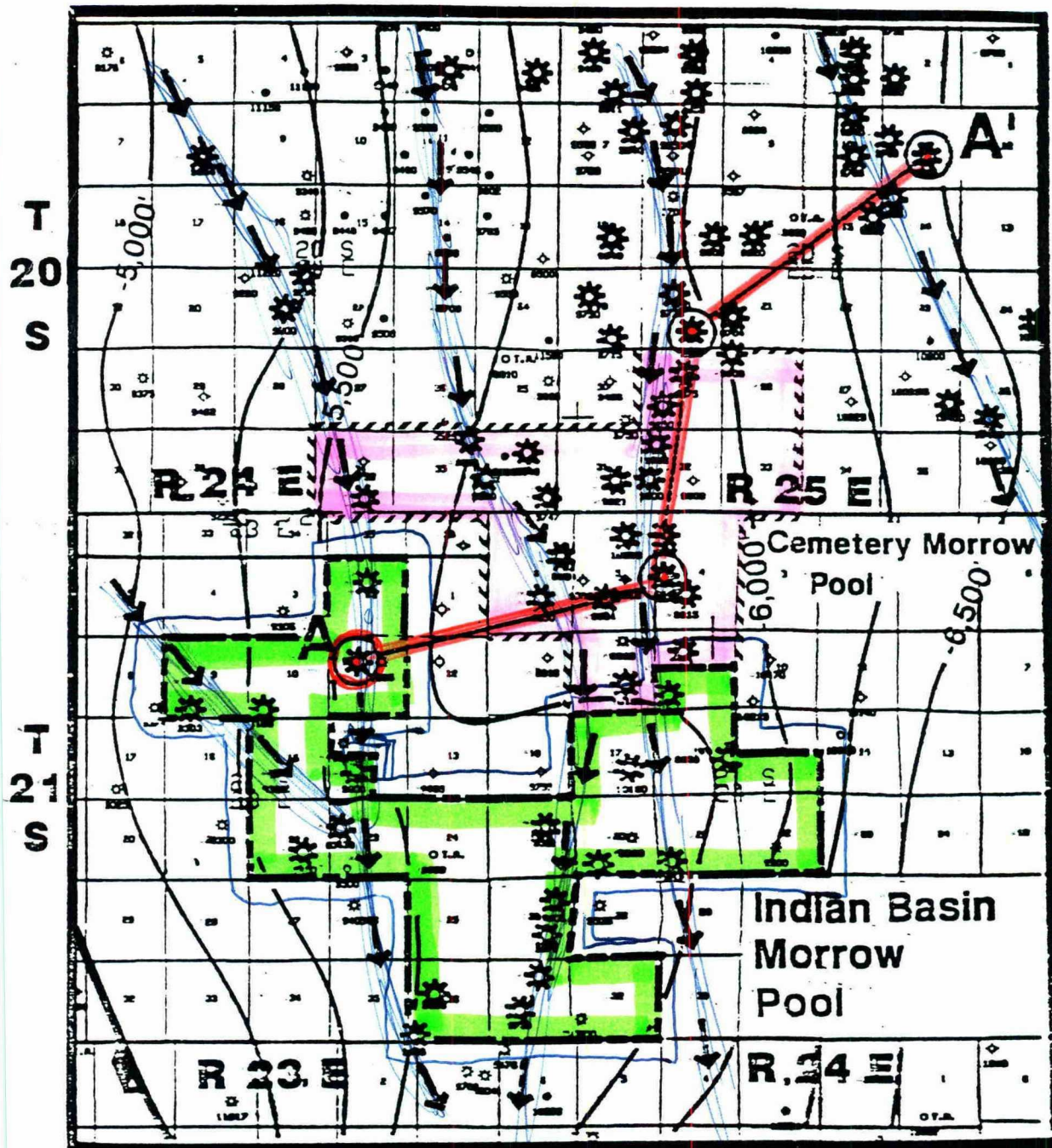




Lower Morrow
Regional Structure Contours
Contour interval = 250 ft

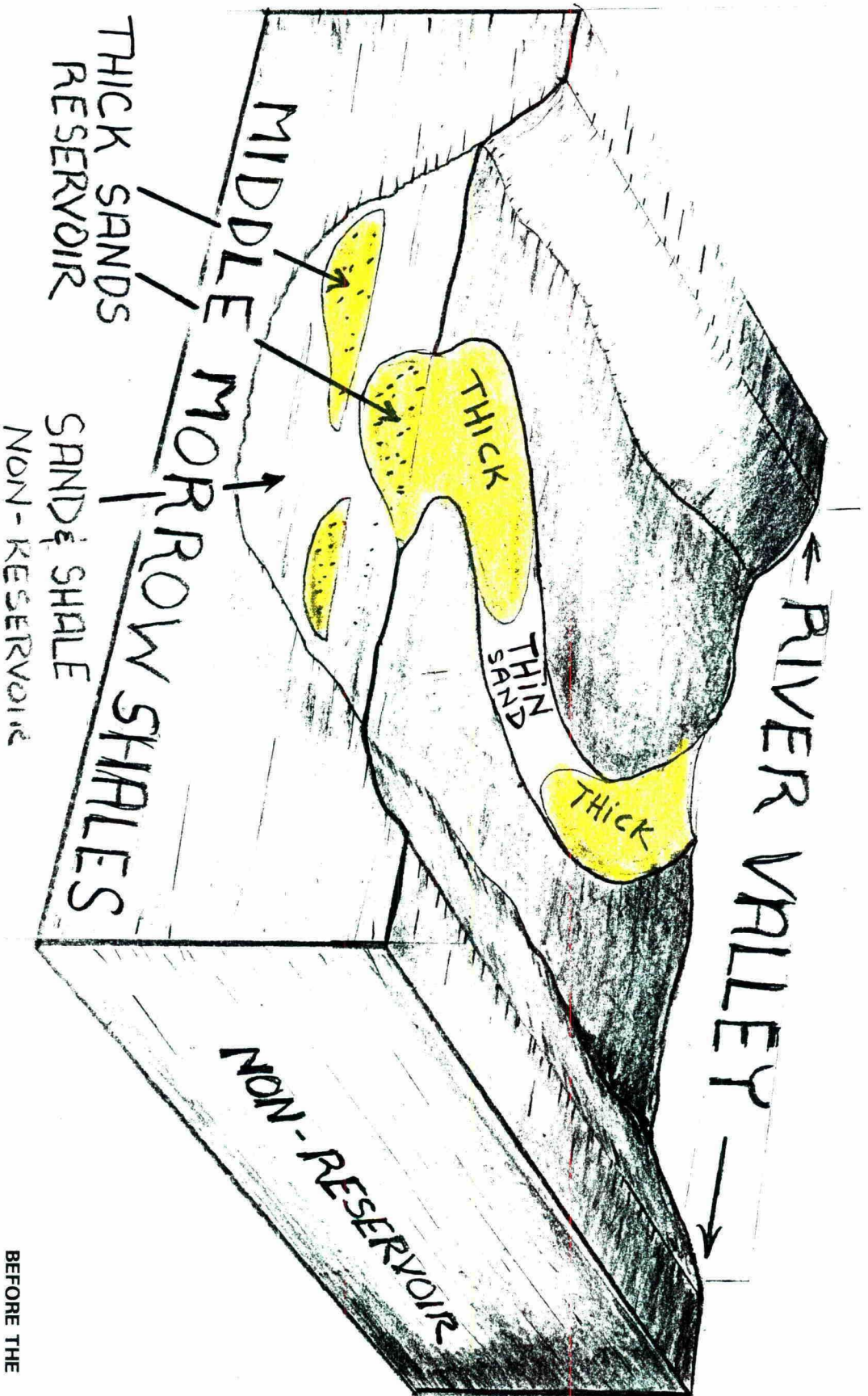
-  Morrow producer
-  Morrow channel axis
-  Fault (teeth on down-thrown side)

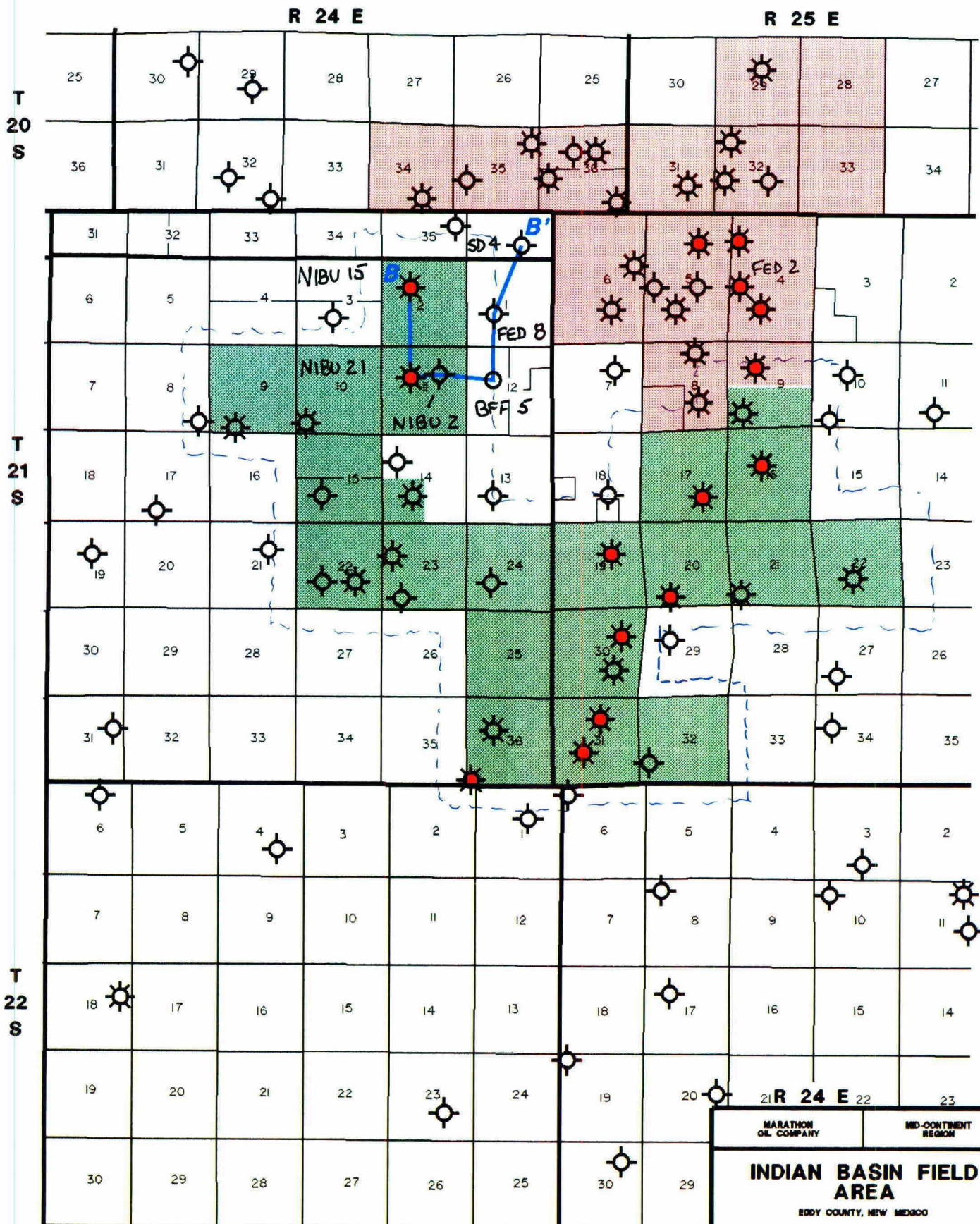
BEFORE THE
OIL CONSERVATION DIVISION
Case No. 11512 Exhibit No. 1
Submitted By:
MARATHON OIL COMPANY
Hearing Date: May 2, 1996

Map shows wells deeper than 9,000 ft

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE

MORROW DEPOSITIONAL MODEL





- MORROW GAS PRODUCING
- MORROW GAS DEPLETED
- MORROW PENETRATION (DRY)

CEMETERY MORROW
INDIAN BASIN MORROW

BEFORE THE
OIL CONSERVATION DIVISION
SANTA FE, NEW MEXICO
MARATHON OIL CO. EXHIBIT NO. 4
CASE NO. 11512
MAY 2, 1996

MARATHON OIL COMPANY		MID-CONTINENT REGION	
INDIAN BASIN FIELD AREA			
EDDY COUNTY, NEW MEXICO			
MORROW PRODUCTION			
ORIGINAL SCALE 1" = 1000'	DATE 4/84		
AUTHOR	REVISED 4/98		
DRAFTED BY:	PROJECT		
FILE LOC: IBFBASE.BMP EXPL			
DON - IBFMORPD.BMP EXPL			

MARATHON OIL COMPANY
MID-CONTINENT REGION

INDIAN BASIN FIELD AREA

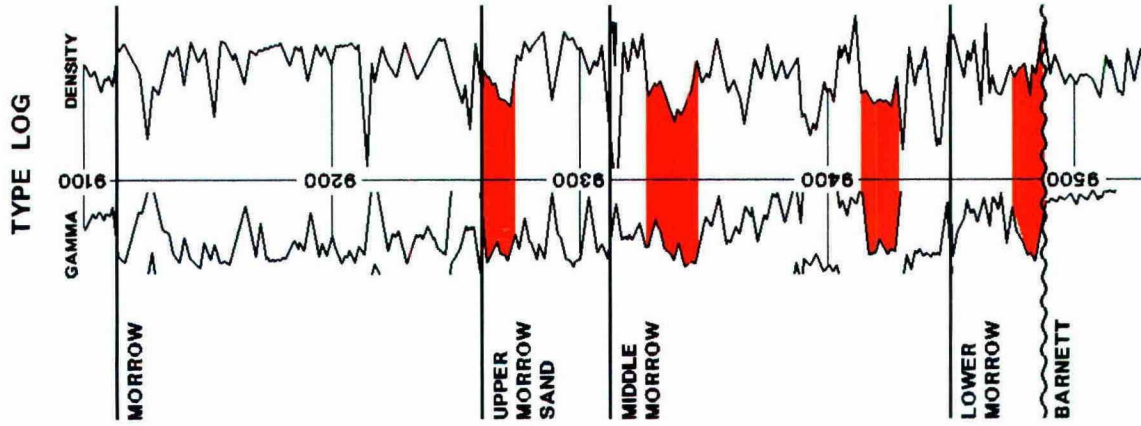
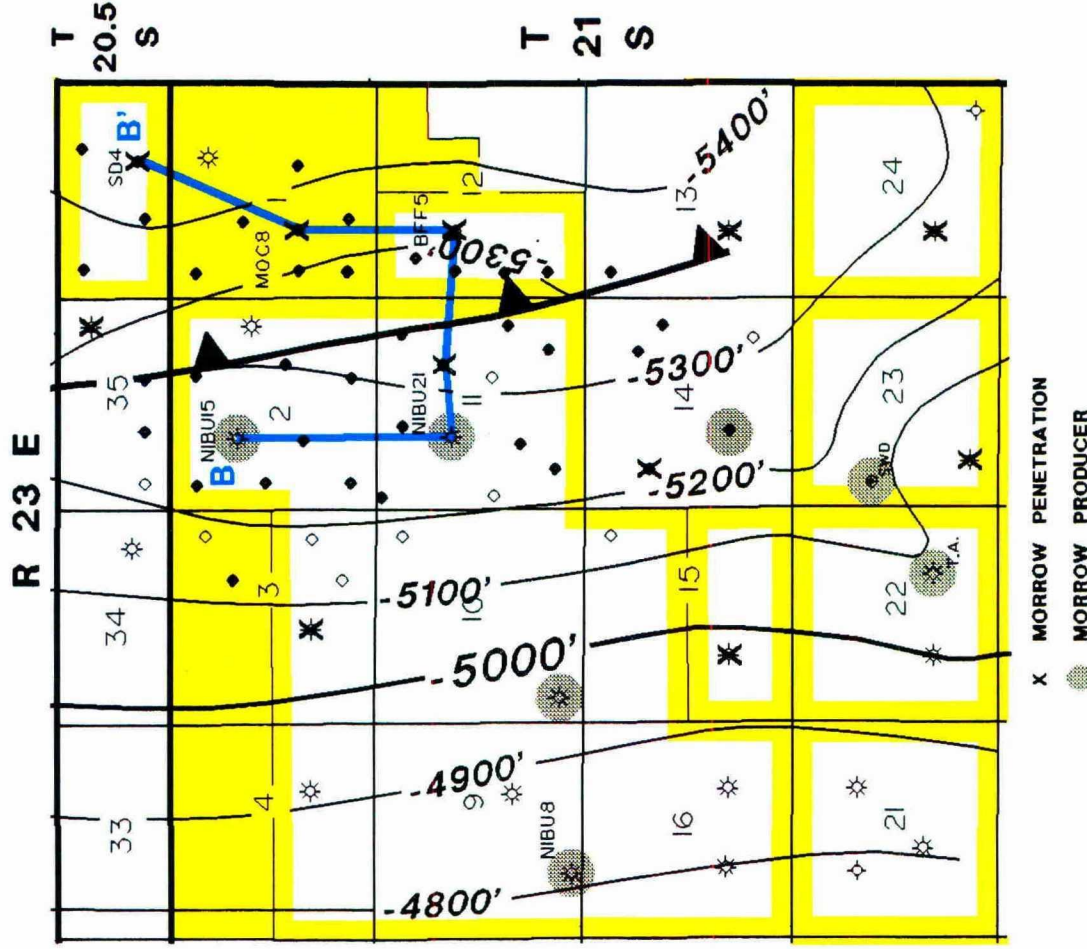
EDDY COUNTY, NEW MEXICO

TOP OF MORROW STRUCTURE MAP

C.L.: 100'

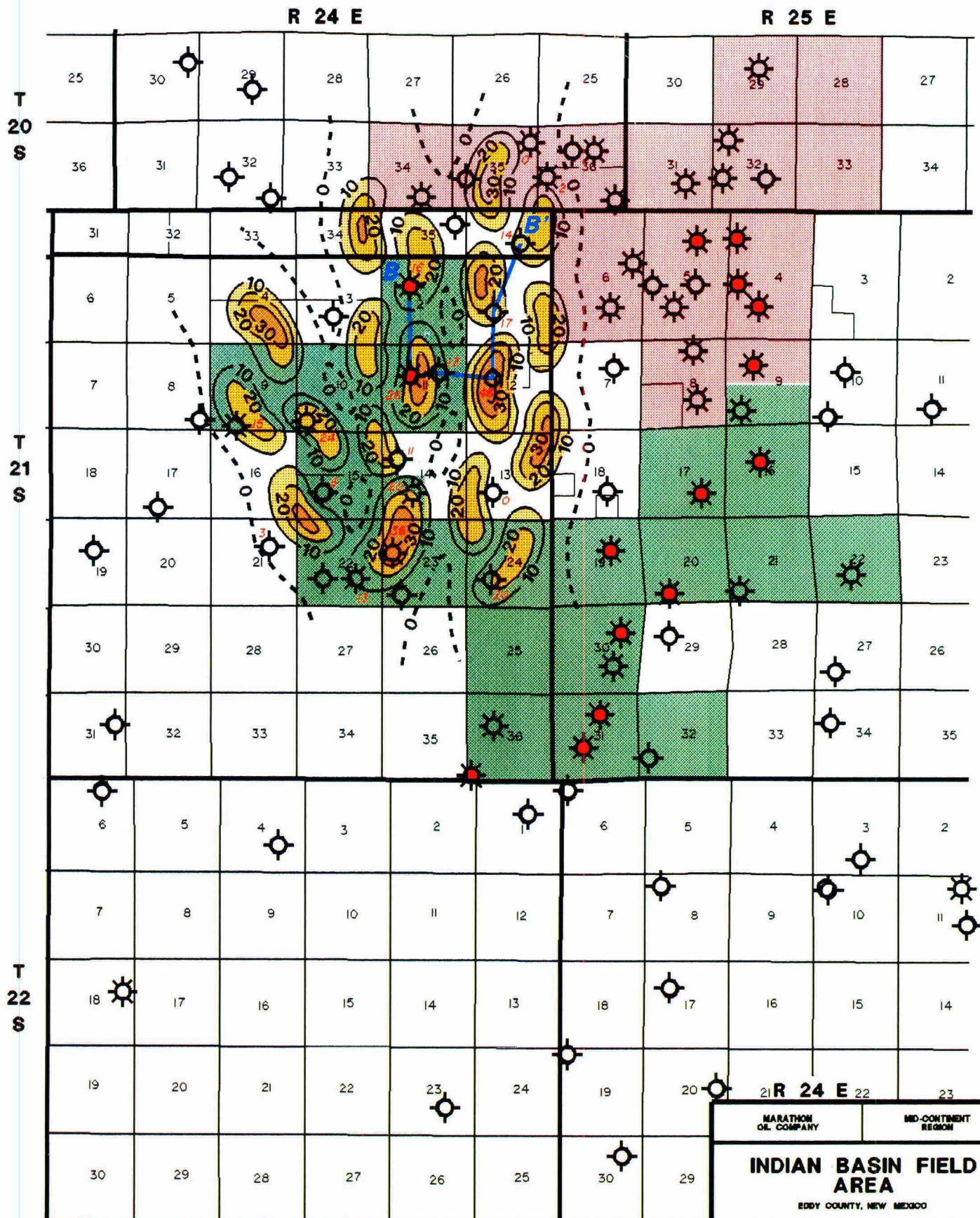


B-β' = Exhibit #6



Before the
OIL CONSERVATION DIVISION
SANTA FE, NEW MEXICO
Submitted by MARATHON OIL CO. EXHIBIT NO. 5
Hearing Date: May 2, 1996 CASE NO. 11512

LARGE FORMAT
EXHIBIT HAS
BEEN REMOVED
AND IS LOCATED
IN THE NEXT FILE



- MORROW GAS PRODUCING
- MORROW GAS DEPLETED
- MORROW PENETRATION (DRY)

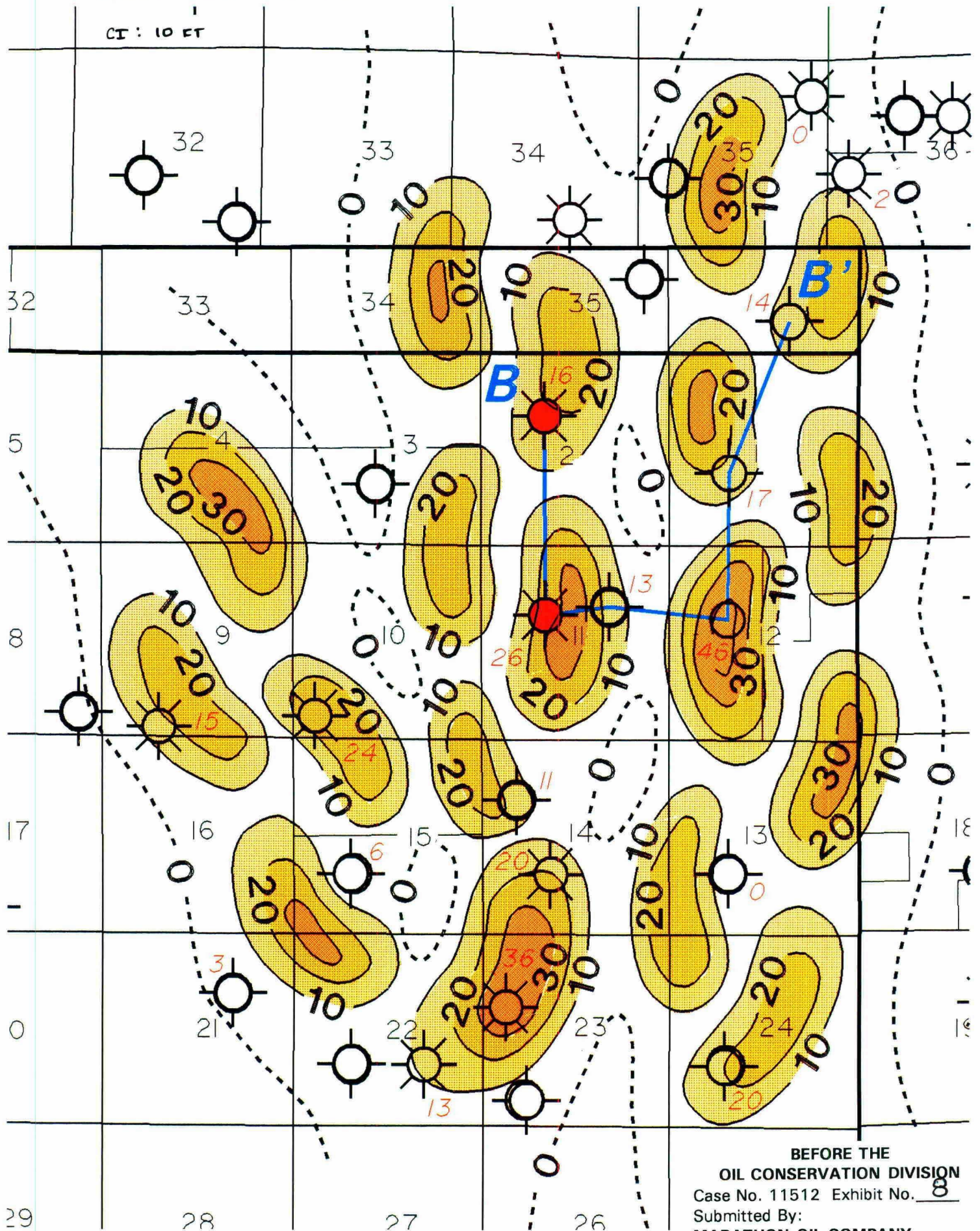
CEMETERY MORROW
INDIAN BASIN MORROW

BEFORE THE
OIL CONSERVATION DIVISION
SANTA FE, NEW MEXICO
MARATHON OIL CO. EXHIBIT NO. 7
CASE NO. 11512
MAY 2, 1996

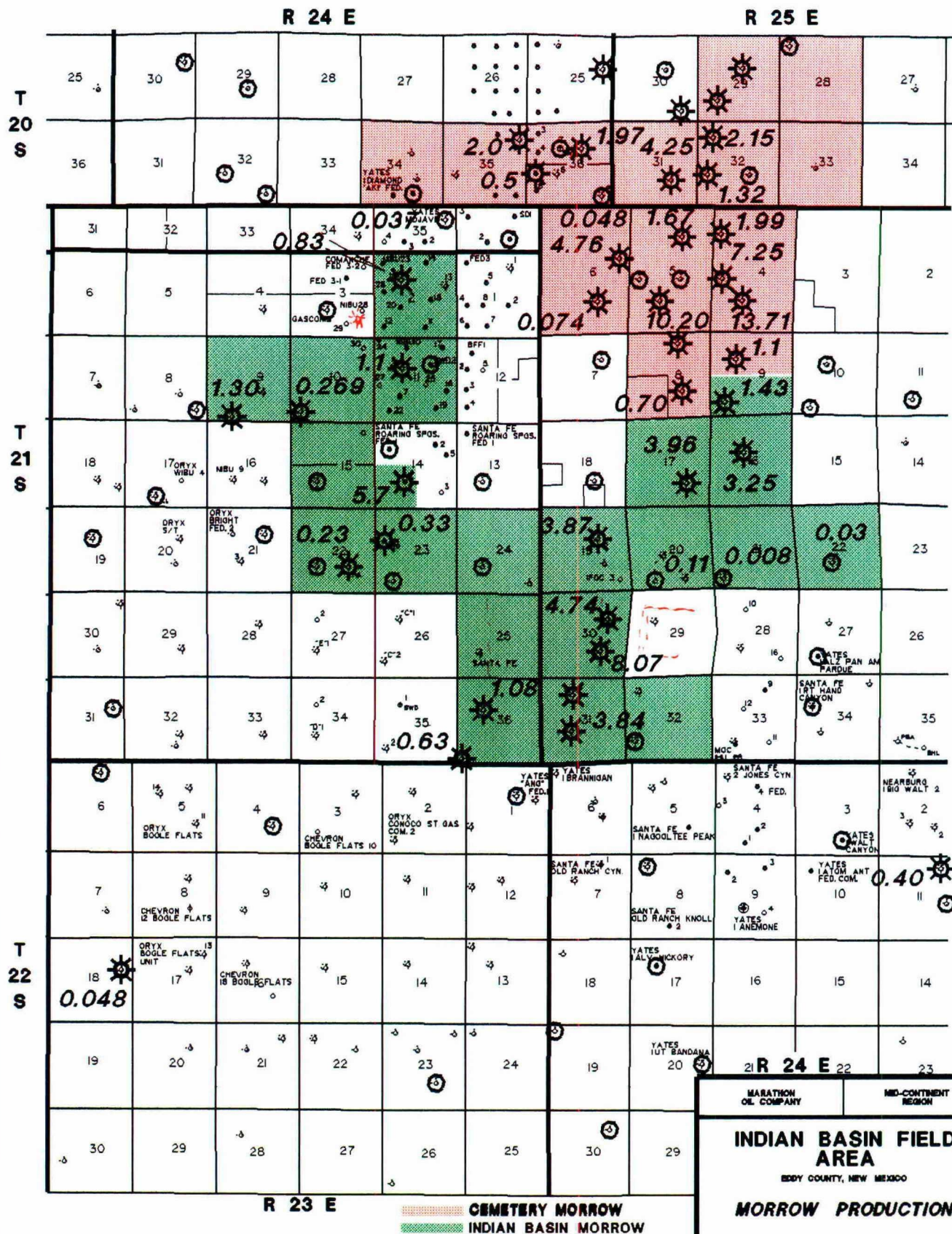
MARATHON OIL COMPANY		MID-CONTINENT REGION	
INDIAN BASIN FIELD AREA			
EDDY COUNTY, NEW MEXICO			
LOWER MORROW NET SAND ISOPACH			
C.I.: 10'			
ORIGINAL SCALE 1" = 1000'	DATE 4/84		
AUTHOR	REVISED 4/96		
DRAFTED BY:	PROJECT		
FILE LOC: IBFBASE.BMP EXPL			
DON - IBFMORPD.BMP EXPL			

INDIAN BASIN FIELD AREA
LOWER MORROW NET SAND ISOPACH

CI: 10 FT



BEFORE THE
OIL CONSERVATION DIVISION
Case No. 11512 Exhibit No. 8
Submitted By:
MARATHON OIL COMPANY
Hearing Date: May 2, 1996



- MORROW PRODUCER

2.15 - CUM. PRODUCTION IN BCFG



- MORROW PENETRATION (DRY)

BEFORE THE
OIL CONSERVATION DIVISION
Case No. 11512 Exhibit No. 9
Submitted By:
MARATHON OIL COMPANY
Hearing Date: May 2, 1996

OG6GPSC1
OG6BGPSC

ONGARD
OIL CONSERVATION DIVISION
GAS PRORATION SCHEDULE - SOUTHEAST FOR OCT95 THRU MAR96

DATE: 11-28-95

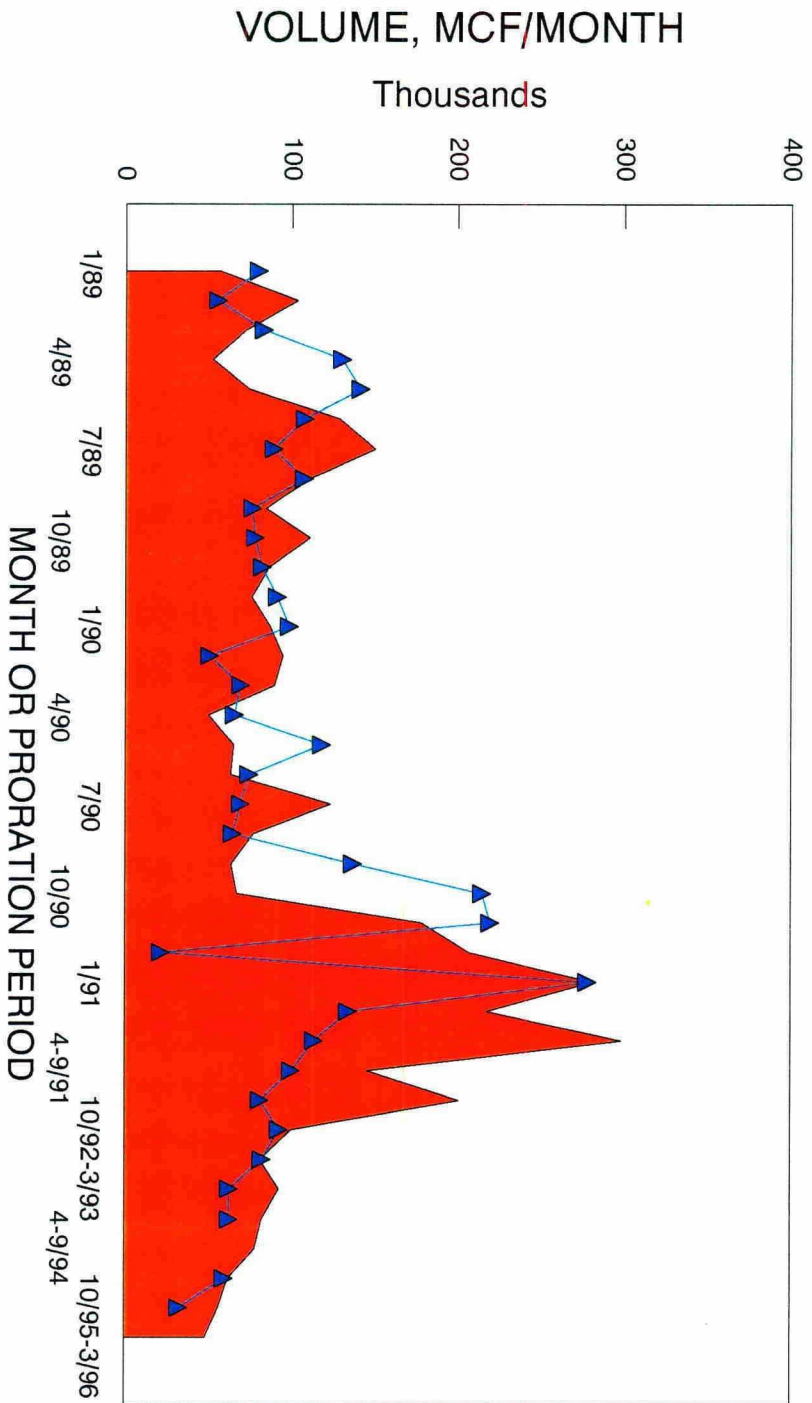
TIME: 16:18
PAGE: 23

POOL/OPERATOR/PROPERTY/HELL APINUM	NEL U MUM L	SE CT	THM SHP	RAM GE	STA TUS	TRANS	ACRG	ACRG FACT	AVG RTH SALES APR95-JUN95	OVER PROO LIMIT JAN 96	OVER/UNDER PRODUCTION JUN 95	OLD OVER PROO MAR 95	MONTHLY ALLOWABLE
078950 INDIAN BASIN: MORROW (PRO GAS)													
001621 BARBARA FASKEN													
004296 INDIAN HILLS UNIT													
12-20149 007 F	16	215	24E	M		1616	640.00	1.00	5,890				5,890
OTHER TRANSPORTER						15629							
004297 INDIAN HILLS UNIT COM A													
12-20004 008 2	17	215	24E	M		1616	640.00	1.00	2,507				2,507
OTHER TRANSPORTER						15629							
OPERATOR TOTALS							1,280.00	2.00	8,397				8,397
012223 KERR-MCGEE CORP													
001624 MARTHA CREEK GAS COM													
12-22975 001 J	30	215	24E	M		14021	688.89	1.08	16,872	187,236	1,224		31,206
OTHER TRANSPORTER						14039							
003770 WINSTON GAS COM													
12-10363 001 K	31	215	24E	M		8503	640.00	1.00	4,789				4,789
OTHER TRANSPORTER						14021							
OTHER TRANSPORTER						14039							
OTHER TRANSPORTER						21924							
OPERATOR TOTALS							1,328.89	2.08	21,661				35,995
014021 MARATHON OIL CO													
001004 INDIAN BASIN A													
12-20034 001 J	22	215	23E	M		14021	640.00	1.00	0				0
012223 INDIAN FED GAS COM													
12-10395 001 G	19	215	24E	M		8503	640.00	1.00	513				513
OTHER TRANSPORTER						14021							
OTHER TRANSPORTER						14039							
004409 INDIAN HILLS UNIT													
12-24277 004 H	20	215	24E	M		14021	640.00	1.00	451				451
OTHER TRANSPORTER						14039							
OTHER TRANSPORTER						14609							
004411 NORTH INDIAN BASIN UNIT													
12-10065 001 M	10	215	23E	M		14021	640.00	1.00	0				0
12-24334 004 H	09	215	23E	M		14021	550.40	1.86	0				0
OPERATOR TOTALS							3,110.40	4.86	964				964
016587 ORYX ENERGY CO													
004961 LONE STATE													
12-25694 002 M	36	215	23E	M		15629	640.00	1.00	1,568				1,568
004962 LONE STATE GAS COM													
12-10342 001 F	36	215	23E	M		14021	640.00	1.00	0				1,568
OPERATOR TOTALS							1,280.00	2.00	1,568				3,136
025578 YATES PETROLEUM CORPORATION													
012224 LONE STATE AMR FEDERAL COM													
12-10040 001 4	22	215	24E	M		0	651.47	1.02	0				0
OPERATOR TOTALS							651.47	1.02	0				0
*** O O L TOTALS***							7,650.76	11.96	32,590		1,224		48,492
NON MARGINAL POOL TOTALS							688.89	1.08	16,872		1,224		31,206
*****END OF PAGE*****													

Before the
OIL CONSERVATION DIVISION
SANTA FE, NEW MEXICO
Submitted by MARATHON OIL CO. EXHIBIT NO. 10
Hearing Date: May 2, 1996 CASE NO. 11512

INDIAN BASIN MORROW GAS POOL

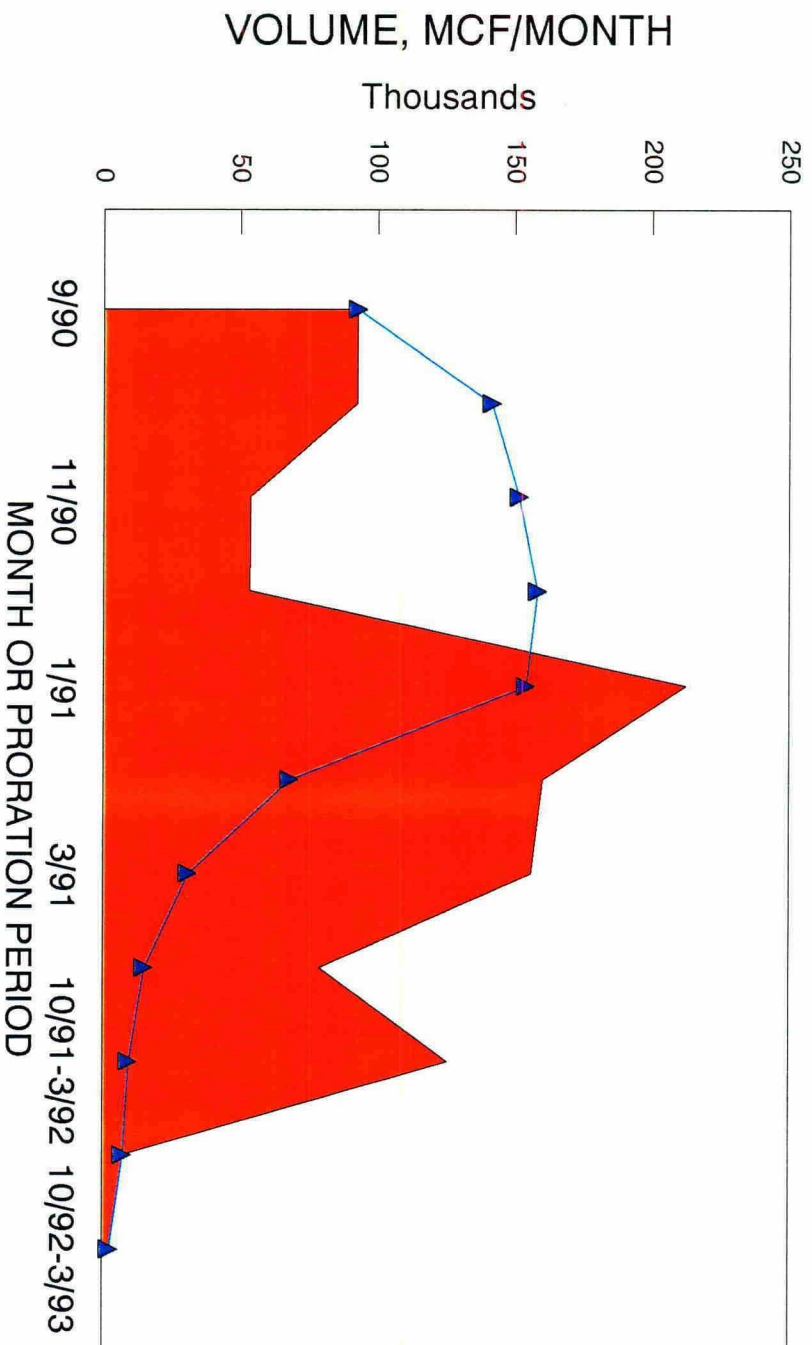
HISTORICAL TRENDS



Before the OIL CONSERVATION DIVISION SANTA FE, NEW MEXICO
Submitted by: MARATHON OIL CO. EXHIBIT NO. 11 MAY 2, 1996 CASE NO. 11512

NORTH INDIAN BASIN UNIT 8

HISTORICAL TRENDS



Before the OIL CONSERVATION DIVISION SANTA FE, NEW MEXICO
Submitted by: MARATHON OIL CO. EXHIBIT NO. **12** MAY 2, 1996 CASE NO. 11512

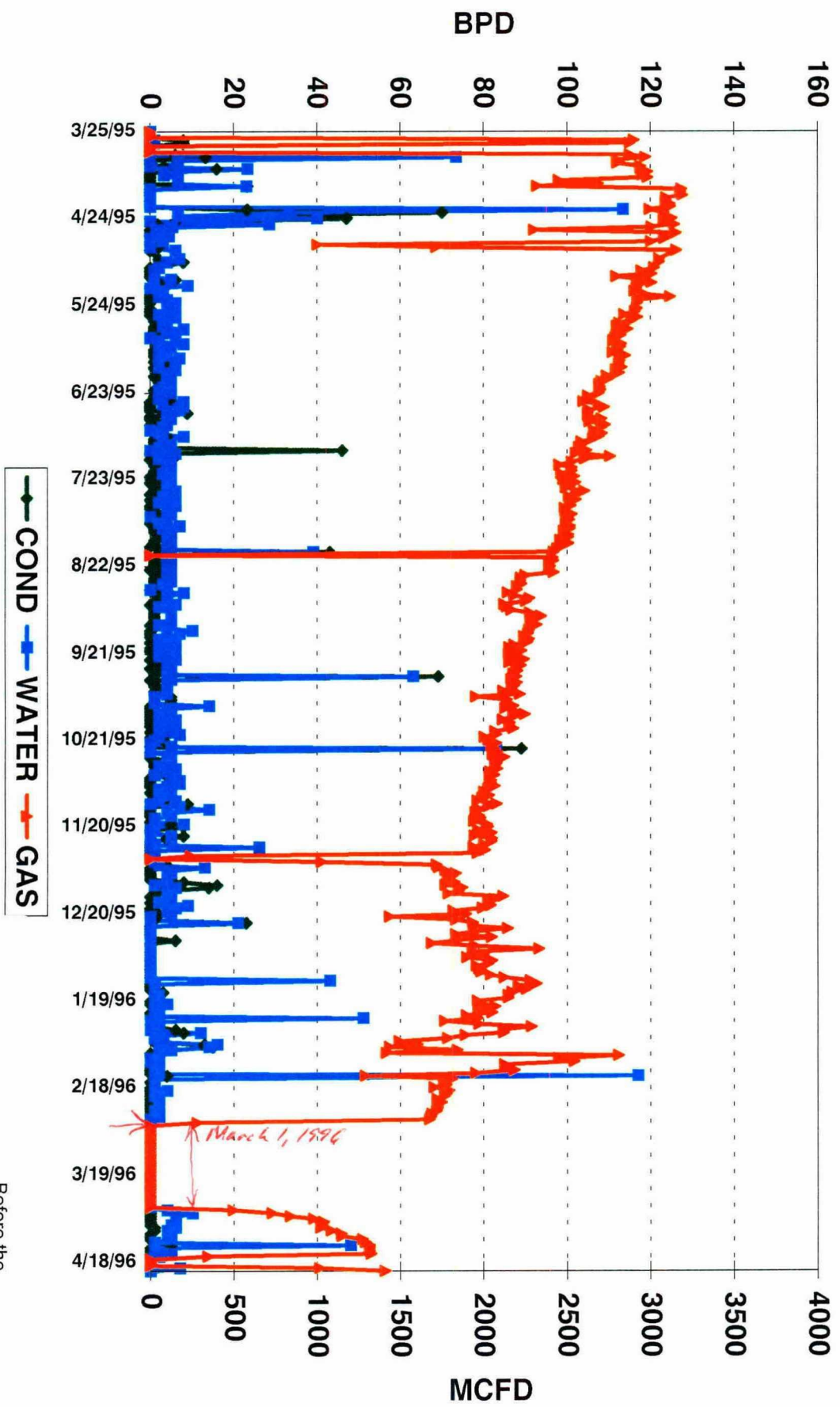
INDIAN BASIN MORROW GAS POOL

WESTERN AREA

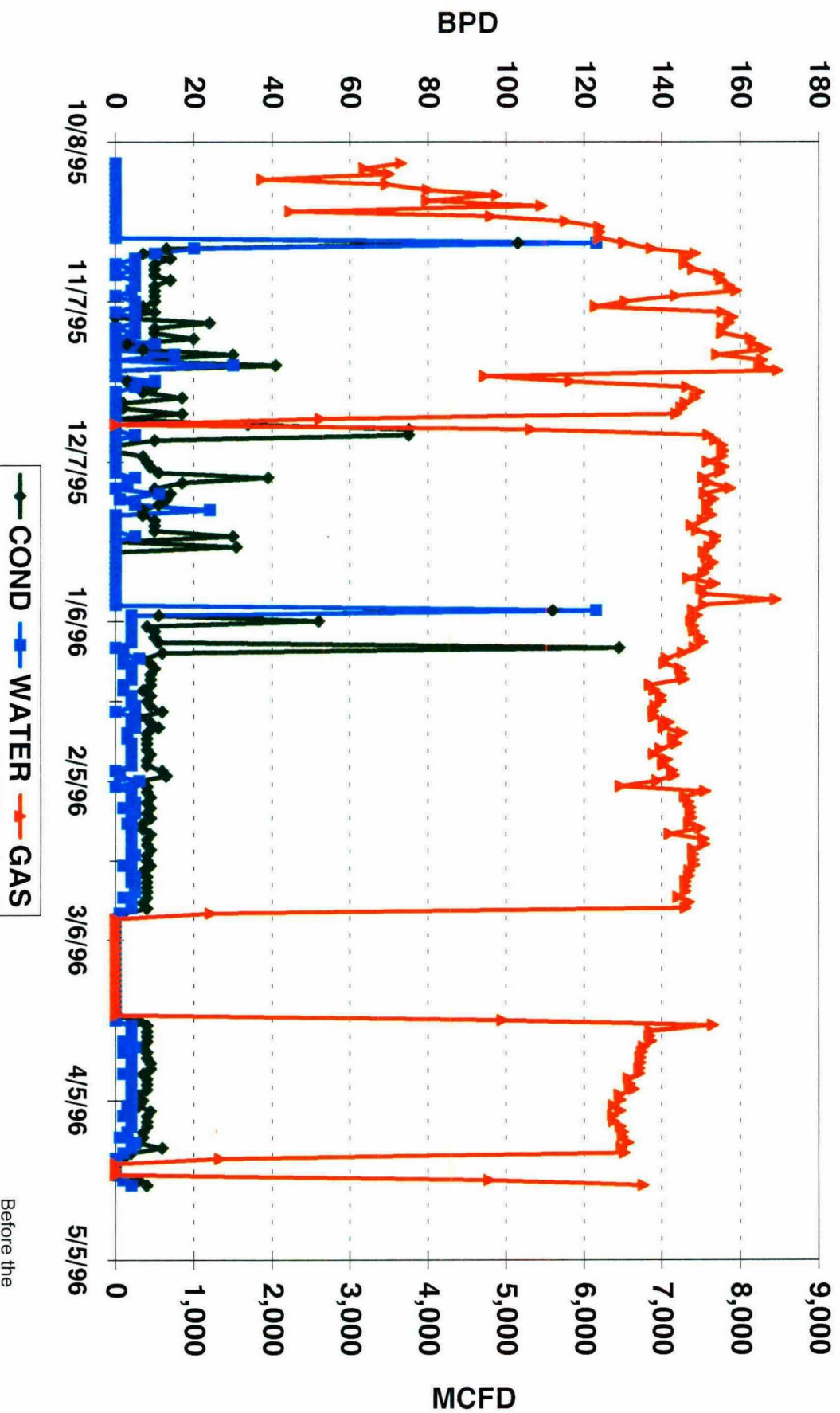
WELL	LOCATION SEC,T,R	INITIAL TEST DATE	Gp 03/31/96 MMCF	DEPLETION DATE	DRAINAGE AREA ACRES
INDIAN BASIN GAS COM #1	23, 21, 23	10/28/62	330	1971	41
INDIAN BASIN A #1	22, 21, 23	12/27/62	228	PRE '70	19
INDIAN BASIN B GAS COM #1	14, 21, 23	03/25/63	5727	1984	315
NORTH INDIAN BASIN UNIT #1	10, 21, 23	07/30/63	269	PRE '70	17
LOWE STATE GAS COM #1	36, 21, 23	09/22/64	1081	1979	52
NORTH INDIAN BASIN UNIT #8	9, 21, 23	06/04/90	1307	1993	224
LOWE STATE GAS COM #2	36, 21, 23	07/08/91	633	1995	207
NORTH INDIAN BASIN UNIT #15	2, 21, 23	05/03/95	826	NA	169
NORTH INDIAN BASIN UNIT #21	11, 21, 23	10/17/95	1105	NA	288

BEFORE THE OIL CONSERVATION DIVISION SANTA FE, NEW MEXICO Submitted by: MARATHON OIL CO. EXHIBIT NO. 13 May 2, 1996 CASE NO. 11512
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NORTH INDIAN BASIN UNIT NO. 15
SECTION 2, T-21-S, R-23-E

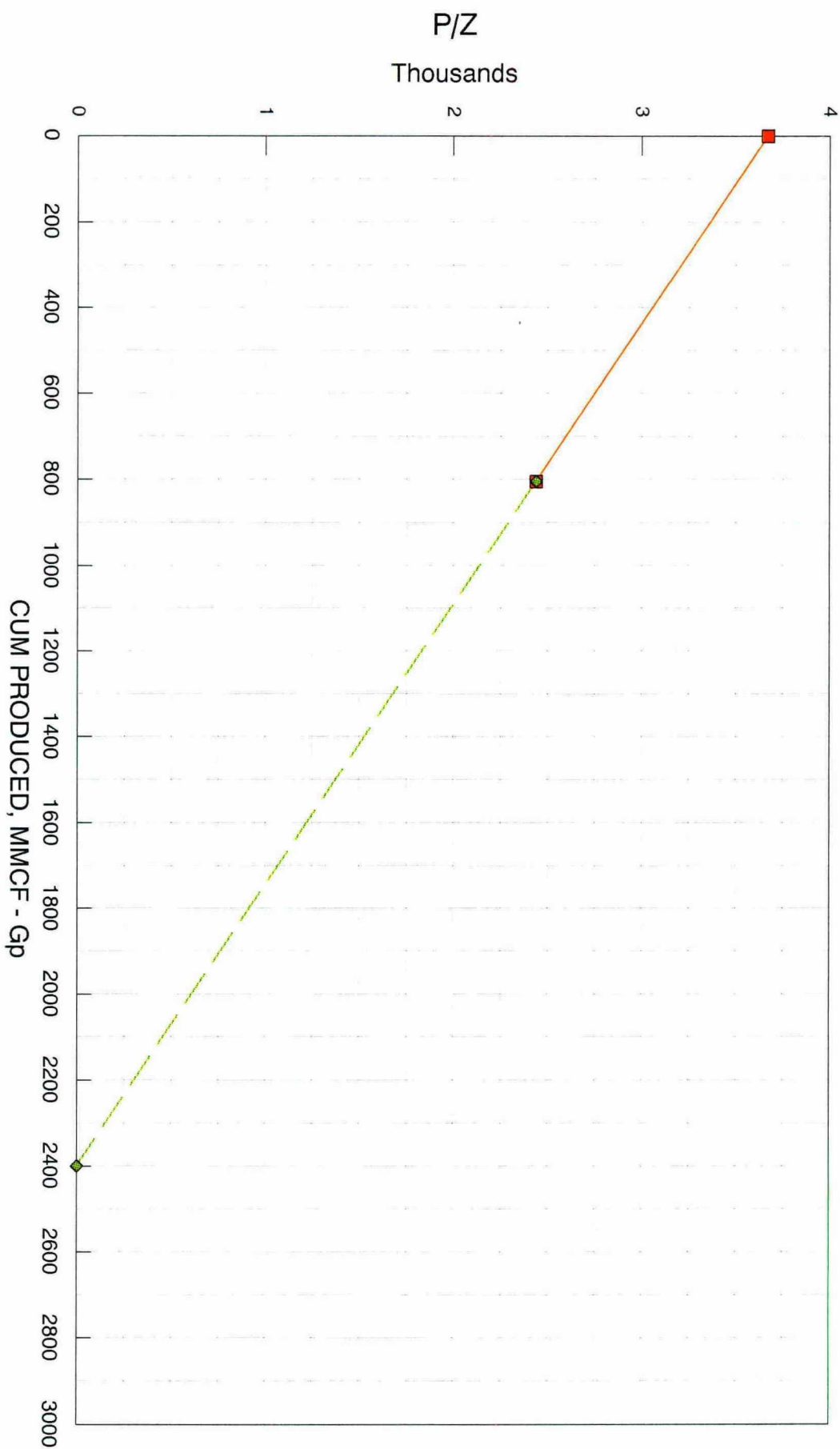


NORTH INDIAN BASIN UNIT NO. 21
SECTION 11, T-21-S, R-23-E



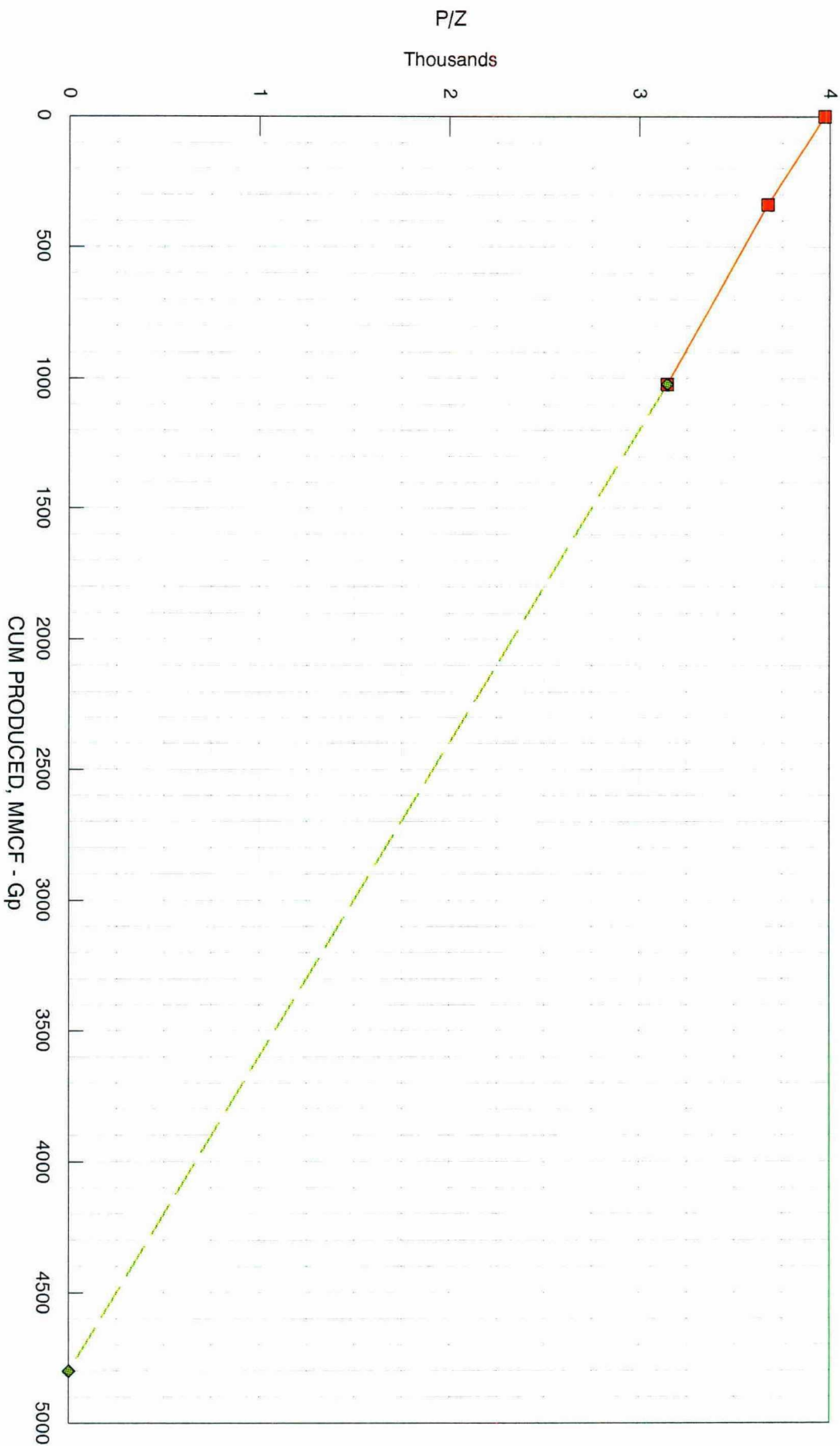
NORTH INDIAN BASIN UNIT 15

P/Z VS. Gp



NIBU 21 MORROW GAS WELL

P/Z VS. Gp



INDIAN BASIN MORROW GAS POOL

VOLUMETRIC CALCULATIONS

WELL	POR.	Sw	PI	Z	T	Bgi SCF/CF	SG	RF	Gp 03/31/96 MMCF	OGIP MMCF	NET PAY h'	DRAINAGE AREA ACRES
IBGC 1	7%	35%	3750	0.9243	165	229	0.58	85%	330	388	21	41
IBA 1	10%	35%	3610	0.9200	165	222	0.58	85%	228	268	22	19
IBBGC 1	11%	35%	3750	0.9265	165	229	0.58	85%	5727	6738	30	315
NIBU 1	12%	35%	3449	0.9140	165	213	0.58	85%	269	316	26	17
LSGC 1	10%	35%	3743	0.9265	165	228	0.58	85%	1081	1272	38	52
NIBU 8	12%	35%	3657	0.9220	165	224	0.58	85%	1307	1538	9	224
LSGC 2	7%	35%	2872	0.8969	163	182	0.58	85%	633	745	10	207
NIBU 15	8%	40%	3675	0.9243	160	227	0.58	86%	826	2400	30	169
NIBU 21	10%	35%	3672	0.9243	160	227	0.58	88%	1105	4800	26	288

$$\text{OGIP} = 43560 \times (\text{POROSITY}) \times (1 - \text{Sw}) \times \text{Bgi} \times \text{Ac} \times \text{Ft}$$



P.O. Box 552
Midland, TX 79702-0552
Telephone 915/682-1626

April 30, 1996

Mr. William J. LeMay, Director
New Mexico Oil Conservation Division
Energy, Minerals and Natural Resources Dept.
2040 South Pacheco
Santa Fe, New Mexico 87505

**Re: Indian Basin-Morrow Pool Gas Sales
Eddy County, New Mexico**

Dear Mr. LeMay:

I am employed by Marathon Oil Company in Midland, Texas, as Senior Natural Gas Property Development Representative. As part of my job, I am responsible for being familiar with the markets for gas produced by Marathon from the Indian Basin Field, including from the Indian Basin-Morrow Pool.

Even with Marathon's Morrow wells at Indian Basin currently flowing at capacity pending the outcome of Marathon's application to terminate prorationing, Marathon is able to market all of its Morrow production. In the event that Marathon's application is granted, I foresee no problem in marketing any additional production which may be made by Marathon as a result of the ending of prorationing.

Sincerely,

A handwritten signature in cursive script that reads 'Craig W. Chambers'.

Craig W. Chambers

TCL\MISCTCL\LEMAY\mlv

A handwritten signature in cursive script that reads 'Marathon Oil Company'.

Exhibit No.

#19

Case 11512