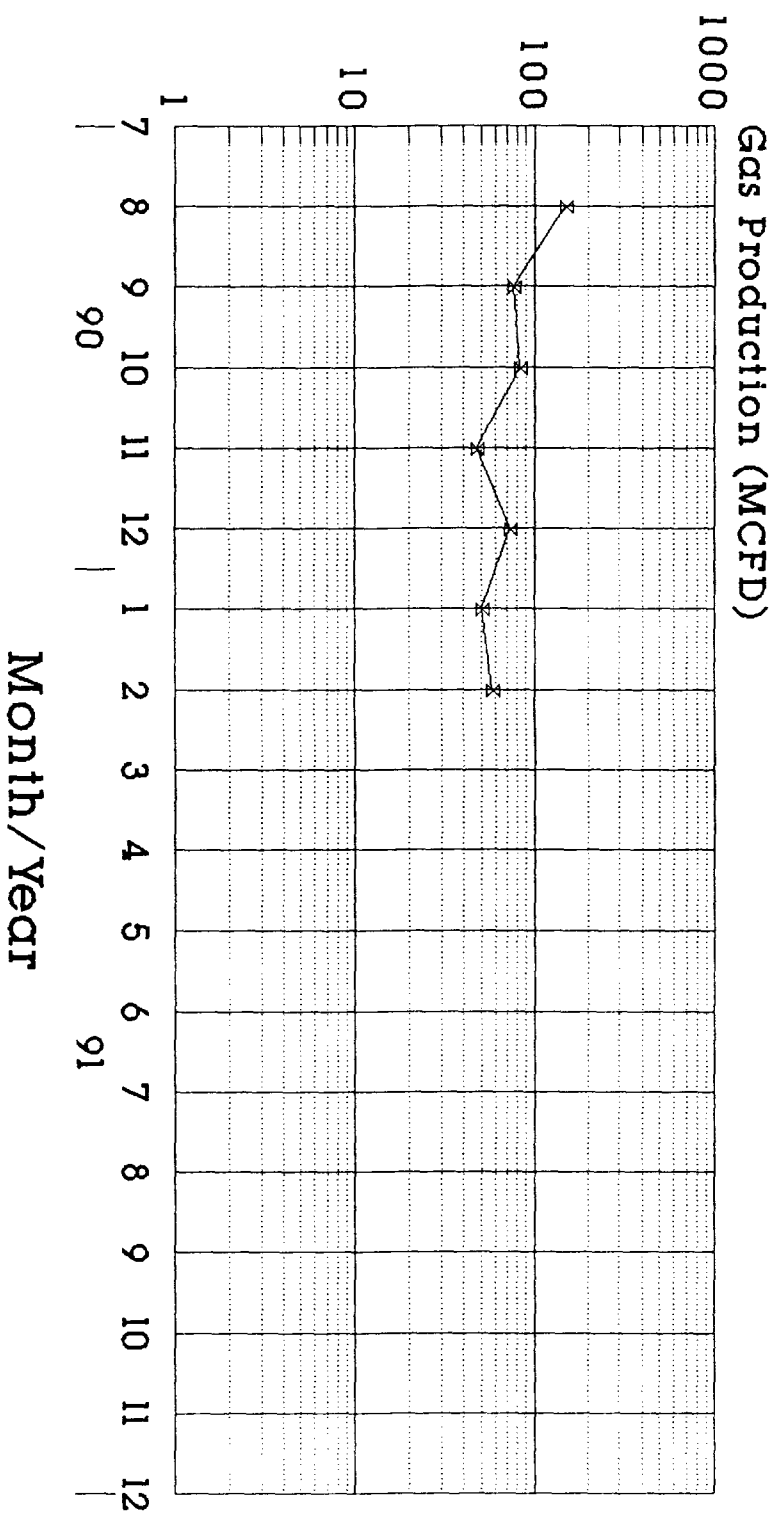


# RINCON UNIT #277

## RIO ARRIIBA COUNTY, NEW MEXICO



Production based on actual days on

UNOCAL North American Oil & Gas Division  
Economic Report Summary

REGION: Southwestern

DISTRICT: Farmington

CNTYSTATE: New Mexico

PROJECT NAME: RINCON U. #277 - FT TAXCR

LOCATION:

BUDGET CATEGORY:

EFFECTIVE DATE: FEB 0

BUDGET PRIORITY:

PROPOSED BY :

IDENTIFICATION				PROFIT INDICES				PRESENT WORTH PROFILE			
						BTAX	ATAX			BTAX	ATAX
FIELD	:	BASIN FRUITLAND COAL		PROFIT TO INV (P/I):	----	----	----	DISCOUNT			
LSE/BLOCK	:			UNDISCOUNTED		-0.55	0.16	RATE (%)		(M\$)	(M\$)
FORMATION	:	FRUITLAND COAL		DISC @ 10.0%		-0.72	-0.18	-----	-----	-----	-----
TOTAL DEPTH:				DISC @ 15.0%		-0.77	-0.27	0.0		-152.	44.
OPERATOR	:	Unocal		INV EFF RATIO (IER):				5.0		-180.	-11.
AFE #	:			UNDISCOUNTED		-0.55	0.19	10.0		-197.	-48.
LIFE (YRS)	:	30.5		DISC @ 10.0%		-0.72	-0.22	15.0		-209.	-74.
				DISC @ 15.0%		-0.77	-0.33	20.0		-217.	-92.
								25.0		-222.	-106.
WI		ORI	GRI	DATE							
100.00000		80.99870	80.99870	MAY 1990							
					PAYOUT (YEARS)	*	9.5				
					RATE OF RETURN (%)	-1000.0	3.8				
										DISCOUNT DATE : MAY 1990	
										DISCOUNT METHOD: EFFECTIVE MON	

COMMODITY PRICES				INVESTMENTS (M\$)				CASH FLOW (M\$)			
						GROSS	NET			NET	
						-----	-----			-----	-----
OIL (\$/BBL)		BEG	END	AVG							
GAS (\$/MCF)		0.00	0.00	0.00	LEASEHOLD	0.	0.	TOTAL REVENUES		322.	
NGL (\$/BBL)		1.35	1.42	1.43	DRY HOLE	0.	0.	EXPENSES:			
SULPHUR (\$/TON)		0.00	0.00	0.00				OPEX (LOE)		109.	
					DRILLING	0.	0.	WORKOVER		0.	
					COMPLETION	0.	0.	PLANT		0.	
\$EQUIV BOE RATIO		6.00	6.00	6.00	PLATFORM	0.	0.	SEV & ADVAL TAXES		47.	
					FACILITIES	0.	0.	INDIRECT		18.	
					PIPELINE	0.	0.	OVERHEAD		25.	
					PLANT	0.	0.	NET ABAND/SALV		0.	
					GATHERING	0.	0.				
								NET INVESTMENTS		275.	
					MISC INTAN	192.	192.	BTAX CASH FLOW		-152.	
					MISC TAN	83.	83.	INCOME TAXES PAID		-196.	
								ATAX CASH FLOW		44.	
					TOTAL	275.	275.	ATAX DISC @ 10.0%		-48.	
					DISC @ 10.0%	273.	273.				

RESERVES & PRODUCTION				ASSUMPTIONS & REMARKS			
				-----	-----	-----	-----
				GROSS	NET		
				REMAIN	ULT	REMAIN	ULT
				-----	-----	-----	-----
OIL (MBBLS)		0.	0.	0.	0.		
GAS (MMCF)		279.	279.	226.	226.		
NGL (MBBLS)		0.	0.	0.	0.		
SULPHUR (MTONS)		0.	0.	0.	0.		
EQUIVALENT RESERVES:							
BTU (MBOE)		47.	47.	38.	38.		
VALUE (MBO\$E)		16.	16.	13.	13.		
INITIAL RATE:							
OIL (BBLS/DAY)		0.				GLOBAL FILES: 1= \$UNOCAL1 2= \$UNOCAL2	
GAS (MCF/DAY)		145.				ALTKEY: USA	

DATE: 04/20/91

TIME: 09:04:35

RPT FILE: 4

PG # 5

PRJ FILE: P.A.

EVAL # 7

P.P.A.  
VAL #: 7

UNOCAL North American Oil & Gas Division  
Economic Report Summary  
AS OF MAY 1, 1990

DATE: 04/20/91  
TIME: 09:04:35  
PAGE: 6

NAME : RINCON U. #277 - FT TAXCR  
FIELD : BASIN FRUITLAND COAL  
CITY, STATE: NEW MEXICO  
FORMATION : FRUITLAND COAL  
OPERATOR : UNOCAL

	GROSS PROD OIL + COND	NET VOLUME OIL + COND	GROSS GAS PRODUCTION	NET GAS VOLUME	NET EQ PROD (RE: BOE)	EFFECTIVE O+C PRICE	NET REV OIL + COND	EFFECTIVE GAS PRICE	NET GAS REVENUE	NET TOTAL REVENUE
	---MBBLS---	---MBBLS---	---MMCF---	---MMCF---	---EMBBLS---	---\$/BBL---	---M\$---	---\$/MCF---	---M\$---	---M\$---
8MO)1990	0.0	0.0	13.0	10.5	1.8	0.00	0.0	1.63	17.2	17.2
1991	0.0	0.0	19.3	15.6	2.6	0.00	0.0	1.42	22.2	22.2
1992	0.0	0.0	17.5	14.2	2.4	0.00	0.0	1.42	20.1	20.1
1993	0.0	0.0	15.9	12.9	2.1	0.00	0.0	1.42	18.2	18.2
1994	0.0	0.0	14.8	12.0	2.0	0.00	0.0	1.42	16.9	16.9
1995	0.0	0.0	13.7	11.1	1.9	0.00	0.0	1.42	15.7	15.7
1996	0.0	0.0	12.8	10.4	1.7	0.00	0.0	1.42	14.7	14.7
1997	0.0	0.0	12.2	9.9	1.6	0.00	0.0	1.42	14.0	14.0
1998	0.0	0.0	11.6	9.4	1.6	0.00	0.0	1.42	13.3	13.3
1999	0.0	0.0	11.0	8.9	1.5	0.00	0.0	1.42	12.6	12.6
2000	0.0	0.0	10.5	8.5	1.4	0.00	0.0	1.42	12.0	12.0
2001	0.0	0.0	9.9	8.0	1.3	0.00	0.0	1.42	11.4	11.4
2002	0.0	0.0	9.4	7.6	1.3	0.00	0.0	1.42	10.8	10.8
2003	0.0	0.0	9.0	7.3	1.2	0.00	0.0	1.42	10.3	10.3
2004	0.0	0.0	8.5	6.9	1.1	0.00	0.0	1.42	9.8	9.8
SUB TOTAL	0.0	0.0	189.1	153.2	25.5	0.00	0.0	1.43	219.2	219.2
REMAINDER	0.0	0.0	90.0	72.9	12.1	0.00	0.0	1.42	103.2	103.2
TOT 30.5 YR	0.0	0.0	279.1	226.0	37.7	0.00	0.0	1.43	322.4	322.4

	NET LOE (FIX + VAR)	NET WORKOVR EXP	NET TOTAL DIRECT EXP	NET TOTAL TAXES	NET ADMIN EXPENSE	NET TOTAL INVESTMENT	BTAX CASHFLOW	INCOME TAXES PAID	ATAX CASHFLOW	CUM ATAX CASHFLOW
	---M\$---	---M\$---	---M\$---	---M\$---	---M\$---	---M\$---	---M\$---	---M\$---	---M\$---	---M\$---
8MO)1990	1.5	0.0	1.5	2.3	0.6	275.0	-262.2	-63.0	-199.3	-199.3
1991	3.6	0.0	3.6	3.3	1.4	0.0	13.9	-22.3	36.2	-163.1
1992	3.6	0.0	3.6	2.9	1.4	0.0	12.1	-19.3	31.4	-131.6
1993	3.6	0.0	3.6	2.7	1.4	0.0	10.5	-17.1	27.6	-104.0
1994	3.6	0.0	3.6	2.5	1.4	0.0	9.4	-15.5	24.9	-79.1
1995	3.6	0.0	3.6	2.3	1.4	0.0	8.4	-13.2	21.6	-57.5
1996	3.6	0.0	3.6	2.2	1.4	0.0	7.5	-10.3	17.8	-39.7
1997	3.6	0.0	3.6	2.1	1.4	0.0	6.9	-8.6	15.5	-24.3
1998	3.6	0.0	3.6	1.9	1.4	0.0	6.3	-6.9	13.2	-11.0
1999	3.6	0.0	3.6	1.9	1.4	0.0	5.7	-6.7	12.4	1.3
2000	3.6	0.0	3.6	1.8	1.4	0.0	5.2	-6.4	11.6	13.0
2001	3.6	0.0	3.6	1.7	1.4	0.0	4.7	-6.2	10.9	23.8
2002	3.6	0.0	3.6	1.6	1.4	0.0	4.2	-6.0	10.2	34.0
2003	3.6	0.0	3.6	1.5	1.4	0.0	3.7	1.4	2.3	36.3
2004	3.6	0.0	3.6	1.4	1.4	0.0	3.3	1.3	2.0	38.4
SUB TOTAL	51.9	0.0	51.9	31.9	20.7	275.0	-160.3	-198.7	38.4	38.4
REMAINDER	57.0	0.0	57.0	15.1	22.7	0.0	8.4	3.2	5.2	43.6
TOT 30.5 YR	108.9	0.0	108.9	47.1	43.3	275.0	-151.9	-195.5	43.6	43.6

F:P.A.  
VAL #: 7

UNOCAL North American Oil & Gas Division  
Economic Report Summary  
AS OF MAY 1, 1990

DATE: 04/20/91  
TIME: 09:04:36  
PAGE: 7

NAME : RINCON U. #277 - FT TAXCR  
FIELD : BASIN FRUITLAND COAL  
CITY, STATE: NEW MEXICO  
FORMATION : FRUITLAND COAL  
OPERATOR : UNOCAL

	GROSS TOTAL INVESTMENT	TOTAL GROSS OPER EXP	NUMBER GROSS WELLS	NET NGL VOLUME	EFFECTIVE NGL PRICE	NET NGL REVENUE	NET SULPHUR	NET PLANT OPER EXP	NET TRANS +TREAT+COMP	NET ABAND & SALVAGE
	-----M\$-----	-----M\$-----	-----	-----MBBLS-----	-----\$/BBL-----	-----M\$-----	-----M-TONS-----	-----M\$-----	-----M\$-----	-----M\$-----
8MO)1990	275.0	1.5	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1991	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1992	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1993	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1994	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1995	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1996	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1997	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1998	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
1999	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
2000	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
2001	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
2002	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
2003	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
2004	0.0	3.6	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
SUB TOTAL	275.0	51.9	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
REMAINDER	0.0	57.0	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0
TOT 30.5 YR	275.0	108.9	1.0	0.0	0.00	0.0	0.0	0.0	0.0	0.0

	NET LEASEHOLD	NET DRY HOLE	NET DRILLING	NET COMPLETION	NET FACILITIES	NET PLATFORM	NET PIPELINE	TAX DEPREC	TAX DEPLETION	IDC AMORT
	-----M\$-----	-----M\$-----	-----M\$-----	-----M\$-----	-----M\$-----	-----M\$-----	-----M\$-----	-----M\$-----	-----M\$-----	-----M\$-----
8MO)1990	0.0	0.0	0.0	0.0	0.0	0.0	0.0	11.9	0.0	4.8
1991	0.0	0.0	0.0	0.0	0.0	0.0	0.0	20.3	0.0	11.5
1992	0.0	0.0	0.0	0.0	0.0	0.0	0.0	14.5	0.0	11.5
1993	0.0	0.0	0.0	0.0	0.0	0.0	0.0	10.4	0.0	11.5
1994	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	11.5
1995	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	6.7
1996	0.0	0.0	0.0	0.0	0.0	0.0	0.0	7.4	0.0	0.0
1997	0.0	0.0	0.0	0.0	0.0	0.0	0.0	3.7	0.0	0.0
1998	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
1999	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2000	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2001	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2002	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2003	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
2004	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
SUB TOTAL	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0	0.0	57.6
REMAINDER	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
TOT 30.5 YR	0.0	0.0	0.0	0.0	0.0	0.0	0.0	83.0	0.0	57.6

P.A.  
VAL #: 7

UNOCAL North American Oil & Gas Division  
Economic Report Summary  
AS OF MAY 1, 1990

DATE: 04/20/91  
TIME: 09:04:38  
PAGE: 8

AME : RINCON U. #277 - FT TAXCR  
IELD : BASIN FRUITLAND COAL  
NTY, STATE: NEW MEXICO  
ORMATION : FRUITLAND COAL  
PERATOR : UNOCAL

	TEMP #1	TEMP #2	TEMP #5	TEMP #6	NET CREDITS INPUT
BMO)1990	15301.1	10.4	0.840	0.000	10.4
1991	22791.4	15.5	0.840	0.000	15.5
1992	20649.2	14.0	0.840	0.000	14.0
1993	18752.5	12.8	0.840	0.000	12.8
1994	17421.4	11.9	0.840	0.000	11.9
1995	16201.9	11.0	0.840	0.000	11.0
1996	15156.7	10.3	0.840	0.000	10.3
1997	14389.1	9.8	0.840	0.000	9.8
1998	13669.7	9.3	0.840	0.000	9.3
1999	12986.2	8.8	0.840	0.000	8.8
2000	12336.9	8.4	0.840	0.000	8.4
2001	11720.0	8.0	0.840	0.000	8.0
2002	11134.0	7.6	0.840	0.000	7.6
2003	10577.3	0.0	0.000	0.000	0.0
2004	10048.5	0.0	0.000	0.000	0.0
SUB TOTAL	223135.8	137.8	0.840	0.000	137.8
REMAINDER	106170.0	0.0	0.000	0.000	0.0
TOT 30.5 YR	329305.8	137.8	0.840	0.000	137.8

GLOBAL FILE: \$UNOCAL1

VALUATION #7 IN PROJECT FILE "P.A. " 04/20/91 09:04:00

0 IDENT "30 25 U091205  
0 DATES MAY 1990 MAY 1990 AUG 1990  
0 NAME "RINCON U. #277 - FT TAXCR "  
0 FIELD "BASIN FRUITLAND COAL "  
0 CNTYSTATE "NEW MEXICO "  
0 FORMATION "FRUITLAND COAL "  
0 ECONOMICS ELIM  
0 OPERATOR "UNOCAL "  
0 OWNERSHIP 1. 0.809987  
20 COMMENT "PROD DECLINE BASED ON AVG WELL CASE "  
30 COMMENT "FIRST 6 MONTHS = ACTUAL PROD. "  
40 GPROD P MON 4.499 2.264 2.548 1.41 2.246 1.555  
50 GPROD \* EXP 1.724 \* \* 28. 1.  
60 GPROD \* EXP \* \* \* 10. 25.  
70 GPROD \* EXP \* \* \* 7. 36.  
80 GPROD \* EXP \* \* \* 5.  
90 TAN I MON 83000. 0. 0.  
10 INTAN I MON 192000. 0.  
20 PRGAS P MON 1.14 1.37 1.77 1.64 1.29  
60 PRGAS JAN 1991 CON 1.2  
90 FACTOR 1.18 PRGAS  
110 LOETOT P CON 300.  
120 AVALPS \* CON 3.5  
\*\* START OF INSERT FILE C-TAX  
0 COMMENT "ASSUMES CONSTANT \$.84 TAX CREDIT "  
0 COMMENT "TO 2003 "  
30 TEMP1 \* CON 0.  
0 CADD TEMP1 GPROD  
0 FACTOR 1000. TEMP1  
0 FACTOR 1.18 TEMP1  
0 TEMP5 JAN 1990 CON 0.84  
0 TEMP5 JAN 2003 CON 0.  
0 CADD TEMP2 TEMP1  
00 CFACTOR TEMP5 TEMP2  
10 FACTOR 0.809987 TEMP2  
20 CADD TAXCR TEMP2  
30 FACTOR 0.001 TEMP2  
\*\* END OF INSERT FILE  
170 ULTIMATE GPROD 460.

GLOBAL FILE: \$UNOCAL2

ILLEGIBLE

APPLICATION TO EXPAND THE BASIN FRUITLAND COAL GAS PARTICIPATING AREA  
- 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 expansion to the participating area for the Basin Fruitland Coal Gas producing formation, to wit:

TOWNSHIP 27 NORTH, RANGE 7 WEST, N.M.P.M.

Section 14: North/2

Containing 320 acres, more or less

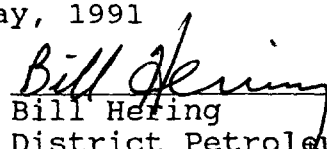
In support of this application, and in addition to the geologic and engineering reports, the following are attached:

- 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 #278 Fruitland Coal Gas Production Decline Curve
- 6) Rincon Unit #278 Fruitland Coal Gas Economics
- 7) Schedule of Lands and Working Interest Ownership in the expansion to the Basin Fruitland Coal Gas Participating Area (Participation Allocation Formula)
- 8) Applicant's Statement and Affidavit

This application is predicated on six months of actual production history from the Rincon Unit #278 well which first delivered on August 24, 1990.

Applicant respectfully requests your approval of the hereinabove selection of lands to constitute expansion to the Basin Fruitland Coal Gas Formation participating area, to be effective August 24, 1990.

Dated this 31st day of May, 1991

  
\_\_\_\_\_  
Bill Hering  
District Petroleum Engineer  
Union Oil Company of California

### Well Summary

Well Name: Rincon Unit #278  
Location: 1970'FNL, 970'FEL, Sec 14, T27N, R7W  
Elevation: 6580' GL  
Total Depth: 3174'  
Lease Number: NM-012209  
Pool/Formation: Basin Fruitland Coal Gas  
Spud Date: 5-6-90  
Completion Date: 5-20-90  
1st Delivery Date: 8-24-90  
Perf'd Interval: 3020-3024, 3039-3041, 3045-3050, 3054-3056,  
3090-3092, 3095-3108, 3113-3126.

### 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 #278 was drilled and completed by Union Oil Company of California as a Basin Fruitland Coal Gas producer in 1990. Surface pipe measuring 8-5/8" was set at 362 feet and cemented with 450 sacks to surface. Production casing measuring 4-1/2" was then set at 3173 feet and cemented in two stages to surface with 795 sacks cement. After drilling out to PBTD of 3172' the upper and lower coal zones were perforated from 3020'-3126' with 4 shots per foot and fracture stimulated with 285,000# 20/40 sand, 1.16MM SCF N<sub>2</sub>, and 27,000 gallons cross-linked gel water. The recorded initial potential and 24 hour shut-in pressure were 325 MCFD and 520 psi, respectively. The well was first delivered to the El Paso Natural Gas pipeline system on August 24, 1990. The current deliverability for the well against a 150# line pressure is 57 MCFD.

Volumetrics calculated on the below-listed parameters yields a recoverable gas volume of 0.35 Bcf.



Net Pay: 56 ft  
Drainage area: 160 acres  
Gas Content: 125 SCF/ton  
Tonnage Factor: 1847 tons/acre-feet (from density log)  
Recovery Factor: 17 %

Economics

Completion Cost: \$267,000  
Royalty Burden: 19.00%  
Gas Price: \$1.20/MMBTU  
Operating Cost: \$300/month  
Tax Credit: \$0.84/MMBTU constant  
Production Rate: Maximum - 222 MCFD, Current - 70 MCFD  
No associated water production

Economics based on the above are attached. Given the investment cost to complete this well payout should occur in 7.3 years. Compared with net total revenue this Basin Fruitland Coal Gas well produces in economic quantities above operating costs.

STATE OF NEW MEXICO

COUNTY OF SAN JUAN

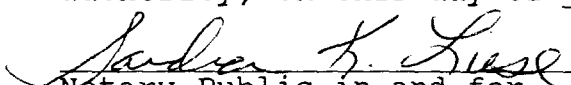
APPLICANT'S STATEMENT AND AFFIDAVIT

BEFORE ME, the undersigned authority on this day personally appeared Bill Hering, 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 expansion to the Basin Fruitland Coal Gas participating area in the Rincon Unit, in the N/2 Section 14, T27N-R7W, comprising 320 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.
- 5) That he is of lawful age, that he is a responsible official of Union, that he is duly authorized to make this Statement and Affidavit on behalf of Union, 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.

---

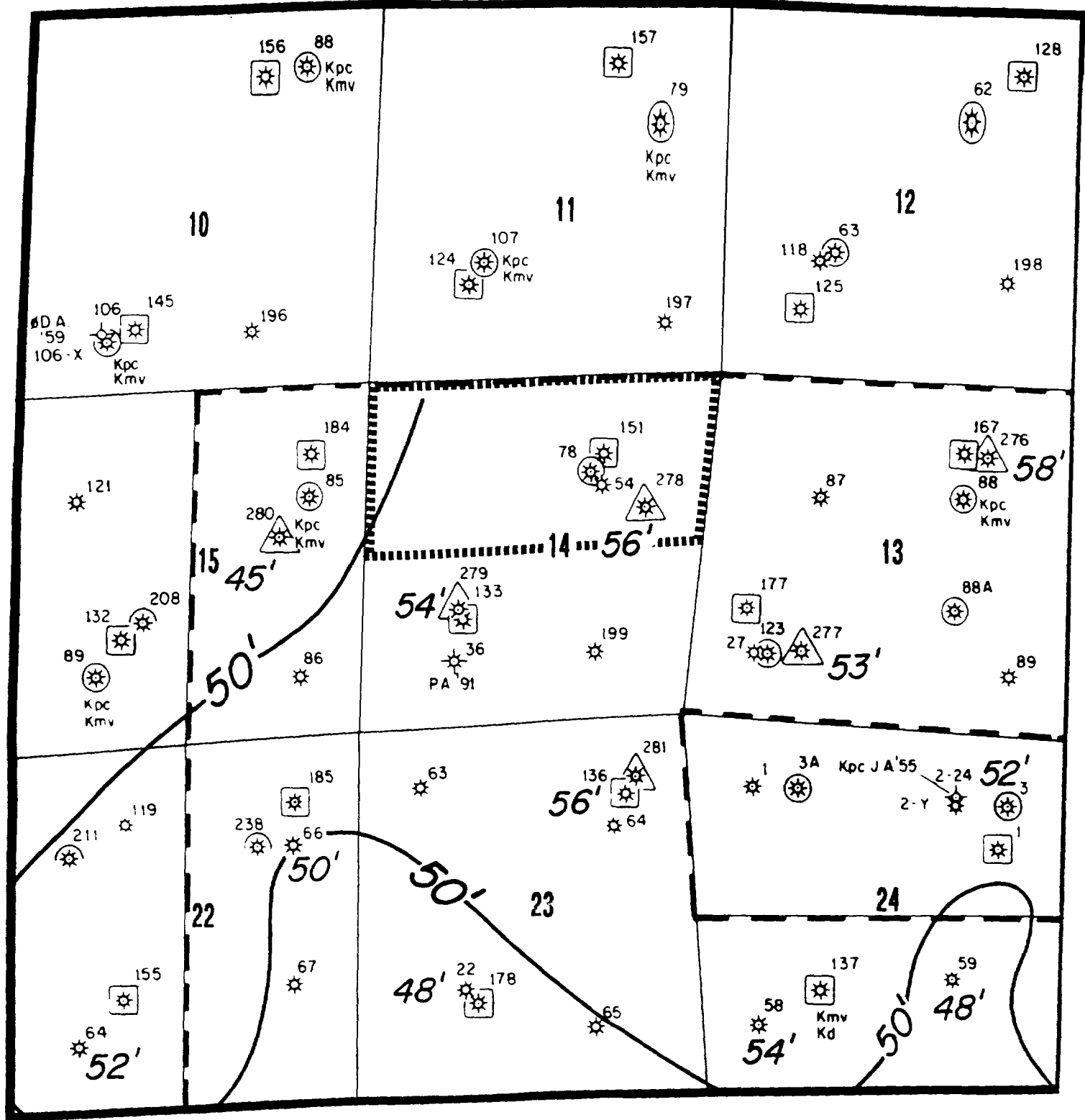
SUBSCRIBED AND SWORN TO before me, this undersigned authority, on this day of May 31, 1991.

  
Notary Public in and for  
San Juan County, New Mexico

My Commission Expires:

6/2/94





# PRODUCING INTERVAL

	FARMINGTON	Kfm	
	KIRTLAND	Kk	
	FRUITLAND	Kf	
	PICTURED CLIFFS	Kpc	
	CHACRA	Kc	
	LA VENTANA	Klv	
	MESAVERDE	Kmv	<div> <div>Kch</div> <div>Km</div> <div>Kgl</div> </div> <div> <div>CLIFFHOUSE</div> <div>MENEFEE</div> <div>POINT LOOKOUT</div> </div>
	GALLUP	Kgl	<div> <div>Kt</div> <div>Kgn</div> </div> <div> <div>TOCITO</div> <div>GREENHORN</div> </div>
	DAKOTA	Kd	

NORTH AMERICAN OIL & GAS DIVISION  
SOUTHWESTERN REGION

**RINCON UNIT**  
RIO ARRIBA COUNTY, NEW MEXICO  
*ISOPACH*  
FRUITLAND COAL  
RINCON UNIT # 278  
N½ SEC. 14 -T27N R7W

INTERP BY D.V.H. SCALE 2 1/2" = 1 Mi. C. 10'

DRAFT BY DATE 3-26-90 (REV. NO. 1)