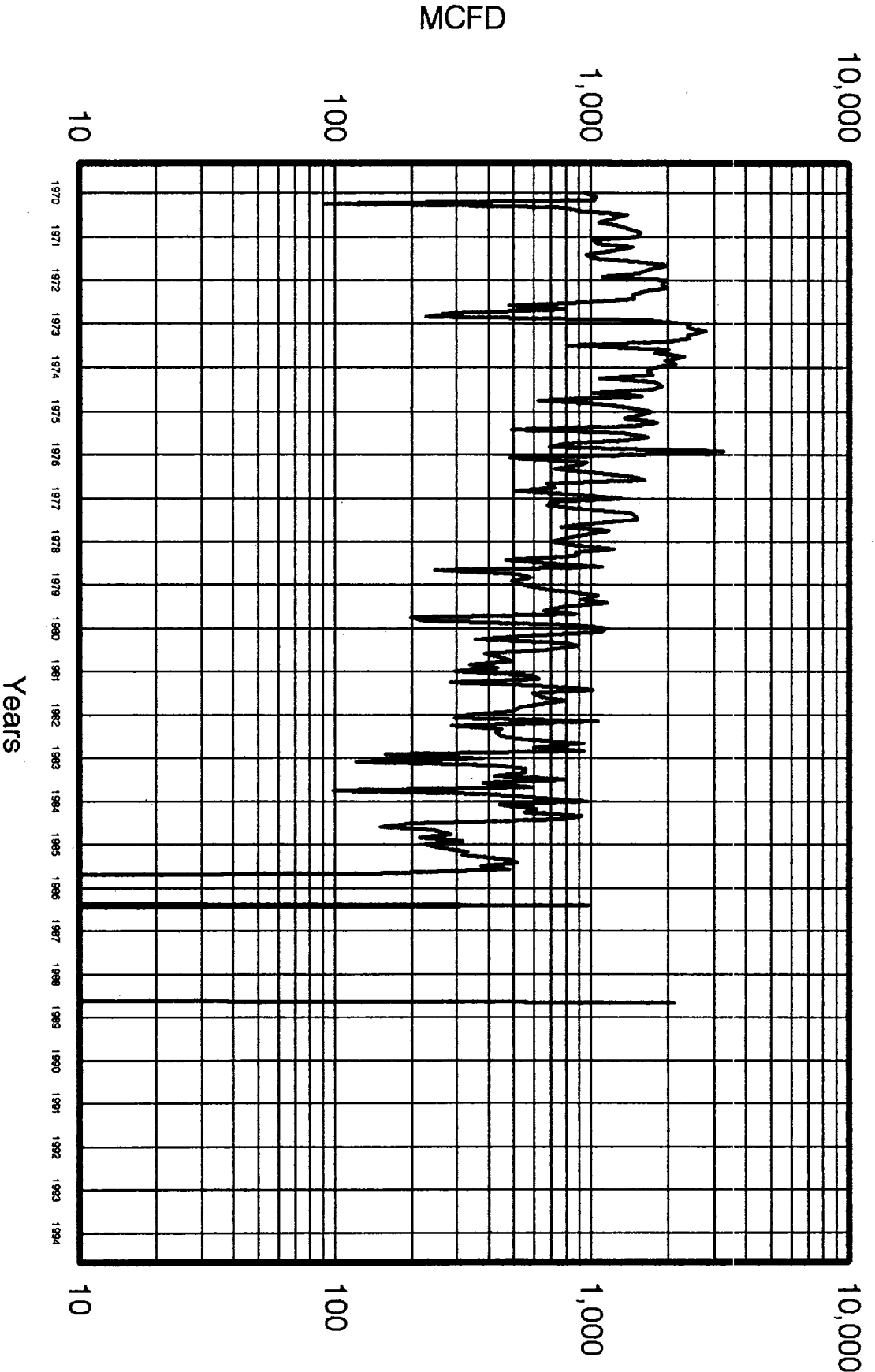
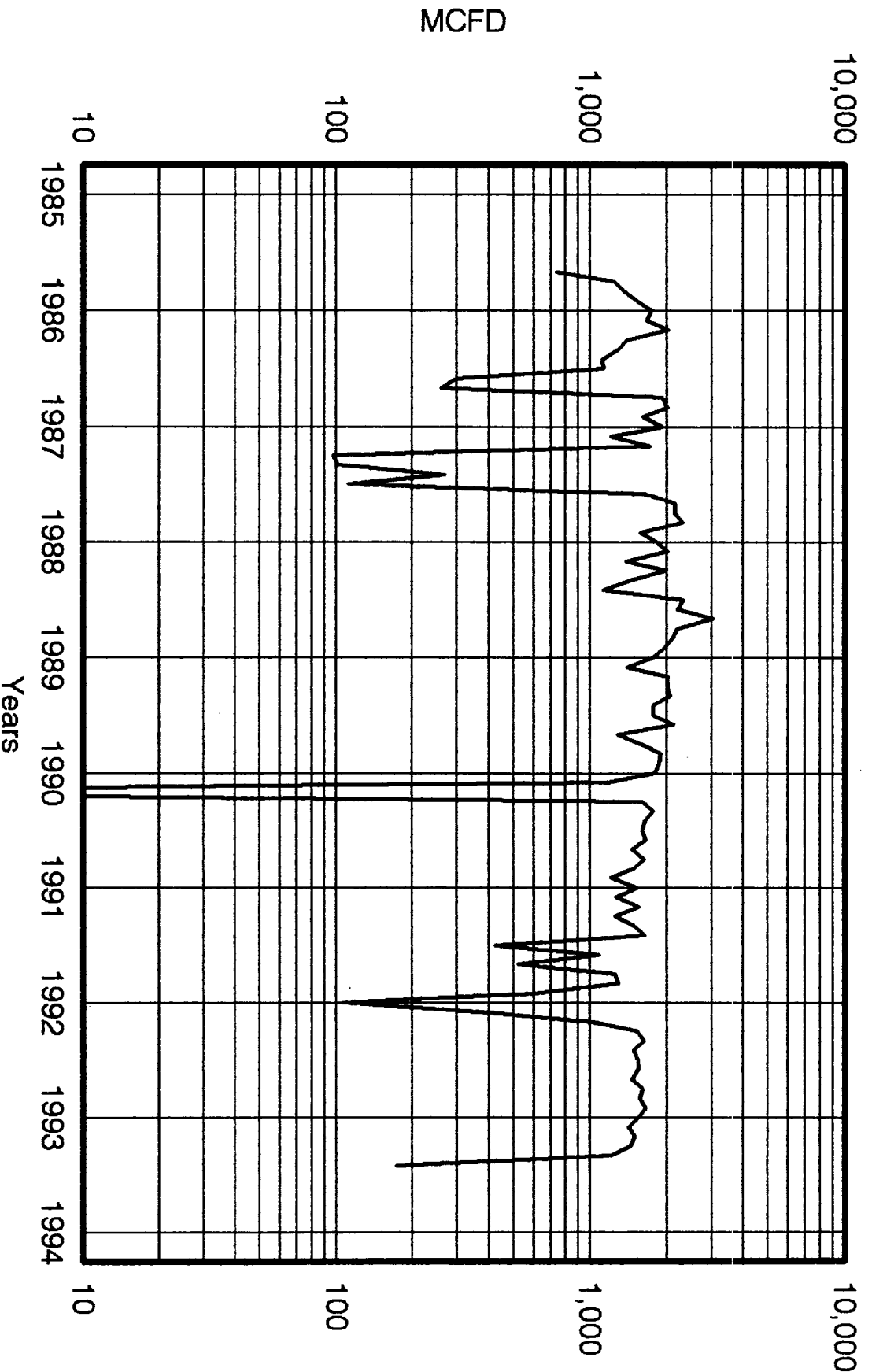




MARTHA CREEK NO. 1

INDIAN BASIN FIELD, N. M.



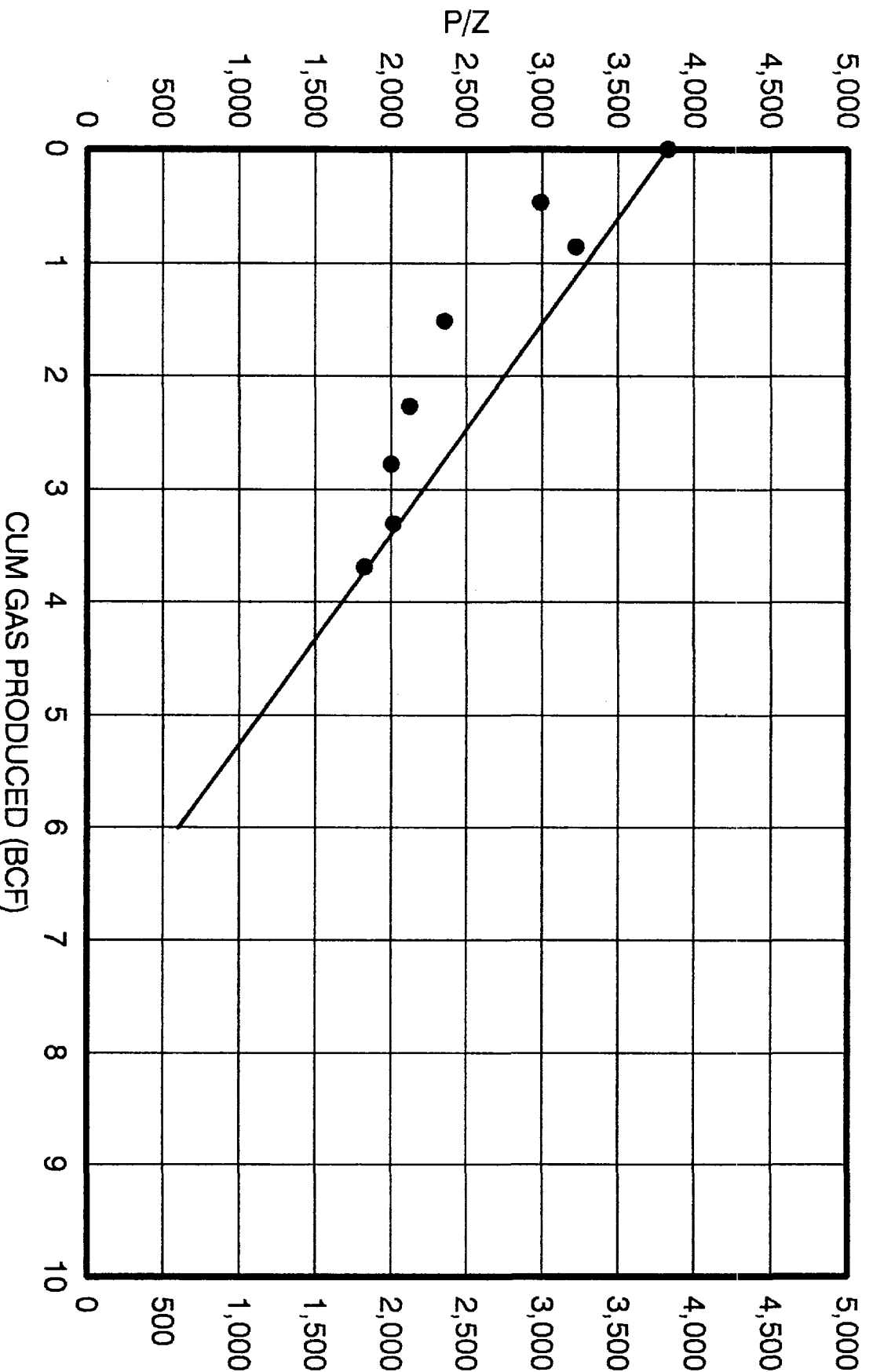


Martha Creek No. 2

MARTHA CREEK NO. 2

INDIAN BASIN FIELD, N. M.

Exhibit No. _____
Case No. _____

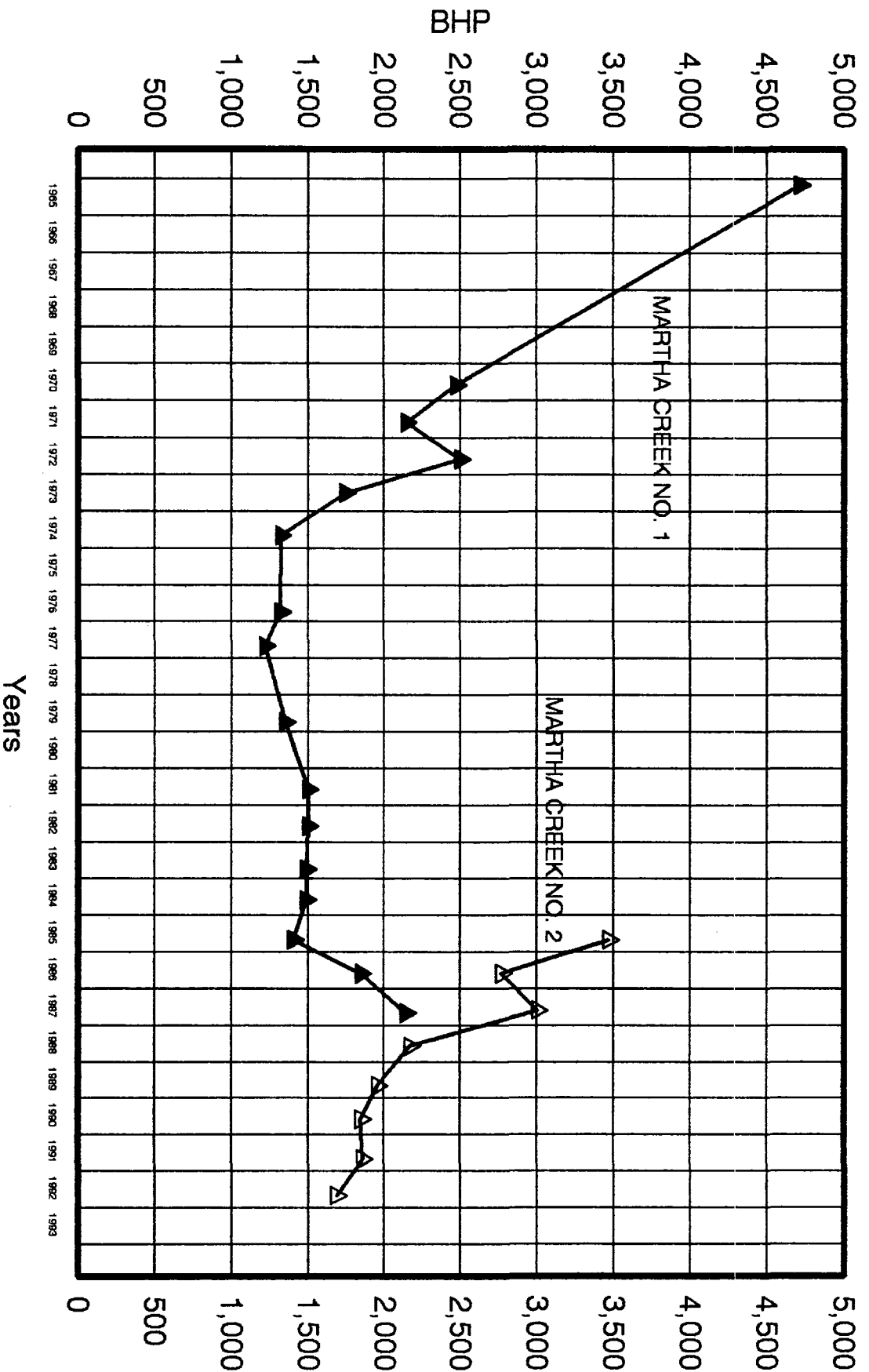


7787237, DW 8-16-93 C&I

MARTHA CREEK NO. 2

INDIAN BASIN FIELD, N. M.

Exhibit No. _____
Case No. _____



MARTHA-CRIP, Dwy 8-15-93 CRI

MARTHA CREEK

INDIAN BASIN FIELD, N. M.

Exhibit No. _____
Case No. _____

MARTHA CREEK UNIT
INDIAN BASIN (MORROW) FIELD

GAS-IN-PLACE CALCULATION

BHP, psia	4717
Z	0.996
BHT, F	194

$$B_{gi} = [(.02829)(Z)(BHT, R)/(BHP)]$$

$$B_{gi} = [(.02829)(0.996)(194+460)/(4717)] = 0.00391 \text{ RCF/SCF}$$

GAS-IN-PLACE

$$\text{GAS-IN-PLACE} = [(43560)(AC-FT)(POROSITY)(1-S_w)]/(B_{gi})$$

SAND	AC-FT	POROSITY	Sw	GIP, BCF
UPPER MORROW	6997	0.115	0.46	4.8
MORROW "A"	6698	0.075	0.165	4.7
MORROW "B"	5653	0.155	0.4	5.9
MORROW "C"	4044	0.07	0.48	1.6
LOWER MORROW	9546	0.07	0.26	5.5
TOTAL				22.5

**MARTHA CREEK UNIT
INDIAN BASIN (MORROW) FIELD**

REMAINING GAS CALCULATION

GAS-IN-PLACE:

ORIGINAL GAS-IN-PLACE	22.5 BCF
RECOVERY FACTOR	87%
RECOVERABLE GAS	19.6 BCF

EXISTING WELL RECOVERY:

MARTHA CREEK #1 ULTIMATE RECOVERY	8.0 BCF
MARTHA CREEK #2 ULTIMATE RECOVERY	6.0 BCF

REMAINING GAS:

REMAINING RECOVERABLE GAS = 19.6 - 8.0 - 6.0 = 5.6 BCF

INDIAN BASIN (MORROW) FIELD

ALLOWABLE REQUEST

MARTHA CREEK UNIT:

MARTHA CREEK #2 ALLOWABLE REQUEST	36,750 MCF/MO
MARTHA CREEK #3 ALLOWABLE REQUEST	60,000 MCF/MO
MARTHA CREEK UNIT ALLOWABLE REQUEST	96,750 MCF/MO

TOTAL POOL ACREAGE FACTOR	2.08
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MARTHA CREEK ACREAGE FACTOR	1.08
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MARTHA CREEK, % OF TOTAL POOL	51.923%
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INDIAN BASIN POOL:

NON-MARGINAL WELL ALLOWABLE REQUIRED	186,334 MCF/MO
(96,750/0.51923)	
MARGINAL WELL ALLOWABLE	41,468 MCF/MO
(BASED ON PREVIOUS PERIOD)	
TOTAL POOL ALLOWABLE	227,802 MCF/MO

