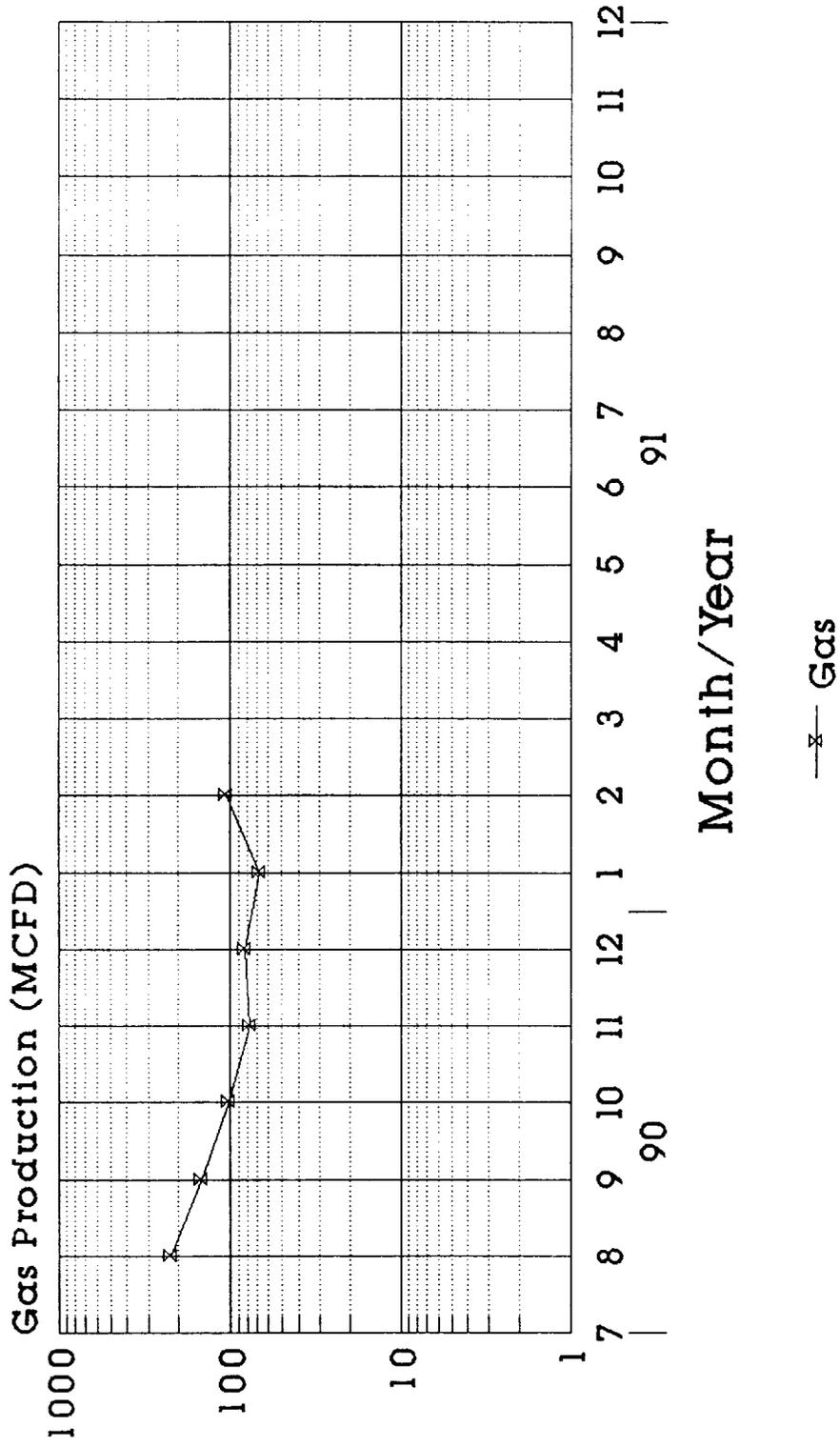


RINCON UNIT #278

RIO ARRIBA 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. #278 - FT TAXCR LOCATION:

BUDGET CATEGORY: EFFECTIVE DATE: FEB 0
BUDGET PRIORITY: PROPOSED BY :

| IDENTIFICATION | | | | PROFIT INDICES | | | PRESENT WORTH PROFILE | | | | |
|----------------------|-----------|----------------|--------------|----------------|-------|------------|-----------------------|--------------|-------------------|--------------------------------|------------|
| FIELD | LSE/BLOCK | FORMATION | TOTAL DEPTH: | OPERATOR | AFE # | LIFE (YRS) | BTAX | ATAX | DISCOUNT RATE (%) | BTAX (M\$) | ATAX (M\$) |
| BASIN FRUITLAND COAL | | FRUITLAND COAL | | Unocal | | 32.1 | UNDISCOUNTED | UNDISCOUNTED | 0.0 | -113. | 84. |
| | | | | | | | DISC @ 10.0% | DISC @ 10.0% | 5.0 | -149. | 22. |
| | | | | | | | DISC @ 15.0% | DISC @ 15.0% | 10.0 | -171. | -19. |
| | | | | | | | UNDISCOUNTED | UNDISCOUNTED | 15.0 | -185. | -48. |
| | | | | | | | DISC @ 10.0% | DISC @ 10.0% | 20.0 | -194. | -68. |
| | | | | | | | DISC @ 15.0% | DISC @ 15.0% | 25.0 | -201. | -84. |
| WI | ORI | GRI | DATE | | | | PAYOUT (YEARS) | * | 7.3 | | |
| 100.00000 | 80.99870 | 80.99870 | MAY 1990 | | | | RATE OF RETURN (%) | -1000.0 | 7.4 | | |
| | | | | | | | | | | DISCOUNT DATE : MAY 1990 | |
| | | | | | | | | | | DISCOUNT METHOD: EFFECTIVE MCN | |

| COMMODITY PRICES | | | | INVESTMENTS (M\$) | | | CASH FLOW (M\$) | | |
|-------------------|------|------|------|-------------------|-------|------|-------------------|--|-------|
| | BEG | END | AVG | | GROSS | NET | | | NET |
| OIL (\$/BBL) | 0.00 | 0.00 | 0.00 | LEASEHOLD | 0. | 0. | TOTAL REVENUES | | 367. |
| GAS (\$/MCF) | 1.56 | 1.42 | 1.44 | DRY HOLE | 0. | 0. | EXPENSES: | | |
| NGL (\$/BBL) | 0.00 | 0.00 | 0.00 | DRILLING | 0. | 0. | OPEX (LOE) | | 115. |
| SULPHUR (\$/TON) | 0.00 | 0.00 | 0.00 | COMPLETION | 0. | 0. | WORKOVER | | 0. |
| \$EQUIV BOE RATIO | 6.00 | 6.00 | 6.00 | PLATFORM | 0. | 0. | PLANT | | 0. |
| | | | | FACILITIES | 0. | 0. | SEV & ADVAL TAXES | | 53. |
| | | | | PIPELINE | 0. | 0. | INDIRECT | | 19. |
| | | | | PLANT | 0. | 0. | OVERHEAD | | 27. |
| | | | | GATHERING | 0. | 0. | NET ABAND/SALV | | 0. |
| | | | | | | | NET INVESTMENTS | | 267. |
| | | | | MISC INTAN | 187. | 187. | BTAX CASH FLOW | | -113. |
| | | | | MISC TAN | 80. | 80. | INCOME TAXES PAID | | -198. |
| | | | | TOTAL | 267. | 267. | ATAX CASH FLOW | | 84. |
| | | | | DISC @ 10.0% | 265. | 265. | ATAX DISC @ 10.0% | | -19. |

| RESERVES & PRODUCTION | | | | ASSUMPTIONS & REMARKS | | | |
|-----------------------|--------|------|--------|-----------------------|--|--|---|
| | GROSS | | NET | | | | |
| | REMAIN | ULT | REMAIN | ULT | | | |
| OIL (MBBLS) | 0. | 0. | 0. | 0. | | | |
| GAS (MMCF) | 315. | 315. | 255. | 255. | | | |
| NGL (MBBLS) | 0. | 0. | 0. | 0. | | | |
| SULPHUR (MTONS) | 0. | 0. | 0. | 0. | | | |
| EQUIVALENT RESERVES: | | | | | | | |
| BTU (MBOE) | 53. | 53. | 43. | 43. | | | |
| VALUE (MBO\$E) | 18. | 18. | 15. | 15. | | | |
| INITIAL RATE: | | | | | | | |
| OIL (BBL/DAY) | 0. | | | | | | GLOBAL FILES: 1= \$UNOCAL1 2= \$UNOCAL2 |
| GAS (MCF/DAY) | 143. | | | | | | ALTKEY: USA |

NAME : RINCON U. #278 - 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--- | ---EMBLS--- | ---\$/BBL--- | -----M\$----- | ---\$/MCF--- | -----M\$----- | -----M\$----- |
| 8MO)1990 | 0.0 | 0.0 | 14.6 | 11.8 | 2.0 | 0.00 | 0.0 | 1.90 | 22.5 | 22.5 |
| 1991 | 0.0 | 0.0 | 25.1 | 20.3 | 3.4 | 0.00 | 0.0 | 1.42 | 28.7 | 28.7 |
| 1992 | 0.0 | 0.0 | 19.7 | 16.0 | 2.7 | 0.00 | 0.0 | 1.42 | 22.7 | 22.7 |
| 1993 | 0.0 | 0.0 | 17.8 | 14.4 | 2.4 | 0.00 | 0.0 | 1.42 | 20.4 | 20.4 |
| 1994 | 0.0 | 0.0 | 16.3 | 13.2 | 2.2 | 0.00 | 0.0 | 1.42 | 18.6 | 18.6 |
| 1995 | 0.0 | 0.0 | 15.1 | 12.2 | 2.0 | 0.00 | 0.0 | 1.42 | 17.3 | 17.3 |
| 1996 | 0.0 | 0.0 | 14.1 | 11.4 | 1.9 | 0.00 | 0.0 | 1.42 | 16.1 | 16.1 |
| 1997 | 0.0 | 0.0 | 13.2 | 10.7 | 1.8 | 0.00 | 0.0 | 1.42 | 15.2 | 15.2 |
| 1998 | 0.0 | 0.0 | 12.6 | 10.2 | 1.7 | 0.00 | 0.0 | 1.42 | 14.4 | 14.4 |
| 1999 | 0.0 | 0.0 | 11.9 | 9.7 | 1.6 | 0.00 | 0.0 | 1.42 | 13.7 | 13.7 |
| 2000 | 0.0 | 0.0 | 11.3 | 9.2 | 1.5 | 0.00 | 0.0 | 1.42 | 13.0 | 13.0 |
| 2001 | 0.0 | 0.0 | 10.8 | 8.7 | 1.5 | 0.00 | 0.0 | 1.42 | 12.3 | 12.3 |
| 2002 | 0.0 | 0.0 | 10.2 | 8.3 | 1.4 | 0.00 | 0.0 | 1.42 | 11.7 | 11.7 |
| 2003 | 0.0 | 0.0 | 9.7 | 7.9 | 1.3 | 0.00 | 0.0 | 1.42 | 11.1 | 11.1 |
| 2004 | 0.0 | 0.0 | 9.2 | 7.5 | 1.2 | 0.00 | 0.0 | 1.42 | 10.6 | 10.6 |
| SUB TOTAL | 0.0 | 0.0 | 211.5 | 171.3 | 28.6 | 0.00 | 0.0 | 1.45 | 248.4 | 248.4 |
| REMAINDER | 0.0 | 0.0 | 103.6 | 83.9 | 14.0 | 0.00 | 0.0 | 1.42 | 118.8 | 118.8 |
| TOT 32.1 YR | 0.0 | 0.0 | 315.1 | 255.2 | 42.5 | 0.00 | 0.0 | 1.44 | 367.2 | 367.2 |

| | NET LOE (FIX + VAR) | NET WORKOVR | 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 | 2.7 | 0.6 | 267.0 | -249.3 | -60.9 | -188.5 | -188.5 |
| 1991 | 3.6 | 0.0 | 3.6 | 4.2 | 1.4 | 0.0 | 19.5 | -24.4 | 43.9 | -144.6 |
| 1992 | 3.6 | 0.0 | 3.6 | 3.3 | 1.4 | 0.0 | 14.3 | -20.0 | 34.3 | -110.3 |
| 1993 | 3.6 | 0.0 | 3.6 | 3.0 | 1.4 | 0.0 | 12.4 | -17.6 | 30.0 | -80.3 |
| 1994 | 3.6 | 0.0 | 3.6 | 2.7 | 1.4 | 0.0 | 10.9 | -15.9 | 26.8 | -53.5 |
| 1995 | 3.6 | 0.0 | 3.6 | 2.5 | 1.4 | 0.0 | 9.8 | -13.6 | 23.4 | -30.1 |
| 1996 | 3.6 | 0.0 | 3.6 | 2.4 | 1.4 | 0.0 | 8.7 | -10.7 | 19.4 | -10.7 |
| 1997 | 3.6 | 0.0 | 3.6 | 2.2 | 1.4 | 0.0 | 7.9 | -9.0 | 16.9 | 6.2 |
| 1998 | 3.6 | 0.0 | 3.6 | 2.1 | 1.4 | 0.0 | 7.3 | -7.3 | 14.6 | 20.7 |
| 1999 | 3.6 | 0.0 | 3.6 | 2.0 | 1.4 | 0.0 | 6.6 | -7.1 | 13.7 | 34.4 |
| 2000 | 3.6 | 0.0 | 3.6 | 1.9 | 1.4 | 0.0 | 6.1 | -6.8 | 12.9 | 47.3 |
| 2001 | 3.6 | 0.0 | 3.6 | 1.8 | 1.4 | 0.0 | 5.5 | -6.6 | 12.1 | 59.3 |
| 2002 | 3.6 | 0.0 | 3.6 | 1.7 | 1.4 | 0.0 | 5.0 | -6.3 | 11.3 | 70.6 |
| 2003 | 3.6 | 0.0 | 3.6 | 1.6 | 1.4 | 0.0 | 4.5 | 1.7 | 2.8 | 73.4 |
| 2004 | 3.6 | 0.0 | 3.6 | 1.6 | 1.4 | 0.0 | 4.0 | 1.5 | 2.5 | 75.9 |
| SUB TOTAL | 51.9 | 0.0 | 51.9 | 35.9 | 20.7 | 267.0 | -127.0 | -202.9 | 75.9 | 75.9 |
| REMAINDER | 62.7 | 0.0 | 62.7 | 17.4 | 25.0 | 0.0 | 13.7 | 5.2 | 8.5 | 84.4 |
| TOT 32.1 YR | 114.6 | 0.0 | 114.6 | 53.3 | 45.6 | 267.0 | -113.3 | -197.7 | 84.4 | 84.4 |

F.P.A.
VAL #: 10

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

DATE: 04/20/91
TIME: 09:24:30
PAGE: 3

NAME : RINCON U. #278 - FT TAXCR
FIELD : BASIN FRUITLAND COAL
COUNTY, 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 | 267.0 | 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 | 267.0 | 51.9 | 1.0 | 0.0 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| REMAINDER | 0.0 | 62.7 | 1.0 | 0.0 | 0.00 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOT 32.1 YR | 267.0 | 114.6 | 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 | 11.4 | 0.0 | 4.7 |
| 1991 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 19.6 | 0.0 | 11.2 |
| 1992 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 14.0 | 0.0 | 11.2 |
| 1993 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 10.0 | 0.0 | 11.2 |
| 1994 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | 11.2 |
| 1995 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | 6.5 |
| 1996 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 7.1 | 0.0 | 0.0 |
| 1997 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 3.6 | 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 | 80.0 | 0.0 | 56.1 |
| REMAINDER | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| TOT 32.1 YR | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 | 80.0 | 0.0 | 56.1 |

F.P.A.
VAL #: 10

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

DATE: 04/20/91
TIME: 09:24:31
PAGE: 4

ME : RINCON U. #278 - FT TAXCR
ELD : BASIN FRUITLAND COAL
CITY, STATE: NEW MEXICO
FORMATION : FRUITLAND COAL
OPERATOR : UNOCAL

| | TEMP #1 | TEMP #2 | TEMP #5 | TEMP #6 | NET CREDITS INPUT |
|-------------|--------------|------------|------------|------------|----------------------|
| | -----MS----- | | | | |
| 8MO)1990 | 17204.4 | 11.7 | 0.840 | 0.000 | 11.7 |
| 1991 | 29559.0 | 20.1 | 0.840 | 0.000 | 20.1 |
| 1992 | 23302.9 | 15.9 | 0.840 | 0.000 | 15.9 |
| 1993 | 20972.6 | 14.3 | 0.840 | 0.000 | 14.3 |
| 1994 | 19182.7 | 13.1 | 0.840 | 0.000 | 13.1 |
| 1995 | 17839.9 | 12.1 | 0.840 | 0.000 | 12.1 |
| 1996 | 16591.1 | 11.3 | 0.840 | 0.000 | 11.3 |
| 1997 | 15593.1 | 10.6 | 0.840 | 0.000 | 10.6 |
| 1998 | 14813.4 | 10.1 | 0.840 | 0.000 | 10.1 |
| 1999 | 14072.8 | 9.6 | 0.840 | 0.000 | 9.6 |
| 2000 | 13369.1 | 9.1 | 0.840 | 0.000 | 9.1 |
| 2001 | 12700.7 | 8.6 | 0.840 | 0.000 | 8.6 |
| 2002 | 12065.6 | 8.2 | 0.840 | 0.000 | 8.2 |
| 2003 | 11462.3 | 0.0 | 0.000 | 0.000 | 0.0 |
| 2004 | 10889.2 | 0.0 | 0.000 | 0.000 | 0.0 |
| SUB TOTAL | 249618.9 | 154.6 | 0.840 | 0.000 | 154.6 |
| REMAINDER | 122217.3 | 0.0 | 0.000 | 0.000 | 0.0 |
| TOT 32.1 YR | 371836.3 | 154.6 | 0.840 | 0.000 | 154.6 |

GLOBAL FILE: \$UNOCAL1

VALUATION #10 IN PROJECT FILE "P.A. " 04/20/91 09:24:02

0 IDENT "30 25 U091205 " " "
0 DATES MAY 1990 MAY 1990 AUG 1990
0 NAME "RINCON U. #278 - FT TAXCR "
0 FIELD "BASIN FRUITLAND COAL "
0 CNTYSTATE "NEW MEXICO "
0 FORMATION "FRUITLAND COAL "
0 OPERATOR "UNOCAL "
0 ECONOMICS ELIM
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 4.428 3.169 2.318 2.565 2.1 3.188
50 GPROD * EXP 2.3 * * 28. 10.
60 GPROD * EXP * * * 10. 25.
70 GPROD * EXP * * * 7. 36.
80 GPROD * EXP * * * 5.
90 GPROD * EXP * * * 5.
00 TAN I MON 80000. 0. 0.
10 INTAN I MON 187000. 0.
20 PRGAS P MON 1.32 1.66 1.94 1.92 1.43
30 PRGAS JAN 1991 CON 1.2
90 FACTOR 1.18 PRGAS
00 COMMENT "18% BTU ADJUSTMENT "
10 LOETOT P CON 300.
20 AVALPS * CON 3.5
** START OF INSERT FILE C-TAX
0 COMMENT "ASSUMES CONSTANT \$.84 TAX CREDIT "
0 COMMENT "TO 2003 "
0 TEMP1 * CON 0.
0 CADD TEMP1 GPROD
0 FACTOR 1000. TEMP1
0 FACTOR 1.18 TEMP1
0 TEMP5 JAN 1990 CON 0.84
10 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
70 ULTIMATE GPROD 350.

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 6 WEST, N.M.P.M.

Section 18 North/2

Containing 320 acres, more or less

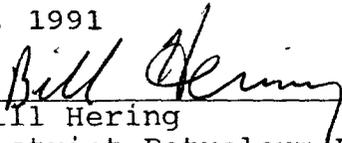
In support of this application, and in addition to the geologic and engineering reports, the following are attached:

- 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 #252 Fruitland Coal Gas Production Decline Curve
- 6) Rincon Unit #252 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 #252 well which first delivered on August 24, 1990.

Applicant respectfully requests your approval of the hereinabove selection of lands to constitute the 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 #252
Location: 1640'FNL, 1605'FEL, Sec 18, T27N, R6W
Elevation: 6602' GL
Total Depth: 3240'
Lease Number: NM-013654
Pool/Formation: Basin Fruitland Coal Gas
Spud Date: 4-9-90
Completion Date: 5-3-90
1st Delivery Date: 8-24-90
Perf'd Interval: 3067-3070,3074-3078,3084-3088,3092-3095,
3158-3161,3163-3170,3172-3175,3180-3193.

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 #252 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 226 feet and cemented with 200 sacks to surface. Production casing measuring 4-1/2" was then set at 3240 feet and cemented in two stages to surface with 745 sacks cement. After drilling out to PBTD of 3193', the upper and lower coal zones were perforated from 3067' to 3193' with 4 shots per foot and fracture stimulated with 390,000# 20/40 sand, 12,000# 100 mesh sand and 103,000 gallons cross-linked gel water. The recorded initial potential and 24 hour shut-in pressure were 311 MCFD and 550 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 101 MCFD.

Volumetrics calculated on the below-listed parameters yields a recoverable gas volume of 0.51 Bcf.

Net Pay: 51 ft
Drainage area: 160 acres
Gas Content: 179 SCF/ton
Tonnage Factor: 2064 tons/acre-feet (from density log)
Recovery Factor: 17 %

Economics

Completion Cost: \$335,000
Royalty Burden: 19.00%
Gas Price: \$1.20/MMBTU
Operating Cost: \$300/month
Tax Credit: \$0.84/MMBTU constant
Production Rate: Maximum - 596 MCFD, Current - 104 MCFD.
No associated water production

Economics based on the above are attached. Given the investment cost to complete this well payout should occur in 3.8 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

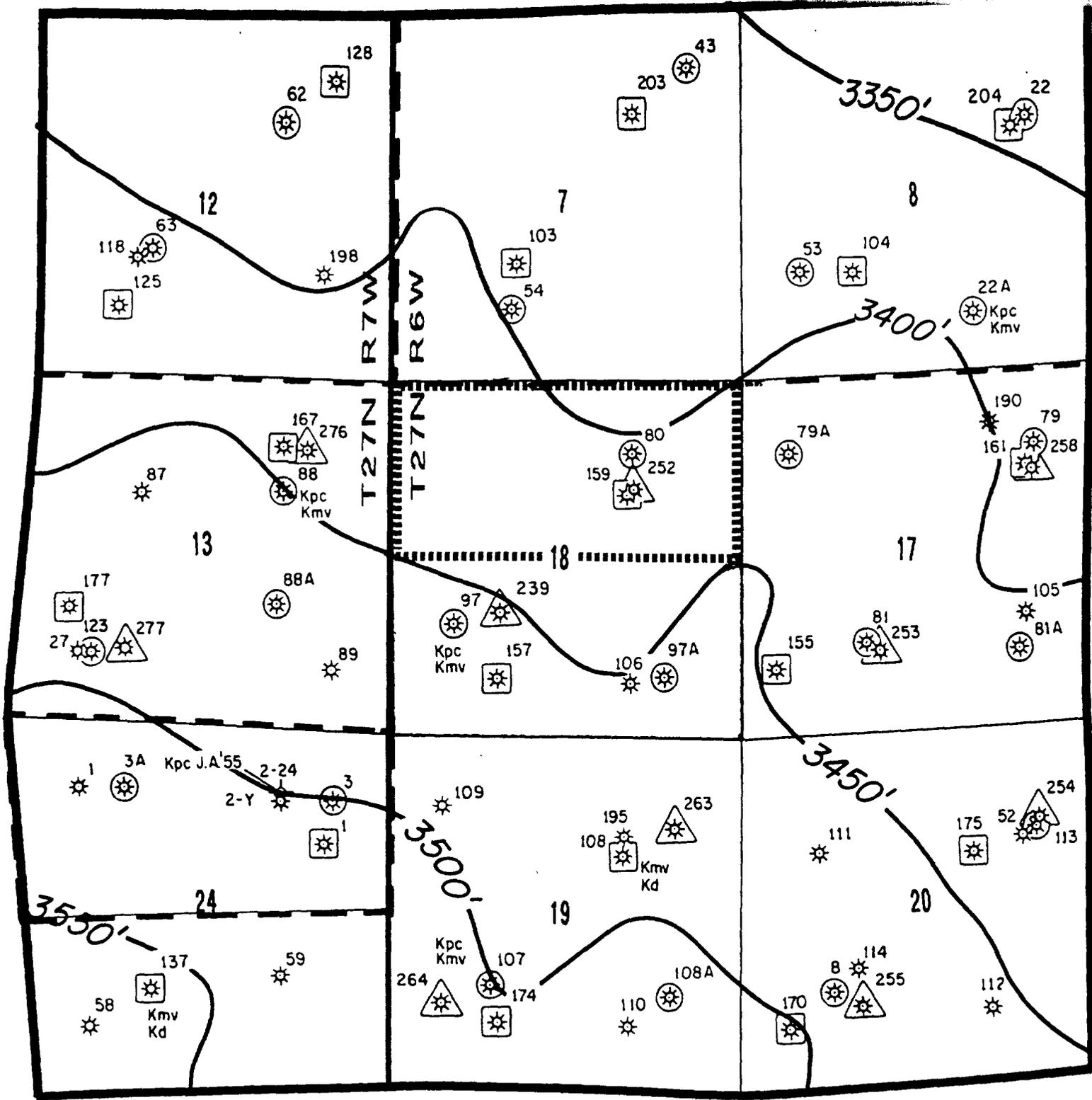
BEFORE ME, the undersigned authority on this day personally appeared Bill Hering, District Petroleum Engineer, known to me to be the person whose name is subscribed to this instrument, who, having been by me first duly sworn, upon oath states as follows:

- 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 18, 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.
- 5) That he is of lawful age, that he is a responsible official of Union, that he is duly authorized to make this Stit 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.

Arden V. Lisse
Notary Public in and for
San Juan County, New Mexico

My Commission Expires:
6/2/94



PRODUCING INTERVAL

- | | | | | |
|---|-----------------|-----|--|------------------------------|
| ☼ | FARMINGTON | Kfm | | |
| ☼ | FIRTLAND | Kf | | |
| ☼ | FRUITLAND | Kf | | |
| ☼ | PICTURED CLIFFS | Kpc | | |
| ☼ | CHACRA | Kc | | |
| ☼ | LA VENTANA | Klv | | |
| ☼ | MESAVERDE | Kmv | { Kch CLIFFHOUSE Km MENEFE Kpl POINT LOOKOUT | |
| ☼ | GALLUP | Kgl | | { Kt TOCITO Kgh GREENHORN |
| ☼ | DAKOTA | Kd | | |

UNOCAL

NORTH AMERICAN OIL & GAS DIVISION
SOUTHWESTERN REGION

RINCON UNIT

RIO ARRIBA COUNTY, NEW MEXICO

STRUCTURE

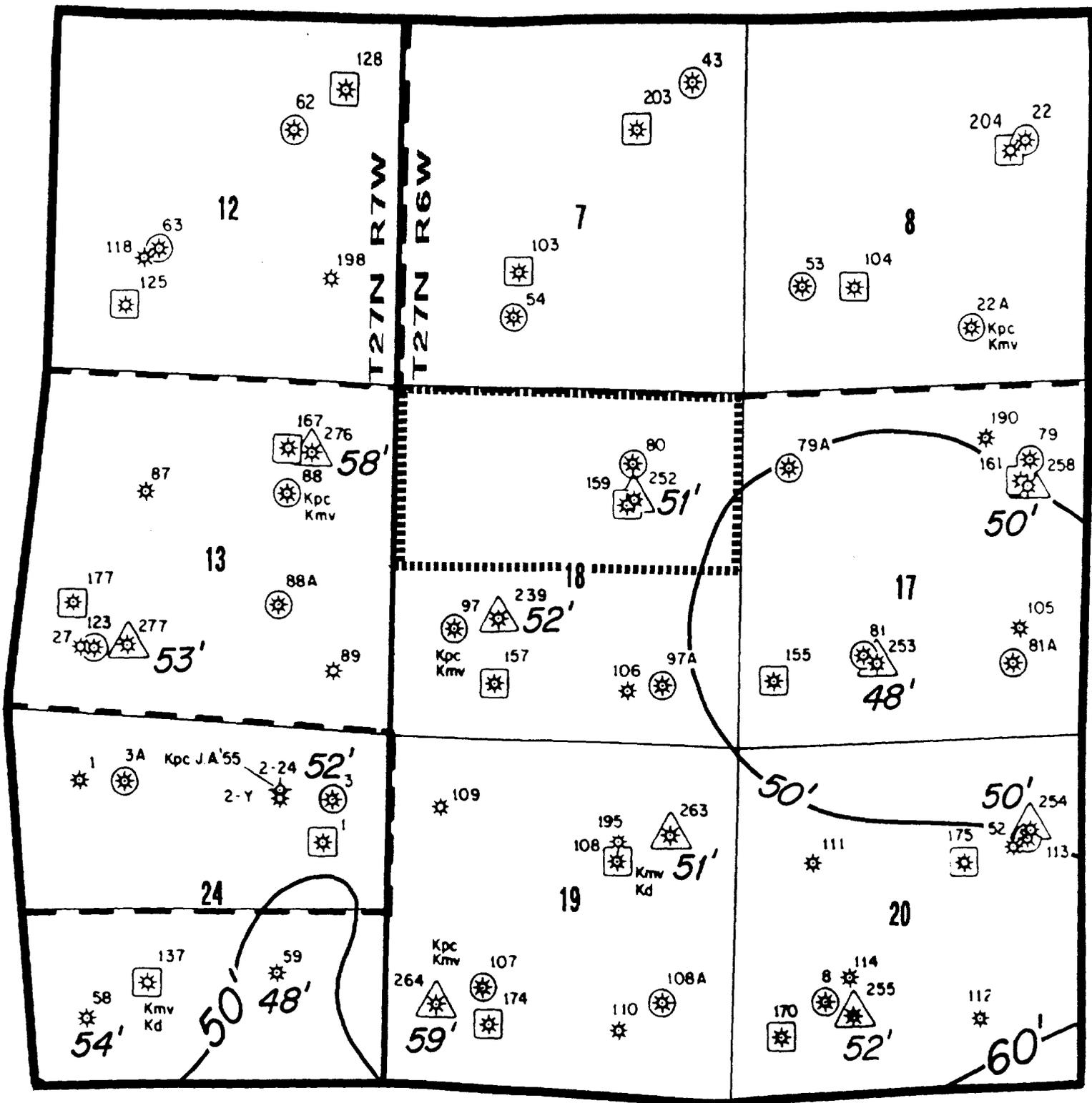
BASE OF FRUITLAND COAL

RINCON UNIT # 252

N $\frac{1}{2}$ SEC. 18 - T27N R6W

INTERD BY DVH SCALE 2 1/2" = 1 Mi. C: 50'

DRAFT BY DATE 0-26-90 FREE NO. 1A18A



PRODUCING INTERVAL

| | | | |
|--|-----------------|-----|---|
| | FARMINGTON | Kfm | |
| | KIRTLAND | Kk | |
| | FRUITLAND | Kf | |
| | PICTURED CLIFFS | Kgc | |
| | CHACRA | Kc | |
| | LA VENTANA | Kiv | |
| | MESA VERDE | Kmv | Kch CLIFFHOUSE Kk MENELEE Kpl POINT LOOKOUT |
| | GALLUP | Kpl | |
| | DAKOTA | Kd | Kf TOCITO Kq GREENHORN |

UNOCAL

NORTH AMERICAN OIL & GAS DIVISION
SOUTHWESTERN REGION

RINCON UNIT
RIO ARRIBA COUNTY, NEW MEXICO
ISOPACH
FRUITLAND COAL

RINCON UNIT # 252
N 1/2 SEC. 18 - T27N R6W

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