

Union Oil Company of California  
Attention: Wayne W. Strong  
500 North Marienfeld  
Midland, TX 79702



Re: 1985 Plan of Development  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

We are in receipt of your letter dated July 16, 1985 which describes your 1985 Plan of Development for the South Caprock Queen Unit Waterflood, Chaves County, New Mexico.

Such plan proposing reentering injection well SCQU No. 16-30, located 990' FSL and 990' FEL, section 30, T. 15 S., R. 31 E., N.M.P.M. and drilling SCQU No. 17-30, located 2630' FSL and 1330' FEL, section 30, T. 15 S., R. 31 E., N.M.P.M., is approved effective as of January 1, 1985.

In subsequent Plans of Development please provide decline curves on production. We appreciate your detailed analysis of 1984-85 activities in the South Caprock Queen Unit.

Sincerely,

Orig. Sgd. Francis R. Cherry, Jr.

Francis R. Cherry, Jr.  
District Manager

cc:  
Commissioner of Public Lands, Santa Fe  
✓NMOCD, Santa Fe



TONY ANAYA  
GOVERNOR

STATE OF NEW MEXICO  
ENERGY AND MINERALS DEPARTMENT  
OIL CONSERVATION DIVISION

50 YEARS



1935 - 1985

POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87501  
(505) 827-5800

March 26, 1985

2031

Union Oil Company of  
California  
500 North Marienfeld  
Midland, Texas 79701

Attention: Larry Murphy

Re: South Caprock Queen Unit  
1985 Plan of Development  
Caprock Queen Prospect  
(7381) Chaves County, NM

Dear Mr. Murphy:

The above referenced submittal has been approved by the New Mexico Oil Conservation Division effective this date. Such approval is contingent upon like approval by the New Mexico Commissioner of Public Lands and the Bureau of Land Management.

Sincerely,

ROY E. JOHNSON  
Senior Petroleum Geologist

REJ/dp

cc: Commissioner of Public Lands - Santa Fe  
Bureau of Land Management - Albuquerque  
OCD District Office - Artesia

Dot -  
We are in  
receipt of  
L.V.

Union Oil and Gas Division: Central Region  
Union Oil Company of California  
500 North Marienfeld, Midland, Texas 79701  
Telephone (915) 682-9731



OK  
3-25-85

Midland District

March 20, 1985

Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attn: Mr. Dick Stamets, Director

Dear Mr. Stamets:

South Caprock Queen Unit  
1985 Plan of Development  
Caprock Queen Prospect (7381)  
Chaves County, New Mexico

Please find enclosed two (2) copies of Union's Plan of Development for the South Caprock Queen Unit. We respectfully request your approval of same.

Should you have any questions, please do not hesitate to contact me.

Yours truly,

UNION OIL COMPANY OF CALIFORNIA

Larry Murphy  
Landman

JLM:njd

Enclosures

CERTIFIED MAIL  
No. P-397-479-796

# 1985 PLAN OF DEVELOPMENT AND OPERATIONS

for

South Caprock Queen Unit  
Chaves County, New Mexico

TO: Oil Conservation Division  
Energy and Minerals Division  
P. O. Box 2088  
Santa Fe, New Mexico 87501

Attn: Mr. Dick Stamets, Director

Union Oil Company of California, as Unit Operator for the South Caprock Queen Unit, pursuant to the provisions of Section 12 of the Unit Agreement for Development and Operation of the South Caprock Queen Unit Area, dated August 1, 1960 (No. 14-08-0001-7284) respectfully submits for approval this 1985 Plan of Development and Operation for the South Caprock Queen Unit Area. This Plan is for the period ending December 31, 1985.

## INTRODUCTION:

The South Caprock Queen Unit was formed in 1960 and covers about 7,000 acres in the southern tip of the Caprock Queen Field. Oil production occurs from the Shattuck member of the Permian Queen formation, which is approximately 20 feet thick in the Unit Area, at a depth generally less than 3,200 feet. The Unit Area was waterflooded from 1961 to 1971 and has recovered 12.9 MMBO (25% OOIP) by both primary and secondary means. By 1972, most of the producing and injection wells had been plugged and abandoned. Prior to the work done in 1984, there were four active producing wells and one active injection well.

## SUMMARY OF 1984 OPERATIONS:

In 1984, three (3) abandoned producing wells were reentered and returned to production. The combined production test from the three (3) wells was 17 BOPD and 811 BWPD. The wells are temporarily shut-in, awaiting the construction of a tank battery and reentry of a water injection well. Monthly production figures for the Unit during 1984 are attached.

## PLAN OF DEVELOPMENT AND OPERATION FOR 1985:

Further development in 1985 is designed to evaluate remaining reservoir potential. One infill well will be drilled in the southern portion of the Unit, near the three (3) reentered wells. One injection well in the same area will also be reentered. The infill well will help determine the amount of unswept oil which may be left in

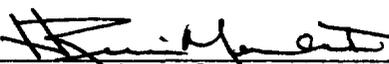
the cusp areas between producing wells. The injection well will provide pressure maintenance and fluid drive as well as a way to dispose of the produced water. A tank battery and testing facility are also being constructed to handle the new production.

A decision concerning further development will be based on the results of prolonged production tests from the reentered wells and on the performance of the new infill well. Should the results prove to be favorable and economically attractive, similar work can be expected for the future.

This Plan may be modified or supplemented from time to time with the necessary approval needed, when necessary to meet changed conditions or to protect the interest of all parties to the Unit Agreement.

SUBMITTED this 20th day of March, 1985.

UNION OIL COMPANY OF CALIFORNIA

By:   
H. Rene Moulinet  
District Land Manager (Acting)

SOUTH CAPROCK QUEEN UNIT  
1984 MONTHLY PRODUCTION

<u>MONTH</u>	<u>OIL, BBLs</u>	<u>WATER, BBLs</u>
Jan	392	3317
Feb	94	3103
Mar	220	3348
Apr	623	5474
May	638	24661
Jun	504	2846
Jul	556	2974
Aug	647	2573
Sep	322	4200
Oct	293	2570
Nov	489	2360
Dec	<u>426</u>	<u>2500</u>
	5204	59,926

Cumulative Production to 1/1/85 = 12,966,734 BO

26,570,726 BW

EXHIBIT "C"  
FOURTH REVISED EDITION  
EFFECTIVE

Attached to and by reference made a part of Unit Operating Agreement,  
SOUTH CAPROCK QUEEN UNIT, CHAVES COUNTY, NEW MEXICO.

Working Interest Owner	Participation Percentage	Distribution of Reservation
Adams, K. S., Jr.	1.955742	52,723.37
Aikman Oil and Gas Company	.503717	15,845.28
**Anderson, E. T.	.069509	2,450.45
*Anderson, Richard S., Incorporated	.344536	12,582.85
Baker, George W.	.387328	9,565.92
**Brokaw, Edwina S.	.218583	7,700.98
*Broseco Corporation	1.997575	71,839.68
California Oil Company	.028331	120.32
Cooper, Sam S.	.020682	777.08
Davis, R. E.	.039839	1,496.84
**Duncan, J. Walter, Jr.	2.432356	87,359.99
**Duncan, Raymond T.	.419595	15,090.86
**Duncan, Vincent J.	.913946	32,842.19
**Duncan, Walter	2.522120	90,568.31
Eisner, Dr. Eric Van	.082598	3,108.34
**Empire Trust Company	5.499391	193,730.31
Frankel, Charles W. and Esther M.	.041299	1,554.16
Frankel, Morris S.	.041363	1,554.16
Gulf Oil Corporation	1.388166	51,997.58
Hanes, James G.	.795868	29,935.19
Hanson, Ernest A.	.263290	8,177.20
Hanson, Ernest A. and wife		
Beulah Irene Hanson	.037713	1,156.85
Helbing & Podpechan	.077257	2,789.68
Hobbs, Roscoe C.	.397934	14,967.58
Hondo Oil & Gas Company	.132362	561.85
Johnson, A. W.	.551182	20,731.65
Kelce, Merl C.	.540793	19,527.75
Late Oil Company	.367408	8,817.51
Lundbeck, G. Hilmer	.752991	27,361.11
McAfee, J. W.	.397934	14,967.59
Monsanto Chemical Company	5.401066	202,933.46
**O'Neill, Joseph I., Jr.	6.295631	225,808.87
Open	.015320	476.63
Pan American Petroleum Corp.	1.547608	-----
Penrose, Neville G., Trustee	.223378	6,335.12
Pubco Petroleum Corporation	.445923	13,296.47
Pure Oil Company (The)	4.933103	185,341.48
Queeny, Edgar M.	.014814	557.40
Ribearn Petroleum Corporation	.014814	557.40
*Rich, John B.	.074846	2,721.58
Ross, W. G.	.046287	1,437.34

Working Interest Owner	Participation Percentage	Distribution of Reservation
Ross, W. G. and wife, Vee K. Ross	.011519	353.36
Roswell Securities Company	.367404	8,817.36
Seltzer, Nathan	.020681	777.08
Shea, Edward L.	1.917906	69,254.59
**Shea, Peter L.	.218583	7,700.98
Sinclair Oil & Gas Company	2.504642	93,160.30
Socony Mobil Oil Company, Inc.	.258837	9,724.96
*Sohio Petroleum Company	2.786443	102,985.42
Strand, Sherman O.	.020681	777.08
Sunray DX Oil Company	.013090	-----
Texas Pacific Coal and Oil Company	2.635355	95,536.21
Tidewater Oil Company	1.224584	43,555.24
Union Oil Company of California	45.682671	1,679,025.02
Western Drilling Company	.082598	3,108.33
Wiggins, Max	.000127	-----
Wilken, Hubert T.	.020681	777.08
	<hr/>	<hr/>
	100.000000	3,556,921.39

\*These interests will change as set forth in Exhibit "B" Fourth Revision in connection with Tract 24.

\*\*See Exhibit "B" for changes to take place after 12-31-64.

UNION OIL CO.

10000 10000 10

*Case # 2031*

**SOUTH CAFROCK QUEEN UNIT**

**REPORT OF OPERATIONS**

**DECEMBER, 1960**

**UNION OIL COMPANY OF CALIFORNIA**

**UNIT OPERATOR**

SOUTH CAPROCK QUEEN UNIT

Production Summary

December, 1960

I. TOTAL UNIT

A. Oil Production\*

1. Monthly Production	19,694
2. Monthly Allowable	49,756
3. Daily Average Production***	938
4. Daily Average Allowable	1,606
5. Cumulative Production Since Discovery	5,041,267
6. Cumulative Production Since Unitization	19,694
7. Cumulative Primary Oil**	5,041,267
8. Cumulative Secondary Oil**	0

B. Water Production\*

1. Average Unit Cut	1.7
2. Monthly Production	346
3. Daily Average Production	16
4. Cumulative Production Since Unitization	346
5. Number of Wells Cutting Over 2%	12

\*Units: Oil and water in barrels, cut in percent and well status in number of wells.

\*\*Secondary Participation will commence the first of the month following that time when 6,287,230 barrels of cumulative primary oil have been produced from the Unit wells.

\*\*\*Excluding 10 days of curtailed production due to power failure from storm damage (December 8 - 17).

Production Summary

Page 2

C. Well Status at End of Month

1. Pumping	120
2. Flowing	1
3. Shut-in	12
4. Shut-in temporarily for well work	0
5. Water Injection	0
6. Drilling	0
7. Total (Excluding water supply and abandoned)	133
8. Water Supply (Shut-In)	5
9. Abandoned	25

II. INITIAL WATER FLOOD PROJECT AREA

A. Oil Production\*

1. Monthly Production	3,326
2. Monthly Allowable <sup>(1)</sup>	7,564
3. Daily Average Production <sup>***</sup>	158
4. Daily Average Allowable <sup>(1)</sup>	244
5. Present Number of 40 Acre Tracts (with wells) in Project Area	23
6. Cumulative Production Since Unitization	3,326

B. Water Production

1. Monthly Production	39
2. Average Cut	1.1
3. Daily Average Production <sup>**</sup>	2
4. Cumulative Production Since Unitization	39

(1) This is not a water flood allowable. The water flood allowable of 42 Bbls/day/well in the project area will not be in effect until the injection wells are placed in service.

Production Summary  
Page 3

C. Well Status at End of Month

1. Pumping	18
2. Flowing	1
3. Shut-In	3
4. Shut-In Temporarily for Well Work	0
5. Water Injection	0
6. Drilling	0
7. Total (Excluding Abandoned)	22
8. Abandoned	3

SOUTH CAPROCK QUEEN UNIT

SUMMARY OF OPERATIONS

I. Production Activities - Total Unit

A. General

Production from the Unit was greatly curtailed in December due to a field-wide power failure caused by a severe ice storm followed by snow and extreme freezing conditions. Complete power service was not restored for a fifteen day period following the storm. No exceptional difficulties were experienced in returning wells to production when power was restored. Nearly all wells were back on production by the end of the month. It is estimated that the Unit Area production was approximately 14,000 barrels lower than the predicted normal monthly rate. An application for back allowable for all the top allowable wells in the Unit will be made by the Operator at the New Mexico Oil Conservation Commission hearing on January 18th. Only top allowable wells are eligible for this special back allowable. There are currently five such wells in the Unit area. Therefore only a small portion of the 14,000 barrel deficit can be made up. Few other wells in the Unit would be capable of the higher production rates. However recent well clean-out work has increased the productive capacity of several other Unit wells. Increased allowables will be sought for these wells by the operator.

B. Routine Well Work

1. Rod and Tubing Jobs

Rods and tubing were pulled in the following wells. In most cases the tubing was steam cleaned to remove paraffin and the wells were cleaned out to bottom with a sand pump.

<u>Date</u>	<u>Tract</u>	<u>Well</u>	<u>Production Tests B/D</u>		<u>Comments</u>
			<u>Before</u>	<u>After</u>	
12 - 2	57	15 - 8	5	7	C.O. to bottom
12 - 4	6	1 - 17	2	5	Pump Change only
12 - 5	8	14 - 4	3	12	Rods parted, C.O. to bottom
12 - 6	26	13 - 30	3	7	C.O. 4' sand
12 - 8	64	9 - 18	3	6	C.O. 30' sand
12 - 12	10	6 - 9	12	12	C.O. 5' sand and removed bottom hole separator
12 - 13	48	10 - 30	11	No test	C.O., Lower tbg. 26', added bottom hole separator to lower GOR
12 - 14	5	12 - 8	Shut in	Shut in	Pulled rods & tubing in preparation for conversion to water injection well
12 - 14	11	6 - 4	Shut in	11	Rods parted, C.O. to bottom
12 - 16	70	14 - 33	3	23	C.O. 11' sand, lower tbg. 57'
12 - 17	11	14 - 5	Shut in	25	C.O. 23' sand, lower tbg. 23'

Summary of Operations

Page 2

Date	Tract	Well	Production Tests B/D		Comments
			Before	After	
12 - 18	11	13 - 5	Shut in	Plunger stuck	C.O. to bottom
12 - 22	11	13 - 5	Plunger stuck	Plunger stuck	Change pump
12 - 28	11	13 - 5	Plunger stuck	Shut in	Change pump
12 - 19	11	11 - 5	Shut in	25	C.O. 20' sand
12 - 20	47A	2 - 4	5	23	C.O. to bottom Lower tbg. 18'
12 - 21	18	8 - 19	18	40	C.O. 12' sand
12 - 23	3	8 - 8	4	No test	C.O. 18' sand
12 - 26	47	1 - 19	17	No test	C.O. 38' sand
12 - 29	35	3 - 34	6	No test	C.O. 12' sand
12 - 30	44A	16 - 32	4	No test	C.O. 10' sand
Total for 12 wells tested			54 B/D	196 B/D	Added bottom hole separator to lower GOR

2. Paraffin and Salt Removal Jobs

There were 68 hot oil or hot water circulation jobs in wells in the Unit area during December for removal of paraffin and salt.

C. Drilling Well Activity

There was no drilling well activity in the Unit during the month of December. An A.F.E. is now in preparation to cover the drilling of four water injection wells, one producing well, and the re-entry of one abandoned well for use as a water injection well. These wells will all be in the initial water flood project area.

D. Repair Well Activity

There were no wells being repaired in the Unit during the month of December. The A.F.E. mentioned in Section C, above, will also cover the conversion of five existing wells to water injection service.

E. Individual Well Statistics

The December, 1960, production statistics for each Unit well are tabulated in the attached Table I.

III. Fresh Water Supply System

A. Supply Wells

No work was done in the five existing water supply wells in December. Layne and Bowler 6" x 26 stage deep well turbine pumps have been ordered for supply wells No. 3, 4, and 5.

B. Fresh Water Supply Station

Two Layne and Bowler 6" x 4 stage vertical turbine transfer pumps have been ordered for this station. Delivery is expected by mid-January, 1961. A 1000 barrel, used, flat bottom, welded steel tank has been ordered for the station. The tank will be sand blasted inside and coated with a coal tar epoxy (Tarset). A contract for the construction of this station will be negotiated in January.

C. Fresh Water Supply Line

Ditching for approximately  $4\frac{1}{2}$  miles of 8 5/8" line from the fresh water station to the high pressure injection station was commenced during December. Operations were greatly hampered due to the extreme weather conditions during most of the month. The line will be 8 5/8" OD, 12 gauge steel, cement lined and reinforced cement coated, with Pres-Seal joints. At the end of the month about 12,000 feet of ditch had been cut and about 2,500 feet of pipe had been installed. Work is now progressing at a much more satisfactory rate and this project should be completed early in January. All pipe has been distributed along the right-of-way and one of the two state highway crossing conduits has been installed. 4 1/2" OD gathering lines from the water wells to the supply station will also be installed under this contract. These lines will also be cement lined and coated.

IV. Water Injection System

A. Injection Station

An order has been issued for the construction of the injection station foundation and erection of a 32' x 40' x 16' Armco Steel building for the station. This work has been delayed due to the bad weather but will commence in early January.

Two 250 HP 10" x 26 stage vertical turbine injection pumps have been ordered. These pumps will provide an initial injection capacity of 20,000 bbls/day at 1000 p.s.i.g. The pumps will be delivered in mid-January, 1961. One 1000 barrel, used, flat bottom, welded steel tank has been ordered for the injection station. This tank will be coated with a coal tar epoxy (Tarset). An order has been issued for the installation of all electrical equipment and controls in the station.

B. High Pressure Injection System

Approximately 13,100 feet of 6 5/8" OD, 0.172" wall, X-52 steel pipe and 23,500 feet of 2 3/8" OD, 0.083" wall, X-46 steel pipe have been ordered for the high pressure water distribution system for the ten initial injection wells. The 2 3/8" OD pipe has been delivered and cement lined locally. Delivery of the 6 5/8" pipe is expected in early January. It will also be cement lined prior to installation. A contract has been made for the installation of the distribution lines along with the construction of five satellite metering stations. The lines will have bell and spigot type welded joints and an external coating of "Roskote" 612 XM cold applied mastic (2 coats) with one spiral wrap of 20 x 20 mesh glass-wrap between the mastic coatings. The installation will commence upon completion of the cement lining work.

Summary of Operations

Page 4

Five 8' x 12' steel shed type buildings have been ordered to cover the metering stations. Nearly all of the meters, valves and fittings for the metering stations have been delivered.

V. Status of Current Unit Projects

<u>AFE Number</u>	<u>Est. Percent Completed</u>	<u>Est. Completion Date</u>	<u>Description</u>
1	100	July, 1960	Drill and test 3 water supply wells
2	2	March, 1961	Install water supply well pumps, water supply station and lines, injection station and lines

VI. Tract Participation Factors

The final tract participation factors as of December 1, 1960, (the effective date of Unitization) are tabulated in the attached Table II. Distribution of revised Exhibits B and C of the Unit Agreement, which include these factors, will be made within the next month. A tract map is also included with the attachments.

VII. Unit Personnel

The following is a list of Unit personnel as of the effective date of Unitization:

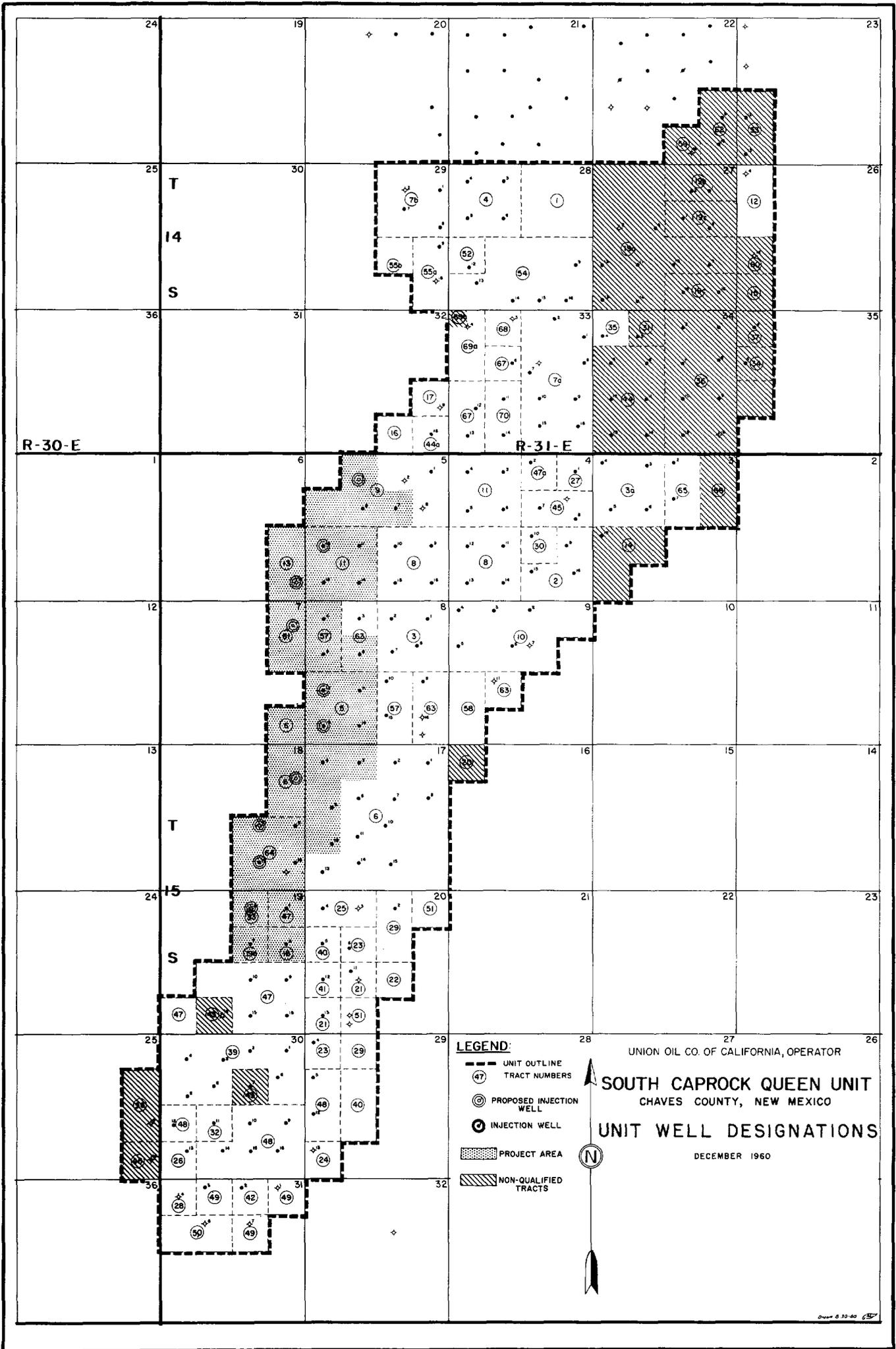
Unit Superintendent	A. T. Mannon, Jr.
Unit Production Foreman	D. R. Bell
Assistant Production Foreman	L. G. Walker
Unit Engineer	R. H. Butler
Unit Clerk	F. S. Peet
Secretary	Mrs. Annaleene McAdoo
Pumpers	J. Johnson, G. Martin, M. Somers, J. Wilbanks, and J. Wilson

Lovington, New Mexico  
January 16, 1961

*Richard H. Butler*

Richard H. Butler  
Unit Engineer

*A. T. Mannon, Jr.*  
A. T. Mannon, Jr.  
Unit Superintendent



R-30-E

R-31-E

**LEGEND:**

- UNIT OUTLINE
- (47) TRACT NUMBERS
- ⊙ PROPOSED INJECTION WELL
- ⊙ INJECTION WELL
- ▨ PROJECT AREA
- ▨ NON-QUALIFIED TRACTS

UNION OIL CO. OF CALIFORNIA, OPERATOR

**SOUTH CAPROCK QUEEN UNIT**  
CHAVES COUNTY, NEW MEXICO

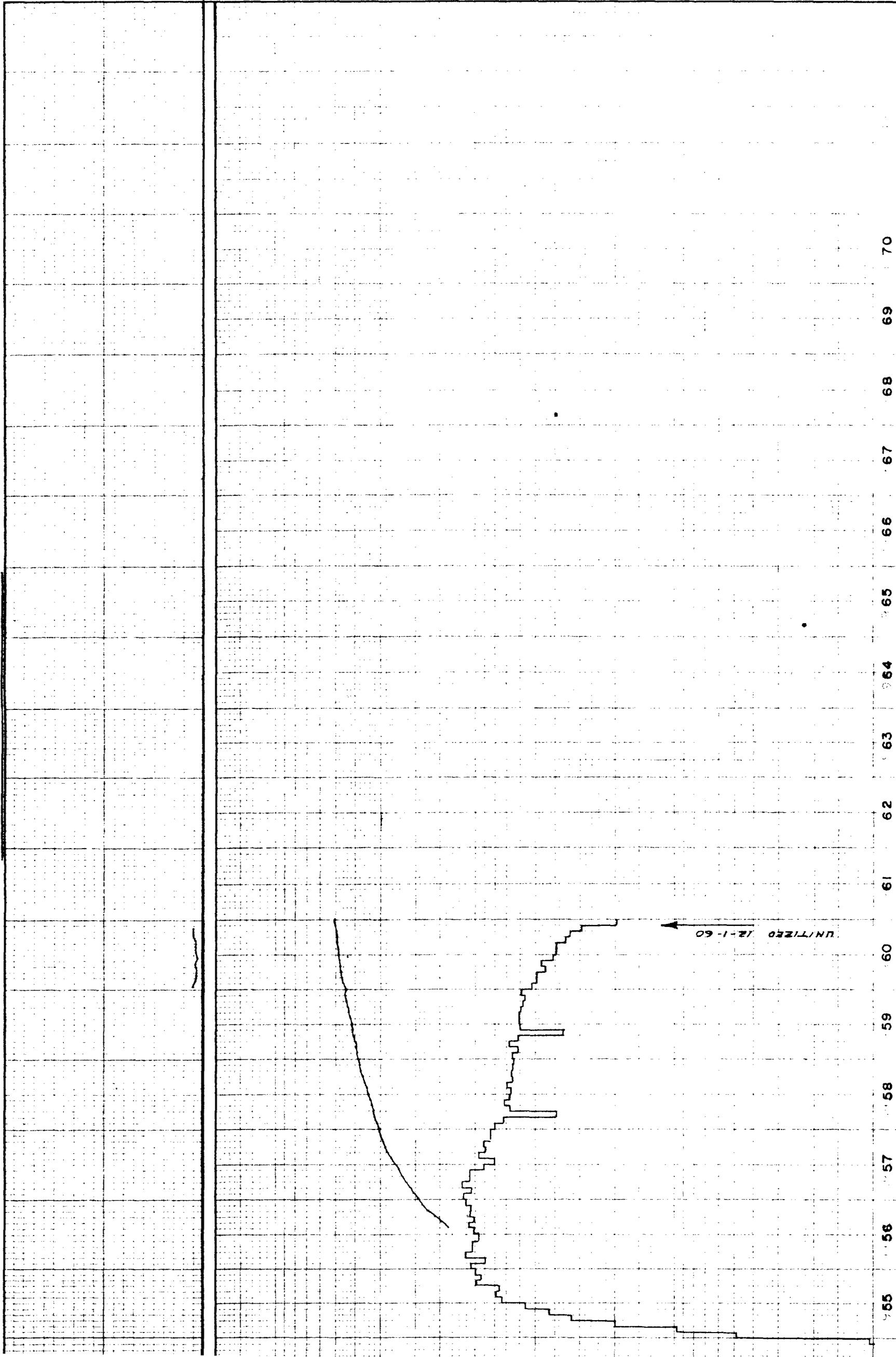
**UNIT WELL DESIGNATIONS**

DECEMBER 1960



UNION OIL CO. OF CALIF., OPERATOR  
CHAVES COUNTY, NEW MEXICO

UNIT PRODUCTION CURVE



**OIL CONSERVATION COMMISSION**  
**Santa Fe, New Mexico**

Sheet No. ....

**OPERATOR'S MONTHLY REPORT**

Union Oil Company of California

The following is a correct report of all oil and gas producing wells of South Caprock (Company or Operator)  
Lease Queen Unit Pool Caprock Queen County Chaves for month of December, 1960

State Land; Lease No. .... Assignment No. .... Government Lease No. .... Pat. Land. ....

**FOLLOWING TO BE REPORTED ON UNIT BASIS**

No.	LOCATION					OIL AND WATER (BBLs.)				(1) Total Gas Prod. MCF	No. Days Produced	Show Whether Flowing Pumping Gas Lift, or Dead
	Well No.	Unit Letter	Sec.	Twp.	Rge.	Net Oil Allowable	(1) Net Oil Prod.	(3) Gravity	(2) Water			
4	3 - 28	C	28	14	31	620	326	35	0	91	20	P
	4 - 28	D	28	14	31	558	181	35	0	61	20	P
	5 - 28	E	28	14	31	279	174	35	0	52	20	P
	6 - 28	F	28	14	31	T. A.	-	-	-	-	-	-
7B	1 - 29	A	29	14	31	558	239	35	5	116	20	P
	7 - 29	G	29	14	31	155	106	35	0	160	20	P
	8 - 29	H	29	14	31	310	137	35	0	79	20	P
52	12 - 28	L	28	14	31	372	163	34	0	94	20	P
54	9 - 28	I	28	14	31	S.I.	-	-	-	-	-	-
	13 - 28	M	28	14	31	248	70	35	5	-	18	P
	14 - 28	N	28	14	31	372	154	35	0	-	18	P
	15 - 28	O	28	14	31	1054	550	36	0	80	19	P
	16 - 28	P	28	14	31	1054	552	36	0	144	20	P
55A	9 - 29	I	29	14	31	310	94	33	0	389	15	P
65	2 - 3	B	3	15	31	558	220	33	0	100	20	P
	7 - 3	G	3	15	31	155	100	33	0	22	20	P
<b>TOTALS</b>						<b>6603</b>	<b>3066</b>		<b>10</b>	<b>1388</b>		

- (1) Distribution to units based on: Test..... Meter..... Estimate.....
- (2) Method of determining water production: Shake out..... Estimate..... Draw Off.....
- (3) Report distillate, condensate or other liquid hydrocarbons (other than oil) in this column, starting with \*

**FOLLOWING TO BE REPORTED ON LEASE BASIS**

No. of Wells	Total on Hand Beginning of Month (Barrels)	Scheduled Allowable for Month	Actual Amount of Oil Produced	Over- Produced	Under- Produced	DISPOSITION OF OIL			Total on Hand End of Month (Barrels)	Total Capacity of Lease Tanks
						Barrels to Pipe Line	Bbls. to Truck or Tank Car	Transporter		
16	2316	6603	3066	-	3537	2687		Texas-New Mex. Pipe Line Co.	2695	5520

**GAS USED FOR GAS LIFT**

MCF Used on Lease ..... MCF Used on Lease .....  
 MCF Sold to ..... MCF On ..... Lease  
 1388 ..... MCF Blown to Air, (By Difference) ..... MCF On ..... Lease

Remarks: .....

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

Signed: A. T. Mannon

Representing: Union Oil Company of California  
205 East Washington  
Lovington, New Mexico

Position: Unit Superintendent  
January 16, 1961

Date: .....

**OIL CONSERVATION COMMISSION**  
**Santa Fe, New Mexico**

Sheet No.....

**OPERATOR'S MONTHLY REPORT**

The following is a correct report of all oil and gas producing wells of Union Oil Company of California  
(Company or Operator)

Lease So. Caprock Queen Unit Pool Caprock Queen County Chaves for month of December, 19 60

State Land; Lease No..... Assignment No..... Government Lease No..... Pat. Land.....

**FOLLOWING TO BE REPORTED ON UNIT BASIS**

LOCATION					OIL AND WATER (BBLs.)				(1) Total Gas Prod. MCF	No. Days Produced	Show Whether Flowing Pumping Gas Lift, or Dead
Well No.	Unit Letter	Sec.	Twp.	Rsc.	Net Oil Allowable	(1) Net Oil Prod.	(3) Gravity	(2) Water			
See attached schedule											
<b>TOTALS</b>											

(1) Distribution to units based on: Test..... Meter..... Estimate.....

(2) Method of determining water production: Shake out..... Estimate..... Draw Off.....

(3) Report distillate, condensate or other liquid hydrocarbons (other than oil) in this column, starting with \*

**FOLLOWING TO BE REPORTED ON LEASE BASIS**

No. of Wells	Total on Hand Beginning of Month (Barrels)	Scheduled Allowable for Month	Actual Amount of Oil Produced	Over- Produced	Under- Produced	DISPOSITION OF OIL			Total on Hand End of Month (Barrels)	Total Capacity of Lease Tanks
						Barrels to Pipe Line	Bbls. to Truck or Tank Car	Transporter		
117	14444	43183	16628		26555	12417		Continental Pipe Line Co.	18655	32790

**GAS**

**USED FOR GAS LIFT**

.....MCF Used on Lease	.....MCF Used on Lease
.....MCF Sold to.....	.....MCF On..... Lease
<u>20,772</u> MCF Blown to Air, (By Difference)	.....MCF On..... Lease

Remarks:.....

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

Signed:..... A.T. Mannon.....

Representing: Union Oil Company of California

Position: Unit Superintendent

205 East Washington

Lovington, New Mexico

Date: January 16, 1961

Production By Wells  
 Supplement Form C-115  
 December, 1960

Tract	Well No.	Unit	Location			Oil Allowable	Oil Production	Gravity	Water Production	Gas	Days Produced	Status
			S	T	R							
2	9 - 4	I	4	15	31	341	223	36	0	TSTM	20	P
	15 - 4	O	4	15	31	620	221	36	0	TSTM	20	P
	16 - 4	P	4	15	31	341	151	36	0	TSTM	20	P
3	1 - 8	A	8	15	31	217	97	35	2	41	18	P
	2 - 8	B	8	15	31	527	204	36	0	129	19	P
	7 - 8	G	8	15	31	93	-	-	-	TSTM	-	S.I.
	8 - 8	H	8	15	31	217	68	35	1	25	13	P
3-A	3 - 3	C	3	15	31	558	125	34	0	104	16	P
	4 - 3	D	3	15	31	62	-	34	-	TSTM	-	S.I.
	5 - 3	E	3	15	31	248	131	34	0	28	20	P
	6 - 3	F	3	15	31	186	86	34	0	15	20	P
5	11 - 8	K	8	15	31	248	60	32	0	66	14	P
	12 - 8	L	8	15	31	124	15	33	0	22	5	P
	13 - 8	M	8	15	31	-	-	-	-	-	-	S.I.
	14 - 8	N	8	15	31	372	59	33	0	93	15	P
6	1 - 17	A	17	15	31	248	32	35	16	63	7	P
	2 - 17	B	17	15	31	248	33	35	1	14	8	P
	3 - 17	C	17	15	31	775	229	35	9	191	13	P
	4 - 17	D	17	15	31	341	66	37	2	165	12	P
	5 - 17	E	17	15	31	620	236	37	9	472	13	P
	6 - 17	F	17	15	31	558	214	35	8	138	13	P
	7 - 17	G	17	15	31	248	70	35	0	51	10	P
	8 - 17	H	17	15	31	124	12	35	0	TSTM	4	P
	10 - 17	J	17	15	31	93	28	35	0	40	7	P
	11 - 17	K	17	15	31	93	39	35	0	TSTM	10	P
	12 - 17	L	17	15	31	775	171	35	0	116	11	P
	13 - 17	M	17	15	31	186	63	35	0	27	10	P
	14 - 17	N	17	15	31	248	109	35	0	TSTM	11	P
	15 - 17	O	17	15	31	62	-	-	0	TSTM	-	S.I.
7A	1 - 33	A	33	14	31	775	295	34	0	93	20	P
	2 - 33	B	33	14	31	775	268	34	0	34	19	P
	7 - 33	G	33	14	31	-	-	-	-	-	-	S.I.
	8 - 33	H	33	14	31	775	296	34	0	298	20	P
	9 - 33	I	33	14	31	620	239	34	0	114	20	P
	10 - 33	J	33	14	31	589	200	34	0	TSTM	19	P
	15 - 33	O	33	14	31	155	42	34	0	TSTM	18	P
	16 - 33	P	33	14	31	248	157	34	0	103	20	P
	11 - 4	K	4	15	31	124	84	34	0	187	17	P
	12 - 4	L	4	15	31	186	85	34	0	68	17	P
13 - 4	M	4	15	31	248	85	34	0	44	17	P	
14 - 4	N	4	15	31	62	98	34	0	512	14	P	
9 - 5	I	5	15	31	-	-	-	-	-	-	S. I.	
10 - 5	J	5	15	31	403	96	34	0	216	14	P	
15 - 5	O	5	15	31	217	87	34	0	87	17	P	
16 - 5	P	5	15	31	155	81	34	0	201	16	P	
9	1 - 5	A	5	15	31	620	273	35	0	255	18	P
	7 - 5	G	5	15	31	620	234	35	0	178	18	P

Production By Wells  
 Supplement Form C-115  
 December, 1960  
 Page 2

Tract No.	Well No.	Unit	Location			Oil Allowable	Oil Production	Gravity	Water Production	Gas	Days Produced	Status
			S	T	R							
10	2 - 9	B	9	15	31	620	256	35	0	43	20	P
	3 - 9	C	9	15	31	124	69	35	0	TSTM	20	P
	4 - 9	D	9	15	31	465	231	35	0	47	20	P
	5 - 9	E	9	15	31	93	-	-	-	TSTM	-	S.I.
	6 - 9	F	9	15	31	558	261	35	0	51	20	P
	11	3 - 4	C	4	15	31	217	126	34	0	350	12
4 - 4		D	4	15	31	434	140	34	0	639	12	P
5 - 4		E	4	15	31	217	117	34	0	135	11	P
6 - 4		F	4	15	31	155	59	33	0	47	5	P
11 - 5		K	5	15	31	124	295	33	0	3776	12	P
12 - 5		L	5	15	31	-	-	-	-	-	-	S.I.
13 - 5		M	5	15	31	-	146	33	0	-	6	S.I.
14 - 5		N	5	15	31	341	350	33	0	1564	13	P
18	8 - 19	H	19	15	31	930	555	34	0	539	17	P
19D	7 - 19	G	19	15	31	310	242	34	0	1272	28	F
21	11 - 20	K	20	15	31	279	160	34	0	TSTM	14	P
	13 - 20	M	20	15	31	589	229	34	0	68	20	P
23	4 - 29s	D	29	15	31	620	177	34	0	52	17	P
	6 - 20	F	20	15	31	558	210	34	0	63	18	P
25	4 - 20	D	20	15	31	775	313	35	31	128	20	P
26	13 - 30	M	30	15	31	31	35	36	-	TSTM	3	P
27	1 - 4	A	4	15	31	93	146	35	0	322	19	P
29	2 - 20	B	20	15	31	372	134	35	24	TSTM	9	P
30	10 - 4	J	4	15	31	155	59	32	0	TSTM	19	P
32	11 - 30	K	30	15	31	1054	385	36	0	95	9	P
33	2 - 19	B	19	15	31	-	-	-	-	-	-	S.I.
35	3 - 34	D	34	14	31	186	44	34	0	13	10	P
39	1 - 30	A	30	15	31	930	389	36	0	227	20	P
	2 - 30	B	30	15	31	806	406	36	0	166	20	F
	3 - 30	C	30	15	31	775	370	36	0	387	20	P
	4 - 30	D	30	15	31	217	44	37	0	233	4	P
	5 - 30	E	30	15	31	465	83	37	0	182	7	P
	6 - 30	F	30	15	31	558	108	36	0	177	9	P
	8 - 30	H	30	15	31	1023	117	36	0	74	7	P
	5 - 20	E	20	15	31	868	444	35	0	TSTM	19	P
41	12 - 20	L	20	15	31	310	209	35	52	49	20	P
42	2 - 31	B	31	15	31	620	92	35	46	40	7	P
44A	16 - 32	P	32	14	31	93	57	35	0	152	11	P
45	7 - 4	G	4	15	31	217	90	36	0	TSTM	20	P
	8 - 4	H	4	15	31	310	132	36	0	TSTM	20	P
47	1 - 19	A	19	15	31	434	264	37	0	1274	17	P
	9 - 19	I	19	15	31	1054	434	35	0	446	21	P
	10 - 19	J	19	15	31	620	502	35	0	1152	21	P
	15 - 19	Q	19	15	31	372	147	37	5	681	21	P
	16 - 19	P	19	15	31	1054	259	35	0	248	15	P
47A	2 - 4	B	4	15	31	217	171	35	0	TSTM	11	P
48	5 - 29s	E	29	15	31	217	36	35	3	TSTM	8	P

Production By Wells  
 Supplement Form C-115  
 December, 1960  
 Page 3

Tract Well			Location			Oil	Oil		Water	Gas	Days	Status
No.	No.	Unit	S	T	R	Allowable	Production	Gravity	Production		Produced	
48	12	- 29sL	29	15	31	775	58	35	29	38	7	P
	9	- 30 I	30	15	31	465	92	35	4	26	8	P
	10	- 30 J	30	15	31	558	94	35	0	68	8	P
	12	- 30 L	30	15	31	248	91	35	9	20	9	P
	14	- 30 N	30	15	31	465	184	36	9	310	9	P
	15	- 30 O	30	15	31	620	98	35	2	10	8	P
	16	- 30 P	30	15	31	775	173	35	52	168	9	P
49	3	- 31 C	31	15	31	310	67	35	3	59	8	P
57	4	- 8 D	8	15	31	248	66	32	0	150	15	P
	5	- 8 E	8	15	31	217	47	32	0	23	12	P
	10	- 8 J	8	15	31	93	-	-	-	-	-	S.I.
	15	- 8 O	8	15	31	248	44	32	0	17	12	P
63	3	- 8 C	8	15	31	186	159	34	00	TSTM	20	P
	6	- 8 F	8	15	31	465	165	34	16	33	19	P
	9	- 8 I	8	15	31	186	70	34	0	15	10	P
64	9	- 18 I	18	15	31	310	46	35	0	228	8	P
	15	- 18 O	18	15	31	-	-	-	-	-	-	S.I.
	16	- 18 P	18	15	31	310	80	35	3	336	17	P
67	6	- 33 F	33	14	31	248	152	33	0	63	16	P
	12	- 33 L	33	14	31	186	92	33	0	68	17	P
	13	- 33 M	33	14	31	124	95	33	0	69	18	P
70	11	- 33 K	33	14	31	248	50	34	0	23	8	P
	14	- 33 N	33	14	31	93	250	34	0	166	11	P
Total						43183	16628		331	20772		

TABLE II

## SOUTH CAPROCK QUEEN UNIT

## UNIT PARTICIPATION FACTORS BY TRACT

As of 12-1-60

<u>Tract Number</u>	<u>Primary Participation</u>	<u>Secondary Participation</u>	<u>Tract Number</u>	<u>Primary Participation</u>	<u>Secondary Participation</u>
1	-	0.083800%	35	0.501321	0.516103
2	2.022507%	2.560577	39	9.152717	7.774899
3	2.251163	2.971199	40	1.520238	1.244018
3-A	2.201386	2.768717	41	0.875040	0.940991
4	2.500440	1.794632	42	1.092081	0.404707
5	1.997224	2.518789	44-A	0.685889	0.347031
6	8.684264	13.449923	45	0.858684	1.430596
7-A	7.789709	5.546179	47	5.500779	4.042546
7-B	1.919714	1.255541	47-A	0.511513	0.580326
8	4.104114	4.408151	48	8.492743	9.514785
9	2.185110	1.470560	49	0.717019	0.452970
10	2.167333	3.077192	50	-	0.028774
11	6.402129	5.486801	51	-	0.052465
12	-	0.025544	52	0.716703	0.655151
16	-	0.004730	54	3.405425	2.435557
17	-	0.039866	55-A	0.619204	0.537370
18	1.077464	0.842678	55-B	-	0.072047
19-D	0.373166	0.336165	57	2.560093	3.098984
21	1.667592	1.067219	58	-	0.134430
22	-	0.002370	61	-	0.276772
23	3.963712	1.820510	63	1.830512	2.345396
24	-	0.043657	64	0.780464	1.574933
25	1.573096	1.358733	65	1.226478	0.602830
26	0.241535	0.215634	67	1.501987	2.044900
27	0.705404	0.603008	68	-	0.268247
28	-	0.051993	69-A	-	0.241790
29	0.928767	0.253497	70	0.759922	1.628794
30	0.531266	0.977477			
32	1.404093	1.454508			
33	-	0.262938	TOTAL	100.000000	100.000000

# Union Oil Company of California

Union Oil Building - 619 West Texas

M I D L A N D



T

1963 NOV X4

AM

8:23

October 31, 1963

Oil Conservation Commission  
State of New Mexico  
P. O. Box 871  
Santa Fe, New Mexico

Re: OP-132 - South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

Enclosed is a copy of an application for contraction and a statement concerning the mailing of notices of contraction. We are also enclosing copies of Exhibits "A", "B" and "C", Fourth Revision.

We would appreciate your forwarding us your approval of the contraction if same is in line with the hearing for the Eastcap Queen Unit that Continental Oil Company had before you last summer. Also, please advise us whether or not Exhibits "A", "B" and "C", Fourth Revision are acceptable to you.

Yours very truly,

Robert F. Jennings, Jr.  
Supervisor of Contracts

RFJ/1s

Encl.

Union Oil Building - 619 West Tenth

MAIN OFFICE OCC

1963 NOV 4 AM 8:23

October 31, 1963

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 791  
Santa Fe, New Mexico

Attention: Mrs. Marian Ehas  
Supervisor, Unit Division

Re: OP-132 - South Caprock Queen Unit  
Chaves County, New Mexico

Dear Mrs. Ehas:

Enclosed is an application for approval of contraction of the South Caprock Queen Unit and the accompanying statement as to mailing of the notice of contraction. Please forward us the Commissioner's approval and your bill for the filing fee if same meets with your approval.

Also enclosed are revised Exhibits "A", "B" and "C" for your consideration, and if same meet with your approval, please file same with the Unit Agreements. A letter from you stating that the Fourth Revised Exhibits are accepted for filing will be sufficient for our purposes.

You will note that the effective date will be the same as the effective date of the Eastcap Queen Unit being worked up by Continental.

Yours very truly,

*Robert F. Jennings, Jr.*  
Robert F. Jennings, Jr.  
Supervisor of Contracts

RJ/ls

Encl.

bcc: R. S. Cooke  
bcc: United States Geological Survey  
bcc: Continental Oil Company  
bcc: John Allen  
7 bcc: Oil Conservation Commission

Union Oil Building - 619 West Texas

MAIN OFFICE OCC.

1963 NOV 4 AM 9 23

October 31, 1963

United States Geological Survey  
Drawer 1837  
Roswell, New Mexico

Attention: Mr. John A. Anderson

Re: OP-132 - South Caprock Queen Unit  
Chaves County, New Mexico

Dear Sir:

Enclosed is the original and four carbon copies of an Application for Approval of Contraction and the original and four carbon copies of a statement concerning mailing of notices of contraction. We are also enclosing five copies of Exhibits "A", "B" and "C", Fourth Revision.

Please forward me your approval of said contraction.

Yours very truly,



Robert F. Jennings, Jr.  
Supervisor of Contracts

RFJ/ls

Encl.

bcc: R. S. Cooke  
bcc: Commissioner of Public Lands  
bcc: Continental Oil Company  
bcc: John Allen  
7 bcc: Oil Conservation Commission

**APPLICATION FOR  
APPROVAL OF  
CONTRACTION**

MAIN OFFICE OCC  
1963 NOV 4 AM 8:24

**Contract No. 14-08-0001-7284  
South Caprock Queen Unit  
Chaves County, New Mexico**

Pursuant to "**SECTION 5. CONTRACTION**" contained in the above mentioned Unit Agreement, Union Oil Company of California made application by letter dated September 6, 1963, addressed to the Director of the U. S. Geological Survey for preliminary concurrence by the Director for contraction of the South Caprock Queen Unit Area. By letter dated September 16, 1963, preliminary consent to proceed with said contraction in accordance with Section 5 of said Unit Agreement was given by the United States Department of the Interior, Geological Survey, through its Acting Director.

On October 1, 1963, a notice of proposed contraction of the South Caprock Queen Unit Area was placed in the U. S. Mails for delivery to the last known address of each Working Interest Owner, Lessee and Royalty Owner whose interests are affected. A copy of said notice is attached to the statement attached to this application setting forth the manner of mailing the notice of contraction.

**NOW, THEREFORE**, comes now Union Oil Company of California, acting as Unit Operator of said South Caprock Queen Unit, and respectfully requests approval by the Commissioner of Public Lands of the State of New Mexico, the Oil Conservation Commission of the State of New Mexico and the Director of the United States Geological Survey for the contraction of said Unit Area to exclude the following described lands which are not effectively committed to the Unit Agreement and are not receiving an allocation, to-wit:

T-14-G, B-31-G, H-32-F, H-

- Section 22: E/2 of NE/4 (Tract 62), SW/4 of SE/4 (Tract 59)
- Section 23: W/2 of SW/4 (Tract 53)
- Section 24: NE/4 of SW/4 (Tract 60), SW/4 of SW/4 (Tract 15)
- Section 27: W/2 and E/2 of SE/4 (Tract 19a)
- Section 27: E/2 of NE/4 (Tract 19b)
- Section 27: S/2 of NE/4 and E/2 of SE/4 (Tract 19c)
- Section 34: NW/4 NE/4 (Tract 31)
- Section 34: SW/4 and E/2 of NW/4 (Tract 44)
- Section 34: E/2 (Tract 36)
- Section 35: SW/4 NE/4 (Tract 36), NW/4 of SW/4 (Tract 38)
- Section 35: NW/4 NE/4 (Tract 37)

Applicant requests that the effective date of said contraction be simultaneous with the effective date of the Eastop Queen Unit, which Unit will cover a portion of the lands described above and will be operated by Continental Oil Company.

Executed this 21st day of October, 1963.

UNION OIL COMPANY OF CALIFORNIA

By John Hansen  
Attorney-in-Fact

Acting as Unit Operator of the South  
Casper Queen Unit. R27

**STATEMENT CONCERNING  
MAILING OF NOTICES  
FOR CONTRACTION  
CONTRACT NO. 14-88-0001-7284**

In order that a contraction of the South Caprock Queen Unit could be effected Union Oil Company of California, acting as Unit Operator, mailed notices of contraction on October 1, 1963, a copy of which notice is attached hereto and marked Exhibit "A".

Said notices were mailed to the last known address of each Working Interest Owner, Lessee and Royalty Owner whose interests are affected, same being shown on the list attached as Exhibit "B". The parties signing and returning an approved copy of the Contraction Letter are marked on Exhibit "B" with an asterisk. The only reply that could be deemed an objection was the letter dated October 11, 1963, of Mr. Merrill Norton, representing the Estate of Cynthia E. Medina, a copy of which is attached hereto and marked Exhibit "C". On October 15, 1963, the undersigned answered Mr. Norton's letter, a copy of which is attached hereto and marked Exhibit "D". No further correspondence has been received from Mr. Norton.

This is to certify that all of the above statement is true and correct to the best of my knowledge and belief.

**UNION OIL COMPANY OF CALIFORNIA**

**Robert P. Jennings, Jr.  
Supervisor of Contracts**

# Union Oil Company of California

Union Oil Building - 619 West Texas

M I D L A N D  T E X A S

September 30, 1963

EXHIBIT "A"

Re: NOTICE OF PROPOSED CONTRACTION OF  
THE SOUTH CAPROCK QUEEN UNIT AREA

Section 5 of the Unit Agreement for the development and operation of the South Caprock Queen Unit, Chaves County, New Mexico, sets forth the provisions whereby the Unit Area may be contracted to exclude unitized land not receiving allocation and to exclude lands not effectively committed to the Unit Agreement. Unit Operator, Union Oil Company of California, has received preliminary approval dated September 16, 1963, from the United States Department of the Interior, Geological Survey, to contract the boundary of the Unit Area to henceforth exclude the following described lands, to-wit:

T-14-S, R-31-E, N.M.P.M.

Section 22: E/2 of SE/4 (Tract 62), SW/4 of SE/4 (Tract 59)  
Section 23: W/2 of SW/4 (Tract 53)  
Section 26: NW/4 of SW/4 (Tract 60), SW/4 of SW/4 (Tract 15)  
Section 27: W/2 and N/2 of SE/4 (Tract 19a)  
Section 27: N/2 of NE/4 (Tract 19b)  
Section 27: S/2 of NE/4 and S/2 of SE/4 (Tract 19c)  
Section 34: NE NW (Tract 31)  
Section 34: SW/4 and S/2 of NW/4 (Tract 44)  
Section 34: E/2 (Tract 36)  
Section 35: SW/4 NW/4 (Tract 34), NW/4 of SW/4 (Tract 38)  
Section 35: NW/4 NW/4 (Tract 37)

The reasons for this contraction are that we have been requested by Continental Oil Company to contract our Unit boundary in order that they may initiate a waterflood in the contracted area to be known as the Eastcap Queen Unit. Union Oil Company of California, as Operator of the South Caprock Queen Unit does not object to the formation by Continental of the Eastcap Queen Unit.

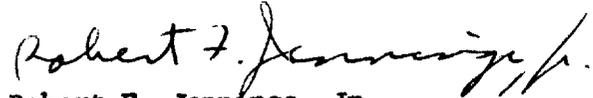
Most of the lands eliminated from the South Caprock Queen Unit will be committed to the pending Eastcap Queen Unit. Other lands to be eliminated will be separated from the South Caprock Queen Unit and can no longer be considered as a logical part thereof. The effective date of this contraction shall be as of the effective date of the Eastcap Queen Unit.

In forwarding you this notice of contraction, we wish to advise you that thirty days will be allowed for submission to Union as Unit Operator of any objections you may have concerning this contraction. Subsequent to the thirty-day period, Union, as Unit Operator, will file with the Supervisor, Commission and Commissioner a comprehensive statement as to the mailing of this notice of contraction and a copy of any objections thereto which have been filed with Union, as Unit Operator.

Please return us one signed copy of this letter approving of the proposed contraction at your earliest convenience, or in the alternative, please forward your objections to subject contraction at your earliest convenience.

Yours very truly,

UNION OIL COMPANY OF CALIFORNIA



Robert F. Jennings, Jr.  
Supervisor of Contracts

RFJ/lb

ABOVE CONTRACTION APPROVED

THIS \_\_\_\_\_ DAY OF \_\_\_\_\_, 1963.

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EXHIBIT "B"

MAIN OFFICE OCC

MAILING LIST 1963 NOV 4 AM 8:24

- \* Mr. Joseph I. O'Neill, Jr.  
410 West Ohio  
Midland, Texas
- Mr. Walter Duncan  
P. O. Box 211  
La Salle, Illinois
- Mr. J. Walter Duncan, Jr.  
P. O. Box 211  
La Salle, Illinois
- Mr. Vincent J. Duncan  
P. O. Box 211  
La Salle, Illinois
- Mr. Raymond T. Duncan  
P. O. Box 211  
La Salle, Illinois
- \* Mr. Frank A. Howard  
30 Rockefeller Plaza  
New York 20, New York
- \* Mr. G. Hilmer Lundbeck  
Swedish American  
636 Fifth Avenue  
New York 20, New York
- \* Mr. Edward L. Shea  
100 Park Avenue  
New York 17, New York
- \* Empire Trust Company  
Oil and Natural Gas Dept.  
20 Broad Street  
New York 5, New York
- \* Mr. E. T. Anderson  
2521 Humble  
Midland, Texas
- \* Mr. Peter L. Shea  
Kuhn, Loeb & Company  
30 Wall Street  
New York 5, New York
- \* Miss Edwina S. Brokaw  
Farms Road  
Greenwich, Connecticut
- \* Mr. N. C. Dragisic, Trustee  
410 West Ohio  
Midland, Texas
- Hondo Oil & Gas Company  
P. O. Box 1000  
Roswell, New Mexico
- \* Mr. Herbert A. Savage  
100 Park Avenue  
New York 17, New York
- Miss Margaret Ross  
7th Floor Petroleum Building  
Roswell, New Mexico  
(Returned Unclaimed)
- \* State of New Mexico  
Commissioner of Public Lands  
Box 791  
Santa Fe, New Mexico
- \* Cottage Baker  
Attn: H. B. Browning  
2004 Central S.E.  
Albuquerque, New Mexico
- \* Gulf Oil Corporation  
Petroleum Building  
Roswell, New Mexico  
Attn: M. F. Taylor
- \* Fair Oil Company  
P.O. Box 689  
Tyler, Texas  
Attn: Dick Ray
- \* Texas Pacific Coal & Oil Co.  
P. O. Box 4067  
Midland, Texas  
Attn: Billie D. Brown
- Mr. Bill A. Shelton  
So. Spring Acres  
Roswell, New Mexico
- \* Phillips Petroleum Company  
Permian Building  
Midland, Texas  
Attn: Don Wolfenburger
- Mr. L. B. Hodges  
Nickson Hotel  
Roswell, New Mexico
- Mr. R. W. Fair  
c/o Fair Oil Company  
P. O. Box 689  
Tyler, Texas
- Mr. S. P. Yates  
c/o Fair Oil Company  
P. O. Box 689  
Tyler, Texas
- \* Mr. Gus W. Arnold  
c/o Fair Oil Company  
P. O. Box 689  
Tyler, Texas
- \* International Oil & Gas Corporation  
Carper Building  
Artesia, New Mexico
- S. P. Yates Drilling Company  
c/o Fair Oil Company  
P. O. Box 689  
Tyler, Texas
- \* Continental Oil Company  
P. O. Box 1377  
Roswell, New Mexico  
Attn: A. B. Slaybaugh
- Mr. Luther B. Harris & Lou  
Harris  
c/o Bill A. Shelton  
So. Spring Acres  
Roswell, New Mexico
- \* Hardin-Simmons University  
23 & Hickory  
Abilene, Texas
- Buddy M. Medlin, Executor of  
the Estate of Cynthia E. Medlin  
Tatum, New Mexico
- \* Mr. George W. Baker  
Box 1826  
Hobbs, New Mexico

**NORTON & INGRAHAM**

ATTORNEYS AT LAW  
200 SOUTH LOVE STREET  
P. O. DRAWER 1567  
LOVINGTON, NEW MEXICO

MAIN OFFICE 000

1963 NOV 4 AM 8:24

October 11, 1963

PHONE 396-2881  
AREA CODE 505

MERRILL L. NORTON  
BARTON L. INGRAHAM

EXHIBIT "C"

RECEIVED

OCT 14 1963

MIDLAND - LAND

Union Oil Company  
619 West Texas  
Midland, Texas

Attention: Robert F. Jennings, Jr.

Gentlemen:

Notice of Proposed Contraction-  
Letter dated September 30, 1963

Your letter of September 30, 1963 notified Buddy M. Medlin, as Executor of the Estate of Cynthia E. Medlin, of a proposed contraction of the unitization in the South Caprock Queen Unit area.

Please deliver to us more complete explanation as to the effect such contraction will have on the oil runs to the Medlin properties. Specifically, we want to know the dollars and cents result of this proposal. Further information we require is a full explanation of your statement in the aforementioned letter of the promise, "Most of the lands eliminated from the South Caprock Queen Unit will be committed to the pending Eastcap Queen Unit." Inform us as to exactly which lands to be omitted will be later included in the Continental Unit.

We shall consider the thirty day limitation for filing objections waived by your offices until a thirty day period commences to run after this information has been delivered to us.

Very truly yours,

NORTON & INGRAHAM

N/r

By: 

Union Oil Building - 619 West Texas

*file*

EXHIBIT "D"

October 15, 1963

Mr. Merrill L. Norton  
P. O. Drawer 1567  
Lovington, New Mexico

Re: OP-132 - South Caprock Queen Unit  
Chaves County, New Mexico

Dear Sir:

The proposed contraction of the South Caprock Queen Unit is contracting from the Unit, lands that were not effectively committed to the Unit, nor qualified for participation therein, therefore, the status of oil runs to the Estate of Cynthia E. Madlin from the South Caprock Queen Unit will not change by virtue of this contraction. The only lands involved in this contraction that will not be included in Continental's Eastcap Queen Unit are as follows:

SW/4 of the SE/4, Section 22, T-14-S, R-31-E;  
W/2 of the SW/4, Section 26, T-14-S, R-31-E;  
NW/4 of the SW/4, Section 35, T-14-S, R-31-E.

Section 5 of the Unit Agreement setting forth the procedure for contracting the Unit Boundary has been complied with, therefore, I must have your objection, if any, within the time limit set forth in the notice of contraction. Neither you nor I have the power to set forth a time for objection other than as set forth in the Unit Agreement.

At one time, we proposed to the U.S.G.S. that only lands going in the Continental Eastcap Queen Unit be contracted out of the South Caprock Queen Unit, but our request for preliminary approval had to be amended at the request of the Department of Interior.

Yours very truly,

Robert F. Jennings, Jr.  
Supervisor of Contracts

RFJ/ls



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY **MAIN OFFICE OCC**  
WASHINGTON 25, D. C.

1963 SEP 23 11 68 AM '63

Union Oil Company of California  
619 West Texas Street  
Midland, Texas

Attention: Mr. Robert F. Jennings, Jr.

Gentlemen:

Your application of June 24, as amended by letter dated September 6, filed with the Regional Oil and Gas Supervisor, Roswell, New Mexico, requests preliminary approval of a proposed contraction of the South Caprock Queen unit area, Chaves County, New Mexico.

The proposed contraction of 1,640 acres which are not qualified for participation in unitized substances, including 1,360 acres of State land, 240 acres of fee land and 40 acres of Federal land, will decrease the unit area from 9,526.10 acres to 7,886.10 acres, more or less. Most of the lands proposed for elimination will be committed to the pending Eastcap Queen unit agreement. Other lands to be contracted will be separated from the South Caprock Queen unit and can no longer be considered as a logical part thereof. The proposed contraction is in accordance with section 5 of the South Caprock Queen unit agreement which provides that the unit area shall be contracted to exclude unitized lands not receiving any allocation and lands not effectively committed to the unit agreement whenever such unit contraction is necessary to conform with the purposes of such agreement.

No objection will be offered to the proposed contraction if accomplished in accordance with the applicable provisions of section 5 of the unit agreement within a reasonable period of time. When you progress to subsection 5(c), at least five copies of the application for final approval should be filed. Do not remember the tracts when preparing revised Exhibits A and B to accompany your application for final approval of the contraction. The contraction notice should provide for the contraction to be effective as of the effective date of the Eastcap Queen unit agreement, as proposed by your application.

Sincerely yours,

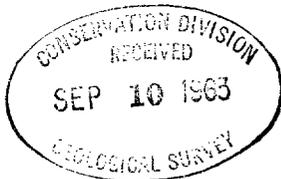
  
Acting Director

Copy to: Gen. Pub. Lands - Santa Fe (w/cy land plot)  
✓ GEOCC - Santa Fe (w/cy land plot)  
BLM - Santa Fe (w/cy land plot)  
Roswell (2)

RWyatt:ibm: 8-9-63

Rewritten: JHOsborne: jt: 9-12-63

Union Oil Building - 619 West Tenth MAIN OFFICE OCC.



1963 SEP 23 AM 8:33

September 6, 1963

Director of the U. S. Geological Survey  
Washington 25, D. C., through the  
Regional Oil and Gas Supervisor,  
Roswell, New Mexico

Re: Amended Application for  
Preliminary Concurrence by  
the Director for Construction of  
the South Caprock Queen Unit Area  
Bearing No. 14-08-0001-7284  
Chaves County, New Mexico

Dear Sir:

Section 5 of the Unit Agreement for the development and operation of the South Caprock Queen Unit, Chaves County, New Mexico, sets forth the provisions whereby the Unit Area may be constructed to include unitized land not receiving allocation and to exclude lands not effectively committed to the Unit Agreement. Unit Operator, Union Oil Company of California, on its own motion requests preliminary concurrence by the Director of the U. S. Geological Survey to the construction of the boundaries of the Unit Area to henceforth include the following described lands, to-wit:

T-14-S, R-21-E, N.M.P.M.

Section 22: E/2 of SE/4 (Tract 62), SW/4 of SE/4 (Tract 59)  
Section 23: W/2 of SW/4 (Tract 53)  
Section 26: NW/4 of SW/4 (Tract 60), SW/4 of SW/4 (Tract 15)  
Section 27: W/2 and E/2 of SE/4 (Tract 19a)  
Section 27: W/2 of NE/4 (Tract 19b)  
Section 27: E/2 of NE/4 and E/2 of SE/4 (Tract 19c)  
Section 34: NE NE (Tract 31)  
Section 34: SW/4 and E/2 of NW/4 (Tract 44)  
Section 34: E/2 (Tract 36)  
Section 35: SW/4 NW/4 (Tract 34), NW/4 of SW/4 (Tract 38)  
Section 35: NW/4 NW/4 (Tract 37)

Such lands are not effectively committed to the South Caprock Queen Unit Agreement and are not receiving an allocation of production, however, it is the intent of Continental Oil Company to form a Unit Area for the development and operation

of the Eastcap Queen Pool Unit and they have filed their application before the Oil Conservation Commission of the State of New Mexico evidencing such intent, being Case No. 2837, scheduled for hearing June 26, 1963.

Union Oil Company of California, as Operator of the South Caprock Queen Unit, does not object to the formation of the Eastcap Queen Pool Unit. Both Continental Oil Company, as proposed Operator of the Eastcap Queen Pool Unit, and Union Oil Company of California contemplate equitable lease well agreements with each other at a later date, when necessary.

In requesting preliminary concurrence, we believe the proper effective date of the construction should be the same date as the effective date of the Eastcap Queen Pool Unit Agreement.

Should you give us your preliminary concurrence, we will proceed with preparation of the notices to effect this construction.

Yours very truly,

UNION OIL COMPANY OF CALIFORNIA



Robert F. Jennings, Jr.  
Supervisor of Contracts

KFJ/ls

cc: Commissioner of Public Lands,  
Santa Fe, New Mexico

New Mexico Oil Conservation Commission

Continental Oil Company

# Union Oil Company of California

Union Oil Building - 619 West Texas

M I D L A N D  T E X A S

September 6, 1963

Director of the U. S. Geological Survey  
Washington 25, D. C., through the  
Regional Oil and Gas Supervisor,  
Roswell, New Mexico

Re: Amended Application for  
Preliminary Concurrence by  
the Director for Contraction of  
the South Caprock Queen Unit Area  
Bearing No. 14-08-0001-7284  
Chaves County, New Mexico

Dear Sir:

Section 5 of the Unit Agreement for the development and operation of the South Caprock Queen Unit, Chaves County, New Mexico, sets forth the provisions whereby the Unit Area may be contracted to exclude unitized land not receiving allocation and to exclude lands not effectively committed to the Unit Agreement. Unit Operator, Union Oil Company of California, on its own motion requests preliminary concurrence by the Director of the U. S. Geological Survey to the contraction of the boundaries of the Unit Area to henceforth exclude the following described lands, to-wit:

T-14-S, R-31-E, N.M.P.M.

Section 22: E/2 of SE/4 (Tract 62), SW/4 of SE/4 (Tract 59)  
Section 23: W/2 of SW/4 (Tract 53)  
Section 26: NW/4 of SW/4 (Tract 60), SW/4 of SW/4 (Tract 15)  
Section 27: W/2 and N/2 of SE/4 (Tract 19a)  
Section 27: N/2 of NE/4 (Tract 19b)  
Section 27: S/2 of NE/4 and S/2 of SE/4 (Tract 19c)  
Section 34: NE NW (Tract 31)  
Section 34: SW/4 and S/2 of NW/4 (Tract 44)  
Section 34: E/2 (Tract 36)  
Section 35: SW/4 NW/4 (Tract 34), NW/4 of SW/4 (Tract 38)  
Section 35: NW/4 NW/4 (Tract 37)

Such lands are not effectively committed to the South Caprock Queen Unit Agreement and are not receiving an allocation of production, however, it is the intent of Continental Oil Company to form a Unit Area for the development and operation

of the Eastcap Queen Pool Unit and they have filed their application before the Oil Conservation Commission of the State of New Mexico evidencing such intent, being Case No. 2837, scheduled for hearing June 26, 1963.

Union Oil Company of California, as Operator of the South Caprock Queen Unit, does not object to the formation of the Eastcap Queen Pool Unit. Both Continental Oil Company, as proposed Operator of the Eastcap Queen Pool Unit, and Union Oil Company of California contemplate equitable line well agreements with each other at a later date, when necessary.

In requesting preliminary concurrence, we believe the proper effective date of the contraction should be the same date as the effective date of the Eastcap Queen Pool Unit Agreement.

Should you give us your preliminary concurrence, we will proceed with preparation of the notices to effect this contraction.

Yours very truly,

UNION OIL COMPANY OF CALIFORNIA



Robert F. Jennings, Jr.  
Supervisor of Contracts

RFJ/lc

cc: Commissioner of Public Lands,  
Santa Fe, New Mexico

New Mexico Oil Conservation Commission

Continental Oil Company



UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY  
WASHINGTON 25, D. C.

MAIN OFFICE 000

1963 APR 4 AM 8:13

2031  
MAR 29 1963

Union Oil Company of California  
Union Oil Building  
Midland, Texas

Attention: Mr. Robert F. Jennings, Jr.

Gentlemen:

Pursuant to the applicable provisions of the South Caprock Queen unit agreement, New Mexico, you have filed a third revised Exhibit "B" effective March 1, 1963, showing the revised participation percentages resulting from the commitment of Federal tract No. 13 and State tracts 20 and 43 to the unit agreement.

The primary participation percentage factor for tract No. 43 has been accepted by more than 90 percent of the working interest owners which is sufficient to satisfy the provisions of section 31 of the unit agreement with respect to subsequent joiners occurring after six months from the effective date of the unit agreement. Tracts 13 and 20 have no primary participation percentages since no producing wells have been drilled on these tracts.

Your letter of November 19, 1962, to the working interest owners shows that all primary participation percentages for previously qualified tracts remain in the same ratio one to the other; whereas the secondary participation percentages do not retain this relationship because they were recalculated using the original secondary participation percentage formula. Although the unit agreement is silent on the method of adjusting participation percentages, the same-ratio method used here for primary production appears correct according to the terms of the unit agreement. The recalculation method used for secondary production is correct for tracts 13 and 20 which were qualified within six months after the effective date of the unit agreement. In this instance, the two methods appear to yield substantially the same results for secondary participation percentages, and, in the absence of protest, we shall not require a revised schedule. However, it appears advisable for any future revisions of secondary participation percentage necessary because of a subsequent joiner to be made by the same-ratio method.

The participation factors set forth in said revised Exhibit "B" effective as of March 1, 1963, are hereby approved subject to like approval by the Commissioner of Public Lands of the State of New Mexico.

Sincerely yours

Copy to: ✓ NMOCC - Santa Fe

*Arthur A. Baker*  
Acting Director

Union Oil Building - 619 West Texas

September 6, 1963

Commissioner of Public Lands  
State of New Mexico  
P. O. Box 791  
Santa Fe, New Mexico

Attn: Mrs. Marjorie M. Ehasz  
Supervisor, Unit Division

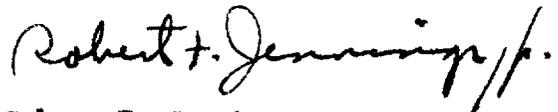
Re: OF-132 - South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

We are attaching a narrow copy of an amended application for construction of the South Caprock Queen Unit so that the construction will eliminate tracts 59, 60, 15 and 38 from the South Caprock Queen Unit Area. Mr. John Allen of our Washington Office advised us that Mr. Pilkinton was ready to act upon the application Monday if we could forward the amending application direct to him.

This letter is not requesting any action from you, but is to keep you advised concerning our proposed construction.

Yours very truly,



Robert F. Jennings, Jr.  
Supervisor of Contracts

RFJ/ls

Encl.

cc: R. S. Coehn  
New Mexico Oil Conservation Commission

August 21, 1963

Union Oil Company  
Union Oil Building  
619 West Texas  
Midland, Texas

Re: South Caprock Queen Unit  
Chaves County, New Mexico  
Ratification and Joinder  
by Olga P. Novick

Attention: Mr. Robert F. Jennings, Jr.

Gentlemen:

We acknowledge receipt of ratification and joinder, to fee tract Number 52, by Olga P. Novick and consented to by Union Oil Company as working interest owner.

This office accepts this ratification for filing with the South Caprock Queen Unit, covering a royalty interest under tract Number 52.

Very truly yours,

E. S. JOHNNY WALKER  
COMMISSIONER OF PUBLIC LANDS

BY:  
(Mrs.) Marian M. Rhea, Supervisor  
Unit Division

ESW/mar/m  
cc: Oil Conservation Commission  
Santa Fe, New Mexico

United States Geological Survey  
Roswell, New Mexico

Union Oil Company of California

IN REPLY GIVE NO.

SALE OFFICE OCC

1963 JUN 27 AM 4 31

2031

June 24, 1963

Director of the U. S. Geological Survey  
Washington 25, D. C., through the  
Regional Oil and Gas Supervisor,  
Roswell, New Mexico

Re: Application for Preliminary Concurrence by the Director for Construction of the South Caprock Queen Unit Area Bearing No. 11-08-0001-7284, Chaves County, New Mexico

Dear Sir:

Section 5 of the Unit Agreement for the development and operation of the South Caprock Queen Unit, Chaves County, New Mexico, sets forth the provisions whereby the Unit Area may be contracted to exclude unutilized land not receiving allocation and to exclude lands not effectively committed to the Unit Agreement. Unit Operator, Union Oil Company of California, on its own motion requests preliminary concurrence by the Director of the U. S. Geological Survey to the contraction of the boundaries of the Unit Area to henceforth exclude the following described lands, to-wit:

T-11-S, R-11-E, NMPM

Section 22: E/2 of SE/4 (Tract 62)  
Section 23: W/2 of SW/4 (Tract 53)  
Section 27: W/2 and N/2 of SE/4 (Tract 19a)  
Section 27: N/2 of NE/4 (Tract 19b)  
Section 27: S/2 of NE/4 and  
S/2 of SE/4 (Tract 19c)  
Section 31: NE NW (Tract 31)  
Section 31: SW/4 and S/2 of NW/4 (Tract 41)  
Section 31: E/2 (Tract 36)  
Section 35: SW/4 NW/4 (Tract 31)  
Section 35: NW/4 NW/4 (Tract 37)

Such lands are not effectively committed to the South Caprock Queen Unit Agreement and are not receiving an allocation of production, however, it is the intent of Continental Oil Company to form a Unit Area for the development and operation of the Eastcap Queen Pool Unit and they have filed their application before the Oil Conservation Commission of the State of New Mexico evidencing such intent, being Case No. 2837, scheduled for hearing June 26, 1963.

Union Oil Company of California, as Operator of the South Caprock Queen Unit, does not object to the formation of the Eastcap Queen Pool Unit. Both Continental Oil Company, as proposed Operator of the Eastcap Queen Pool Unit, and Union Oil Company of California contemplate equitable line well agreements with each other at a later date, when necessary.

In requesting preliminary concurrence, we believe the proper effective date of the contraction should be the same date as the effective date of the Eastcap Queen Pool Unit Agreement.

Should you give us your preliminary concurrence, we will proceed with preparation of the notices to effect this contraction.

Yours very truly,

UNION OIL COMPANY OF CALIFORNIA

R F J <sub>LS</sub>

Robert F. Jennings, Jr.  
Supervisor of Contracts

RFJ:hn  
cc: Commissioner of Public Lands,  
Santa Fe, New Mexico



IN REPLY REFER TO:

UNITED STATES  
DEPARTMENT OF THE INTERIOR  
GEOLOGICAL SURVEY

Drawer 1857  
Roswell, New Mexico

APR 27 1961  
April 27, 1961

Case # 2051

Union Oil Company of California  
Midland, Texas

Attention: Mr. W. D. Owens

Gentlemen:

Your letter of April 17 requests approval of a change in the plan of operations for the South Caprock Queen Unit, Chaves County, New Mexico. You propose that well No. 6-5, (SE $\frac{1}{4}$ NW $\frac{1}{4}$  sec. 5, T. 15 S., R. 31 E., N.M.P.M.) be an injection well due to its position on the structure, and that injection well No. 1606, (SE $\frac{1}{4}$ SE $\frac{1}{4}$  sec. 6, T. 15 S., R. 31 E., N.M.P.M.) be drilled 100 feet north of the abandoned hole that had been authorized for re-entry for recompletion due to hole conditions in the abandoned well.

This office offers no objection to the proposed change in plan of operations.

Very truly yours,

  
EDWIN M. THOMASSON

Acting Regional Oil and Gas Supervisor

Copy to: Washington  
N.M.O.C.C., Santa Fe

1961 APR 4 PM 1:23

Case # 2031

April 3, 1961

Union Oil Company of California  
Union Oil Building  
Midland, Texas

Re: Second Revised Exhibit "B" and  
"C" dated December 1, 1961  
South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

This office has received the "Second Revised Edition" of Exhibit "B" and "C" dated December 1, 1960, setting forth the schedule of those tracts qualified for primary and secondary participation, and filed as required under section 14 of the South Caprock Queen Unit Agreement.

The Commissioner of Public Lands herewith approves the above mentioned, subject to like approval by the United States Geological Survey.

Very truly yours,  
E. S. JOHNNY WALKER  
COMMISSIONER of Public Lands

BY:  
Ted Bilberry, Supervisor  
Oil and Gas Division

ESW/mmr/s  
cc:

US Geological Survey  
Roswell, New Mexico

Oil Conservation Commission  
Santa Fe, New Mexico

C  
O  
P  
Y

In reply refer to:  
Unit Division

OFFICE 000  
OCT 10 AM 1960

Case # 2031

October 7, 1960

\*  
~~Case 2031~~ WF

C  
O  
P  
Y

AIR MAIL

Union Oil Company of California  
Union Oil Building  
619 West Texas  
Midland, Texas

Re: South Caprock Queen Unit  
Chaves County, New Mexico

Gentlemen:

The Commissioner of Public Lands has approved your South Caprock Queen Unit Agreement, as of October 6, 1960, subject to like approval by the United States Geological Survey.

We are enclosing eight certificates of approval, also Official Receipt No. 44497 F in the Amount of \$130.00 which covers the filing fee.

Very truly yours,  
MURRAY E. MORGAN  
Commissioner of Public Lands

BY:  
Ted Bilberry, Supervisor  
Oil and Gas Division

MEM/nmr/s  
cc:

United States Geological Survey  
Roswell, New Mexico

Oil Conservation Commission  
Santa Fe, New Mexico

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

# WESTERN UNION TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination.

LA 097 DB 136

1960 JUL 26

1960 JUL 26 AM 11 26

D MDA 138 PD=MIDLAND TEX 26 1145A CST=

A L PORTER JR, SEC DIR=

NEW MEXICO OIL CONS COMM SANTA FE NMEX=

=MONSANTO CHEMICAL CO CONCURS WITH THE REQUEST OF UNION OIL COMPANY OF CALIFORNIA TO UNITIZE THE PROPOSED SOUTH CAPROCK QUEEN UNIT, CHAVES COUNTY, NEW MEXICO AND PERMISSION TO CONDUCT A WATER FLOOR OF THE QUEEN SAND WITHIN THE PROPOSED UNIT AREA=

A W WOOD REGIONAL PRODUCT SUPT MONSANTO CHEMICAL CO.

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

# WESTERN UNION

## TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

LA 177 DB314

1960 JUL 25 PM 4 00

D MDA276 NL PD=FAX MIDLAND TEX 25=

NEW MEXICO OIL CONSERVATION COMMISSION=

SANTA FE NMEX=

*Case 2032*

ATTENTION MR PORTD ATTENTION MR. PORTER

RE SOUTH CAPROCK QUENN UNIT HEARING OF JULY 28

1960 PLEASE HAVE RECORD SHOW THAT I CONCUR IN THE

APPLICATION OF UNION OIL CO OF CALIFORNIA INsofar AS

REQUEST FOR APPROVAL OF FORMATION OF UNIT AND THE PLAN

OF WATER FLOODING=

JOSEPH I O'NEILL JR

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

# WESTERN UNION TELEGRAM

DL=Day Letter  
NL=Night Letter  
LT=International Letter Telegram

1201 (4-60)

W. P. MARSHALL, PRESIDENT

The line for domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

CLASS OF SERVICE

This is a ~~fast~~ message unless its deferred character is indicated by the proper symbol.

105 SSM 104

1061 111 PD=ROSWELL NMEX 26 1100A MST=

MEXICO OIL CONSERVATION COMMISSION=

SANTA FE NMEX=

RE CASE NO 2031 TO BE HEARD 1:00 PM JULY 27, 1960 GULF OIL CORPORATION AN INTERESTED PARTY IN THE UNION OIL COMPANY APPLICATION FOR APPROVAL OF A SOUTH CAPROCK QUEEN WATERFLOOD UNIT AGREEMENT GULF HAS ACREAGE THAT IS INCLUDED IN APPLICANT'S UNIT AREA BUT AT THE PRESENT TIME SOME OF THIS ACREAGE IS BEING CONSIDERED FOR INCLUSION IN A SEPARATE WATERFLOOD UNIT TO BE OPERATED BY CONTINENTAL OIL COMPANY GULF HAS NO OBJECTION TO APPLICANT'S PROPOSAL SINCE WE WILL HAVE AN OPPORTUNITY TO

FA  
APPR

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

ORPORATION  
UNIT  
COMMISSION

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

CLASS OF SERVICE

This is a fast message unless its deferred character is indicated by the proper symbol.

# WESTERN UNION

## TELEGRAM

W. P. MARSHALL, PRESIDENT

1201 (4-60)

SYMBOLS

DL=Day Letter

NL=Night Letter

LT=International Letter Telegram

The filing time shown in the date line on domestic telegrams is LOCAL TIME at point of origin. Time of receipt is LOCAL TIME at point of destination

LA252 DB351

1960 JUL 26 AM 5 32

D FWA710 PD=FORT WORTH TEX 26 442P CST=

A L PORTER JR=

SECRETARY DIRECTOR OIL CONSERVATION COMMISSION

SANTA FE NMEX=

NEVILLE G PENROSE INC CONCURS WITH UNION OIL COMPANY OF CALIFORNIA IN THEIR APPLICATION FOR DESIGNATION OF S CAPROCK QUEEN UNIT AND INITIATION OF A WATERFLOOD PROJECT

DOCKETT #2051 AND #2037

NEVILLE G PENROSE INC BY JOHN P MCNAUGHTON  
EXECUTIVE VICE PRESIDENT.

THE COMPANY WILL APPRECIATE SUGGESTIONS FROM ITS PATRONS CONCERNING ITS SERVICE

LAW OFFICES OF  
**CAMPBELL & RUSSELL**  
J. P. WHITE BUILDING  
ROSWELL, NEW MEXICO

JACK M. CAMPBELL  
JOHN F. RUSSELL

TELEPHONES  
MAIN 2-4641  
MAIN 2-4642

1966 JUL 15 AM 11  
July 15, 1966

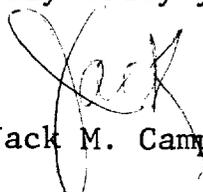
Mr. A. L. Porter  
Secretary-Director  
Oil Conservation Commission  
P. O. Box 871  
Santa Fe, New Mexico

Dear Mr. Porter:

Please find enclosed original and two copies of application of Union Oil Company of California in Case No. 2031. It is my understanding that the Commission is publishing notice of this application for the July 27 hearing.

I will forward to you on Monday application with exhibits attached in Case No. 2032 which is the application of Union Oil Company of California for approval of a waterflood project in the South Caprock Queen Unit.

Very truly yours,

  
Jack M. Campbell

For CAMPBELL & RUSSELL

Enclosure

P.S. Am forwarding Appn. in Case 2032 today

*Jack*  
*Checked*  
*July 15, 1966*  
*JALC*