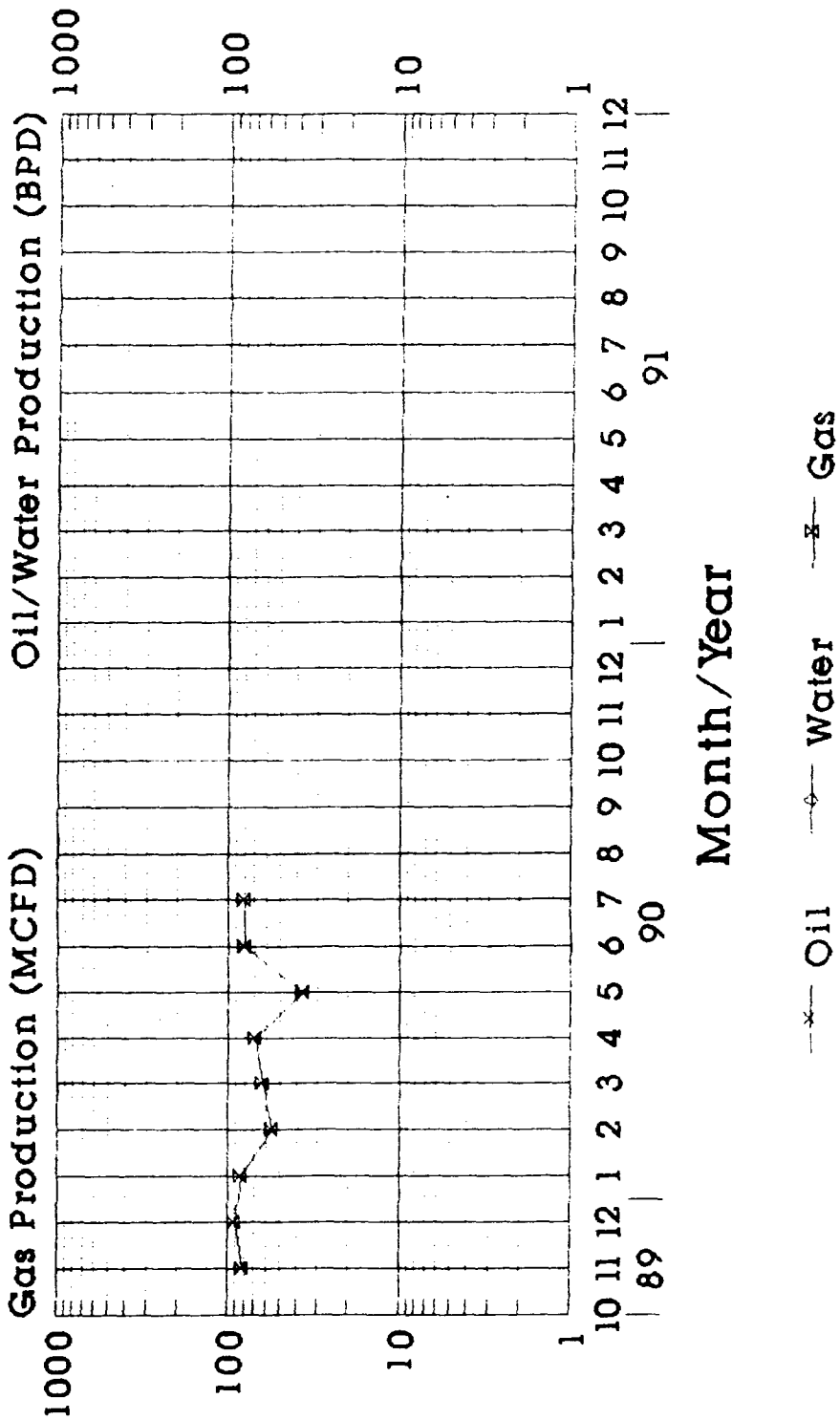


RINCON UNIT #242

RIO ARriba COUNTY, NEW MEXICO



Production based on actual days on

EASE TOTAL

0 1 0 RINCON UNIT 242 P.A.

N MEXICO BH

TYPE 0 SEP 28, 1990 8:27 AM

	GROSS GWG	NET GWG	GWG SOLD	TOTAL INV	GWG INCOME
1989	4,808	3,967	3,967	333,792	9,520
1990	17,110	14,116	14,116		33,877
1991	13,563	11,189	11,189		26,854
1992	12,395	10,225	10,225		24,541
1993	11,477	9,468	9,468		22,724
1994-62	418,879	345,574	345,574		572,914
	=====	=====	=====	=====	=====
TOTAL	478,230	394,539	394,539	333,792	690,430

INVESTMENT PARAMETERS - - - 10/89 :EFFECTIVE DATE

DISC RATE	PRESENT WORTH BEFORE TAX	AFTER TAX	RATE OF RETURN, %	BEFORE TAX	AFTER TAX
10%	-177,027	-120,187	PROFIT / INV (10% DISC)	1.0	1.0
15%	-206,922	-143,048	PROFIT / INV (15% DISC)	-0.54	-0.36
20%	-224,911	-157,737	INV. EFFICIENCY (@ 10%)	-0.63	-0.44
50%	-261,907	-192,664	INV. EFFICIENCY (@ 15%)	-0.6	-0.5
			PAYOUT, YEARS	-0.6	-0.6
			INITIAL INVESTMENT	36.1	35.3
					333,792

TYPE 0 SEP 28, 1990 8:27 AM

	GAR	TOTAL EXP	PRODN TAX	CASH-BT	CASH-AT
1989	9,520	1,440	940	-325,712	-259,313
1990	33,877	6,346	3,346	27,532	32,498
1991	26,854	5,652	2,652	21,202	25,614
1992	24,541	5,424	2,424	19,117	22,207
1993	22,724	5,244	2,244	17,479	19,686
1994-62	572,914	278,436	71,437	294,476	194,548
	=====	=====	=====	=====	=====
TOTAL	690,430	302,542	83,043	54,096	35,242

Unocal North American
Oil & Gas Division
Unocal Corporation
3300 North Butler Avenue
Suite 200
Farmington, New Mexico 87401
Telephone (505) 326-7600
Fax: (505) 326-6145



March 16, 1992

Farmington District

Bureau of Land Management
Minerals Division
1235 La Plata Hwy
Farmington, New Mexico 87401
Attn: Duane Spencer
Chief of Reservoir Management


Re: Application for the Initial
Basin Fruitland Coal Gas
Participating Area "C"
Rincon Unit, Rio Arriba County,
New Mexico

Gentlemen:

Enclosed please find two copies of the Application for Approval for the Initial Basin Fruitland Coal Gas Participating Area "C" in the Rincon Unit, Rio Arriba County, New Mexico. Enclosed also are geologic and engineering data in support of this application.

Union Oil Company of California, as operator of the Rincon Unit, respectfully requests your approval of this application.

Very Truly Yours,
Union Oil Company of California
DBA UNOCAL


William L. Irwin
District Petroleum Engineer

xc: Commissioner of Public Lands
P.O. Box 1148
Santa Fe, New Mexico 87504-1148

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

APPLICATION FOR THE INITIAL BASIN FRUITLAND COAL GAS PARTICIPATING
AREA - "C" - RINCON UNIT - RIO ARriba COUNTY, NEW MEXICO

Duane Spencer
Chief of Reservoir Management
Bureau of Land Management - Minerals Division
1235 La Plata Highway
Farmington, New Mexico 87401

Union Oil Company of California, as unit operator of the Rincon Unit, respectfully submits for your approval the following described lands to constitute the initial participating area "C" for the Basin Fruitland Coal Gas producing formation, to wit:

TOWNSHIP 27 NORTH, RANGE 6 WEST, N.M.P.M.

Section 18: South/2

Containing 319.08 acres, more or less

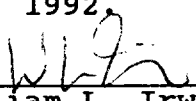
In support of this application, and in addition to the geologic and engineering reports, the following are attached:

- 1) Structure Top - Basin Fruitland Coal Gas Formation
- 2) Basin Fruitland Coal Gas Formation Gross Isopach
- 3) Type Log
- 4) Land Map - Rincon Unit
- 5) Rincon Unit #239 Fruitland Coal Gas Production Decline Curve
- 6) Rincon Unit #239 Fruitland Coal Gas Economics
- 7) Schedule of Lands and Working Interest Ownership in the initial Basin Fruitland Coal Gas participating area "C" (Participation Allocation Formula)
- 8) Applicant's Statement and Affidavit

This application is predicated on nine months of actual production history from the Rincon Unit #239 well which first delivered on November 21, 1989.

Applicant respectfully requests your approval of the hereinabove selection of lands to constitute the Initial Basin Fruitland Coal Gas Formation Participating Area "C", to be effective November 21, 1989.

Dated this 16th day of March, 1992.



William L. Irwin
District Petroleum Engineer
Union Oil Company of California

Well Summary

Well Name: Rincon Unit #239
Location: 1810'FSL, 1645'FWL, Sec 18, T27N, R6W
Elevation: 6648' GL
Total Depth: 3312'
Lease Number: SF-079052
Pool/Formation: Basin Fruitland Coal Gas
Spud Date: 7-26-89
Completion Date: 10-9-89
1st Delivery Date: 11-21-89
Perf'd Interval: 3072-3076, 3078-3082, 3087-3098, 3162-3174
3176-3192

Geologic Summary

The Fruitland Formation was deposited in a coastal plain environment landward of the Pictured Cliffs strandline. It consists of shales, siltstones, sandstones and coal. The coals were deposited in low-lying areas such as lagoons, swamps and bayous behind the barrier islands, bars, and beaches of the Pictured Cliffs sandstone. The coal is best developed in the basal Fruitland, and extends aerially over the entire basin with the exception of a small region on the eastern margin. Net coal varies from 20 to 80 feet thick with the thickest sections being in the north-central part of the basin. The Rincon Unit coals range in thickness from 30 to 70 feet and in some areas of the unit are split into an upper and a basal coal zone. The coal itself is considered High Volatile C Bituminous in rank. Regional dip is 1 to 2 degrees to the northeast, and structure does not appear to be a factor in natural gas entrapment anywhere in the area of the unit.

Engineering Summary

The Rincon Unit #239 was drilled and completed by Union Oil Company of California as a Basin Fruitland Coal Gas producer in 1989. Surface pipe measuring 9-5/8" was set at 225 feet and cemented with 175 sacks to surface. Production casing measuring 5-1/2" was then set at 3312 feet and cemented in two stages to surface with 595 sacks cement. After drilling out to PBTD of 3312', the lower coal zones was perforated from 3162' to 3192' with 4 shots per foot and fracture stimulated with 6,000# 100 mesh, 147,000# 20/40 sand, and 43,000 gallons cross-linked gel water. After setting a bridge plug, the upper coal zone was perforated from 3072' to 3098' with 4 shots per foot and fracture stimulated with 4,000# 100 mesh, 105,000# 20/40 sand and 29,000 gallons cross-linked gel water. The recorded initial potential and 24 hour shut-in pressure were 257 MCFD and 167 psi, respectively. The well was first delivered to the El Paso Natural Gas pipeline system on November 21, 1989. The current deliverability for the well against a 150# line pressure is 50 MCFD.

Volumetrics calculated on the below-listed parameters yields a recoverable gas volume of 0.66 Bcf.

Net Pay: 52 ft
Drainage area: 160 acres
Gas Content: 218 SCF/ton
Tonnage Factor: 2024 tons/acre-feet (from density log)
Recovery Factor: 18 %

Economics

Completion Cost: \$367,021
Royalty Burden: 17.50%
Gas Price: \$2.40/MCF with tax credit, 1.50/MCF after yr 2000
Operating Cost: \$250/month
Production Rate: Maximum - 257 MCFD, Current (10/90) - 50 MCFD,
No associated water production

Economics based on the above are attached. Given the investment cost to complete this well payout should occur in 28 years. Compared with gross income after royalty (GAR) this Basin Fruitland Coal Gas well produces in economic quantities above operating costs.

STATE OF NEW MEXICO

COUNTY OF SAN JUAN

APPLICANT'S STATEMENT AND AFFIDAVIT

BEFORE ME, the undersigned authority on this day personally appeared William L. Irwin, District Petroleum Engineer, known to me to be the person whose name is subscribed to this instrument, who, having been by me first duly sworn, upon oath states as follows:

- 1) That this Statement and Affidavit is made concerning this application for the initial Basin Fruitland Coal Gas participating area "C" in the Rincon Unit, in the S/2 Section 18, T27N-R6W, comprising 319.08 acres.
- 2) That to the best of his information, knowledge and belief, the information supplied is true.
- 3) That notice of this application has been mailed or delivered to the Rincon Unit working interest owners in accordance with the unit agreement and the unit operating agreement.
- 4) That he certifies that the information and data contained in the application are true and correct and that all copies of records or summaries of such records relied upon in the application are true, correct and authentic copies of documents on file in the offices of Union Oil Company of California (Unocal).
- 5) That he is of lawful age, that he is a responsible official of Unocal, that he is duly authorized to make this Statement and Affidavit on behalf of Unocal, that he has knowledge of the facts contained herein, that this Statement and Affidavit is true and correct, and that he adopts the allegations herein as his sworn statement.

SUBSCRIBED AND SWORN TO before me, this undersigned authority, on this day of March 10th 1992.

Melissa Ochoa
Notary Public in and for
San Juan County, New Mexico

My Commission Expires:

1/11/96

**SCHEDULE OF LANDS AND WORKING INTEREST OWNERSHIP
IN INITIAL BASIN FRUITLAND COAL PARTICIPATING AREA "C"**

RINCON UNIT

Tract No. 1 (Unit Tract No. 1)
(Acreage in Unit Tract: 520.00 ac.)

LESSOR:	U.S.A.
SERIAL NO.:	SF-079052
ACREAGE DESCRIPTION:	<u>Township 27 North, Range 6 West</u> Section 18: SE/4, E/2 SW/4
WORKING INTEREST OWNER(S):	Union Oil Company of California - 100%
ACREAGE INCLUDED IN INITIAL PARTICIPATING AREA:	240.00 acres
PERCENTAGE OF FRUITLAND COAL FORMATION PRODUCTION ALLOCATED TO THIS TRACT:	75.21625%

Tract No. 2 (Unit Tract No. 17)
(Acreage in Unit Tract: 157.76 ac.)

LESSOR:	U.S.A.
SERIAL NO.:	SF-079404-A
ACREAGE DESCRIPTION:	<u>Township 27 North, Range 6 West</u> Section 18: Lots 3 thru 4
WORKING INTEREST OWNER(S):	El Paso Natural Gas Company - 100%
ACREAGE INCLUDED IN INITIAL PARTICIPATING AREA:	79.08 acres
PERCENTAGE OF FRUITLAND COAL FORMATION PRODUCTION ALLOCATED TO THIS TRACT:	24.78375%

SUMMARY OF LANDS INCLUDED IN THE
INITIAL BASIN FRUITLAND COAL PARTICIPATING AREA "C"

RINCON UNIT

<u>LEASE</u>	<u>UNIT TRACT NO.</u>	<u>ACREAGE</u>	<u>PERCENTAGE</u>
U.S.A. SF-079052	1	240.00	75.21625%
U.S.A. SF-079404-A	17	79.08	24.78375%
		<hr/>	<hr/>
		319.08	100.00000%

**SUMMARY OF WORKING INTEREST OWNERSHIP IN
INITIAL BASIN FRUITLAND COAL PARTICIPATING AREA "C"**

RINCON UNIT

<u>WORKING INTEREST OWNER</u>	<u>WORKING INTEREST PERCENTAGE</u>
Union Oil Company of California	76.82091%
Wiser Oil Company	2.54378%
H. R. Stasney & Sons Company	1.30259%
Meridian Oil Inc., as Agent	10.59527%
Meridian Oil Inc., Individually	1.55217%
Jones Company, Ltd.	1.30259%
Conoco, Inc.	2.29005%
Amoco Production Company	2.29004%
Beryl B. McMahan	0.65130%
Beryl B. McMahan, Trustee of the Thomas V. McMahan Trust	0.32565%
Beryl B. McMahan, Trustee of the Gwin M. Lewis Trust	0.32565%
TOTAL	100.00000%

UNOCAL 
NORTH AMERICAN OIL & GAS DIVISION
SOUTHWESTERN REGION

RINCON UNIT
RIO ARriba COUNTY, NEW MEXICO
ISOPACH
FRUITLAND COAL
RINCON UNIT # 239
S $\frac{1}{2}$ SEC. 18 -T27N R6W

INTERP BY	D.V.H.	SCALE	2 1/2" = 1 Mi.	C. 10'
DRAFT BY		DATE	9-26-90	FILE NO. (A) 84