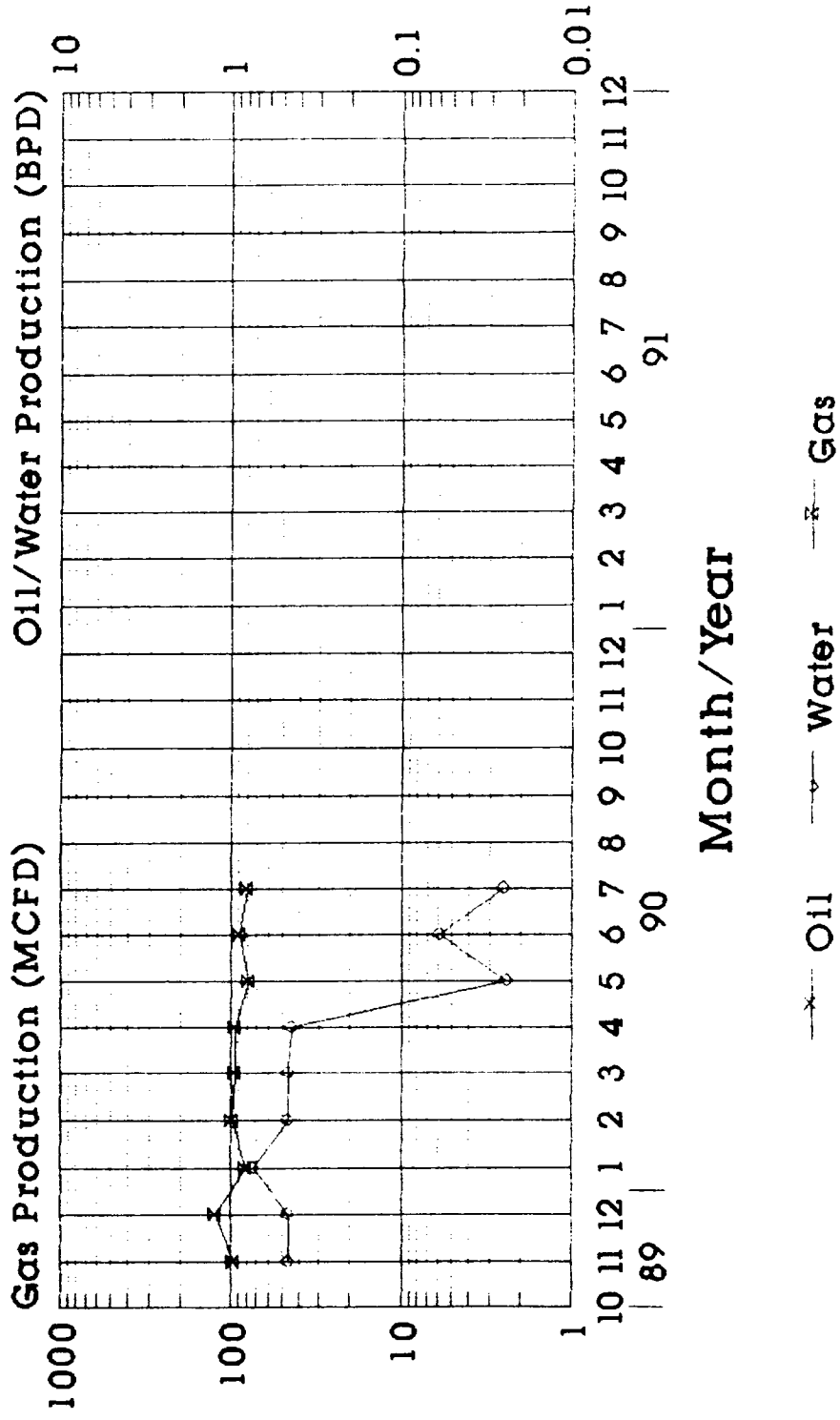


# RINCON UNIT #240

## RIO ARriba COUNTY, NEW MEXICO



Production based on actual days on

EASE TOTAL						
0 1 0		RINCON UNIT 240 P.A.				N MEXICO BH
TYPE 0	SEP 28, 1990	8:27 AM				
	GROSS GWG	NET GWG	GWG SOLD	TOTAL INV	GWG INCOME	
1989	5,248	4,330	4,330	523,734	10,391	
1990	20,563	16,965	16,965		40,715	
1991	17,202	14,191	14,191		34,059	
1992	15,720	12,969	12,969		31,125	
1993	14,556	12,008	12,008		28,820	
1994-74	568,997	469,422	469,422		773,321	
	=====	=====	=====	=====	=====	
TOTAL	642,285	529,885	529,885	523,734	918,432	

\*\*\*\*\*  
INVESTMENT PARAMETERS - - - 10/89 :EFFECTIVE DATE

DISC	PRESENT WORTH			BEFORE TAX	AFTER TAX
RATE	BEFORE TAX	AFTER TAX	RATE OF RETURN, %	0.3	0.3
10%	-318,738	-213,945	PROFIT / INV (10% DISC)	-0.62	-0.41
15%	-358,716	-245,521	PROFIT / INV (15% DISC)	-0.70	-0.48
20%	-382,288	-265,682	INV. EFFICIENCY (@ 10%)	-0.6	-0.5
50%	-428,631	-313,228	INV. EFFICIENCY (@ 15%)	-0.7	-0.6
			PAYOUT, YEARS	57.3	55.4
			INITIAL INVESTMENT		523,734

TYPE 0	SEP 28, 1990	8:27 AM			
	GAR	TOTAL EXP	PRODN TAX	CASH-BT	CASH-AT
1989	10,391	1,526	1,026	-514,869	-409,199
1990	40,715	7,021	4,021	33,694	45,098
1991	34,059	6,364	3,364	27,695	36,735
1992	31,125	6,074	3,074	25,051	31,778
1993	28,820	5,846	2,846	22,974	28,129
1994-74	773,321	339,837	96,838	433,483	287,545
	=====	=====	=====	=====	=====
TOTAL	918,432	366,668	111,169	28,031	20,089

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

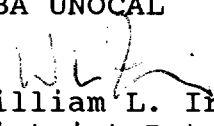
Re: Application for the Initial  
Basin Fruitland Coal Gas  
Participating Area "B"  
Rincon Unit, Rio Arriba County,  
New Mexico

Gentlemen:

Enclosed please find two copies of the Application for Approval for the Initial Basin Fruitland Coal Gas Participating Area "B" 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 - "B" - 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 "B" for the Basin  
Fruitland Coal Gas producing formation, to wit:

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

Section 23: South/2

Containing 320 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 #242 Fruitland Coal Gas Production Decline Curve
- 6) Rincon Unit #242 Fruitland Coal Gas Economics
- 7) Schedule of Lands and Working Interest Ownership in the  
initial Basin Fruitland Coal Gas participating area "B"  
(Participation Allocation Formula)
- 8) Applicant's Statement and Affidavit

This application is predicated on nine months of actual production  
history from the Rincon Unit #242 well which first delivered on  
November 13, 1989.

Applicant respectfully requests your approval of the hereinabove  
selection of lands to constitute the Initial Basin Fruitland Coal Gas  
Formation Participating Area "B", to be effective November 13, 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 #242  
Location: 790'FSL, 1810'FWL, Sec 23, T27N, R6W  
Elevation: 6610' GL  
Total Depth: 3373'  
Lease Number: SF-079365A  
Pool/Formation: Basin Fruitland Coal Gas  
Spud Date: 8-14-89  
Completion Date: 9-20-89  
1st Delivery Date: 11-13-89  
Perf'd Interval: 3196-3202, 3207-3223, 3230-3243, 3249-3261

### 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 #242 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 223 feet and cemented with 150 sacks to surface. Production casing measuring 5-1/2" was then set at 3373 feet and cemented in two stages to surface with 597 sacks cement. After drilling out to PBTD of 3366', the coal zones were perforated from 3196' to 3261' with 4 shots per foot and fracture stimulated with 12,000# 100 mesh, 252,000# 20/40 sand, and 69,000 gallons cross-linked gel water. The recorded initial potential and 24 hour shut-in pressure were 223 MCFD / 2 BWPD and 85 psi, respectively. The well was first delivered to the El Paso Natural Gas pipeline system on November 13, 1989. The current deliverability for the well against a 150# line pressure is 35 MCFD.

Volumetrics calculated on the below-listed parameters yields a recoverable gas volume of 0.78 Bcf.

Net Pay: 61 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: \$333,792  
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 - 254 MCFD, Current (10/90) - 35 MCFD,  
No associated water production

Economics based on the above are attached. Given the investment cost to complete this well payout should occur in 35 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 "B" in the Rincon Unit, in the S/2 Section 23, T27N-R6W, comprising 320.00 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 16<sup>th</sup> 1992.

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

My Commission Expires:

7/11/96

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

Tract No. 1 (Unit Tract No. 14)  
(Acreage in Unit Tract: 840.00 ac.)

LESSOR:	U.S.A.
SERIAL NO.:	SF-079365
ACREAGE DESCRIPTION:	<u>Township 27 North, Range 6 West</u> <u>Section 23: S/2</u>
WORKING INTEREST OWNER(S):	Union Oil Company of California - 83.33% Meridian Oil, Inc., As Agent - 16.67%
ACREAGE INCLUDED IN INITIAL PARTICIPATING AREA:	320.00 acres
PERCENTAGE OF FRUITLAND COAL FORMATION PRODUCTION ALLOCATED TO THIS TRACT:	100%



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

RINCON UNIT

<u>LEASE</u>	<u>UNIT TRACT NO.</u>	<u>ACREAGE</u>	<u>PERCENTAGE</u>
U.S.A. SF-079365	14	320.00	100.00000%

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

**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%
	<hr/>
TOTAL	100.00000%