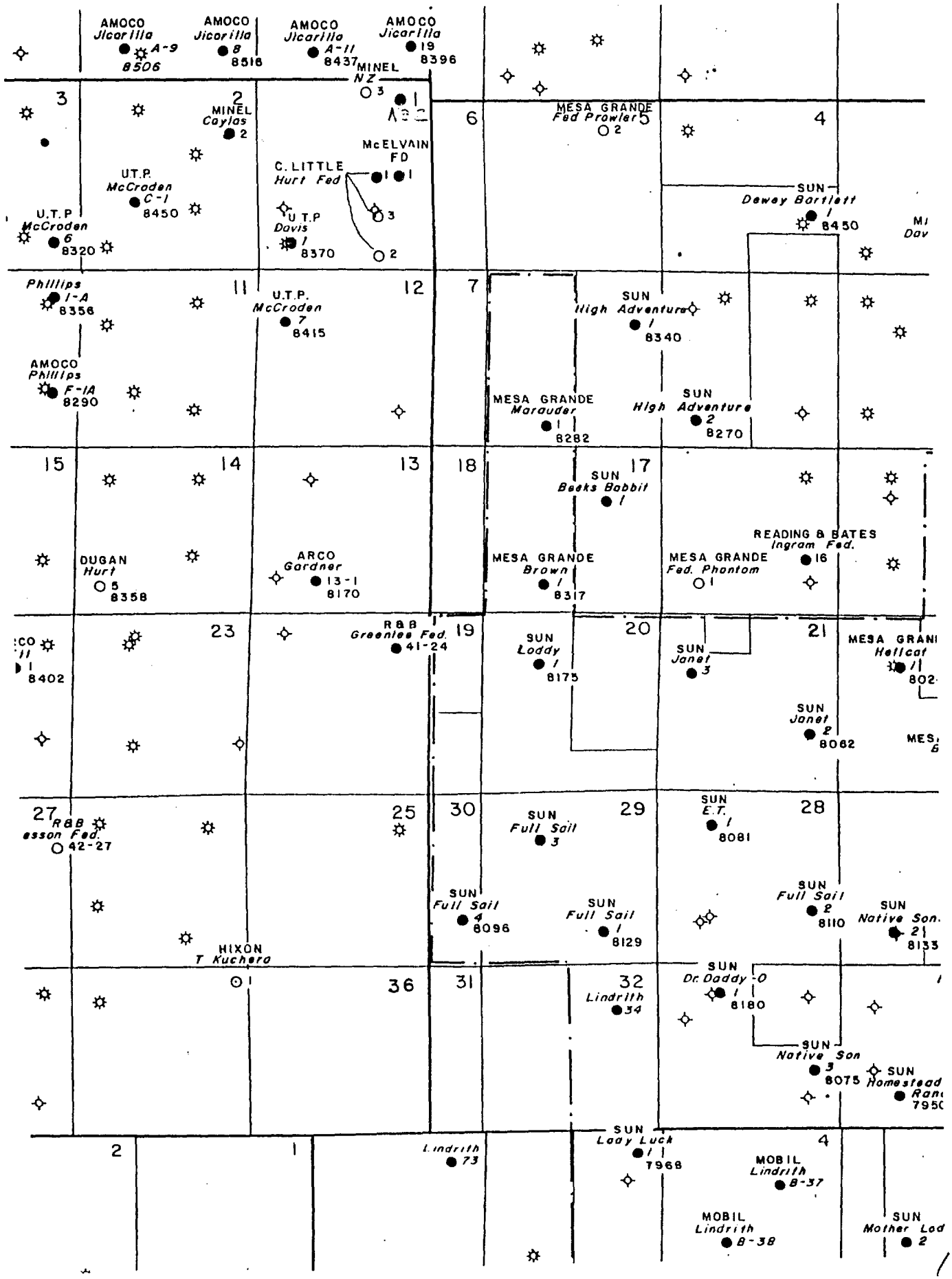
Sun Exploration and Production Company

EXHIBIT 1

NEW MEXICO OIL CONSERVATION COMMISSION
NOVEMBER 19, 1987
GAVILAN - WEST LINDRITH
BOUNDARY
CASE 9226


AMOCO Jicarilla A-9 8506
AMOCO Jicarilla B 8516
AMOCO Jicarilla A-11 8437
AMOCO Jicarilla 19 8396
MINEL NZ 3
MINEL Caylas 2
MESA GRANDE Fed Prowler 2
McELVAIN FD 1
C. LITTLE Hurt Fed 1
U.T.P. McCroden C-1 8450
U.T.P McCroden 6 8320
U.T.P Davis 1 8370
SUN Dewey Bartlett 1 8450
Phillips 1-A 8356
U.T.P. McCroden 7 8415
SUN High Adventure 1 8340
AMOCO Phillips F-1A 8290
MESA GRANDE Marauder 1 8282
SUN High Adventure 2 8270
SUN Beeks Babbit 1
READING & BATES Ingram Fed.
DUGAN Hurt 5 8358
ARCO Gardner 13-1 8170
MESA GRANDE Brown 1 8317
MESA GRANDE Fed. Phantom 1
16
R&B Greenlee Fed. 41-24
SUN Loddy 1 8175
SUN Janet 3
SUN Janet 2 8062
MESA GRANI Hellcat 1 802
8402
R&B esson Fed. 42-27
SUN Full Sail 3
SUN E.T. 1 8081
SUN Full Sail 4 8096
SUN Full Sail 1 8129
SUN Full Sail 2 8110
SUN Native Son 2 8133
HIXON T Kuchera 1
SUN Dr. Daddy O 1 8180
32 Lindrith 34
SUN Native Son 3 8075
SUN Homestead
SUN Lady Luck 1 7968
Lindrith 73
MOBIL Lindrith B-37
MOBIL Lindrith B-38
SUN Mother Lod 2

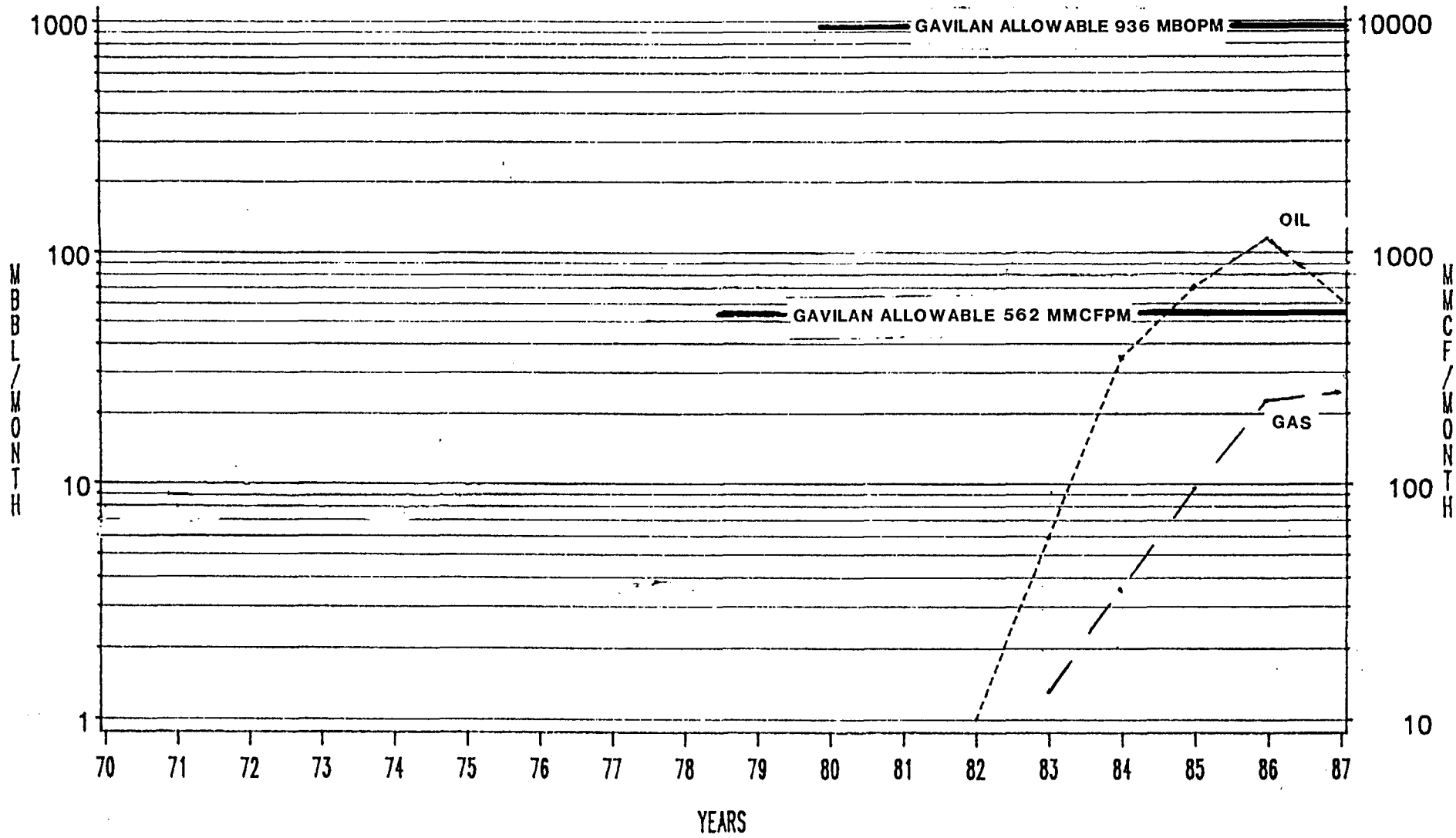
SECTION I

NEW MEXICO OIL CONSERVATION DIVISION
CASE NO. 9226

Pool	Spacing	Allowables BOPD	GOR	MCFPD	640 Acre Allowable BOPD	MCFPD
West Lindrith	160	382	2000	764	1528	3056
Gavilan-Mancos	640	800	600	480	800	480

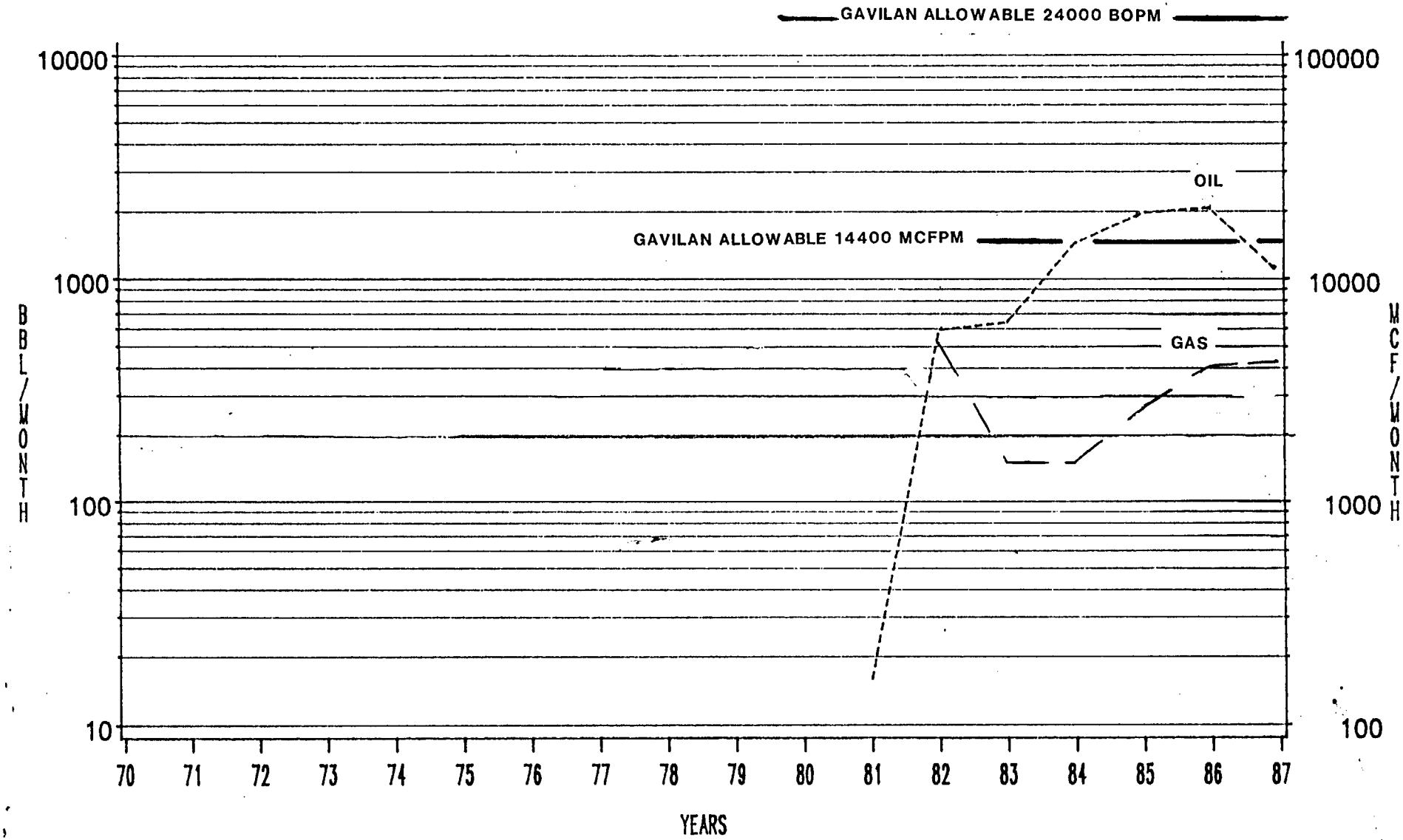
used

GAVILAN FIELD
AVERAGE PRODUCTION PER MONTH

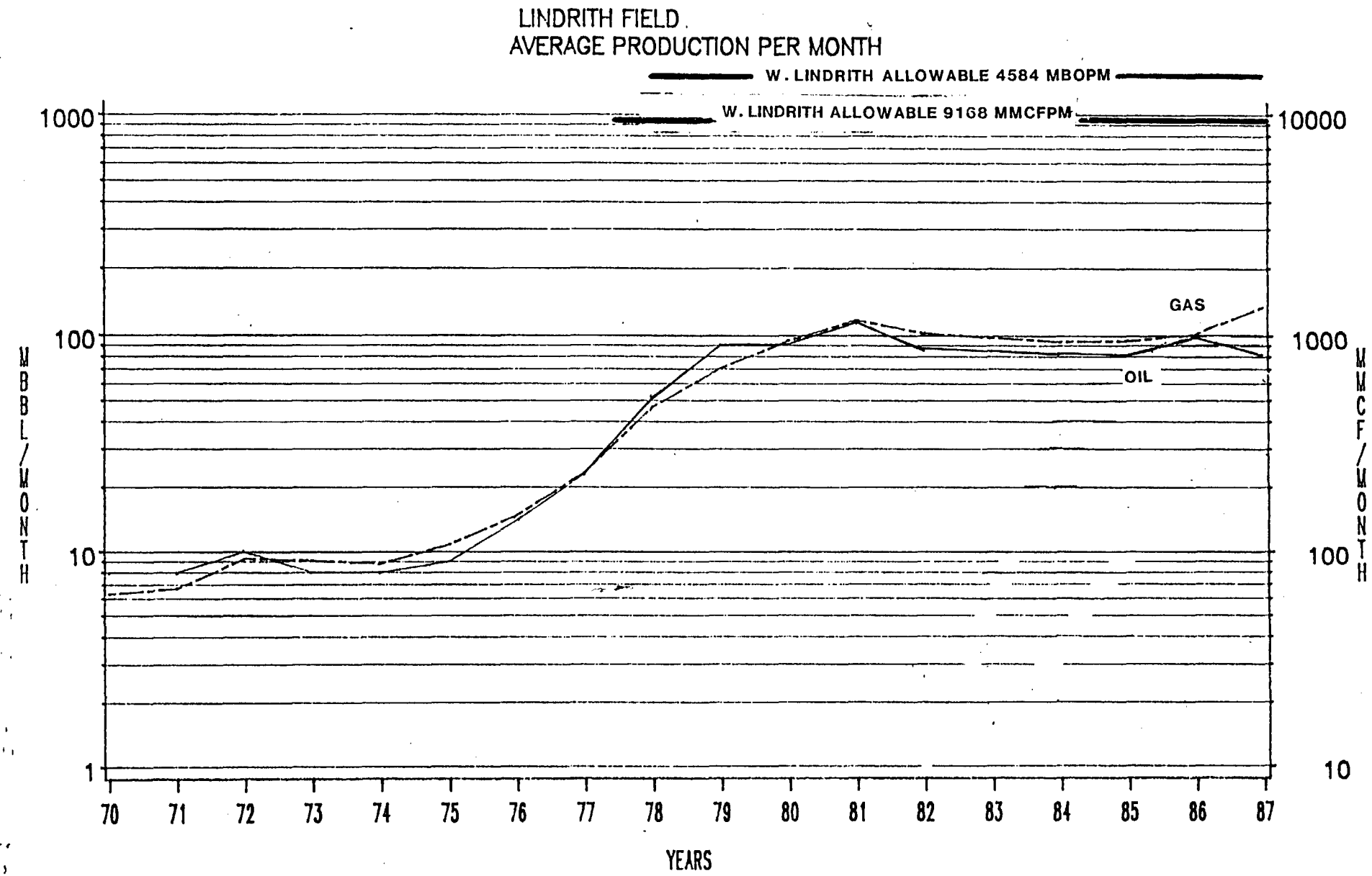


GAVILAN OIL _ _ _
GAVILAN GAS _ _ _

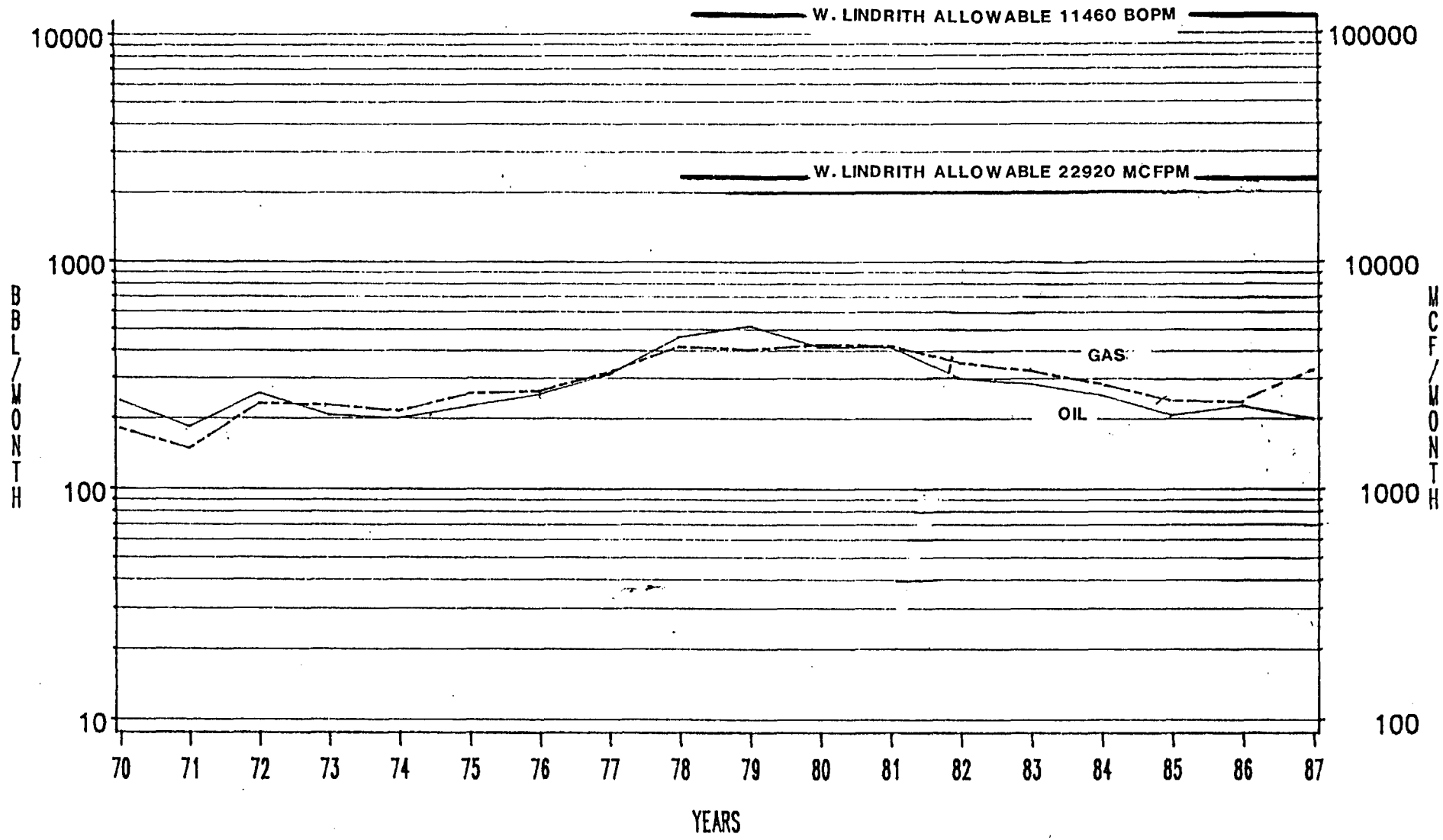
GAVILAN FIELD
AVERAGE PRODUCTION PER WELL PER MONTH



GAVILAN OIL _ _ _
GAVILAN GAS _ _ _

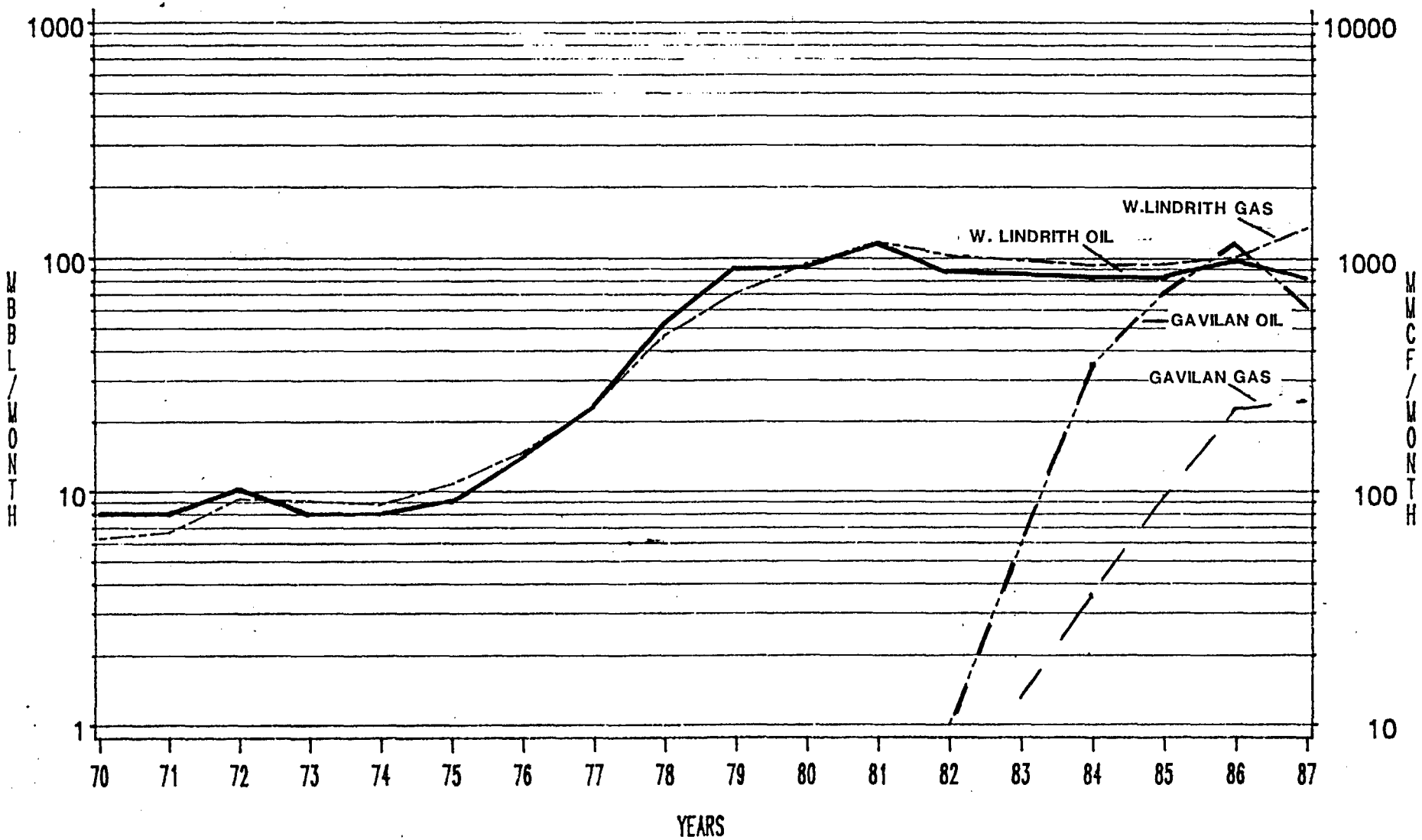

LINDRITH FIELD
AVERAGE PRODUCTION PER MONTH
W. LINDRITH ALLOWABLE 4584 MBOPM
W. LINDRITH ALLOWABLE 9168 MMCFPM
1000
100
10
1
10000
1000
100
10
GAS
OIL
MBBL/MONTH
MMCF/MONTH
70
71
72
73
74
75
76
77
78
79
80
81
82
83
84
85
86
87
YEARS
LINDRITH OIL _
LINDRITH GAS _ . _ . _

LINDRITH FIELD
AVERAGE PRODUCTION PER WELL PER MONTH



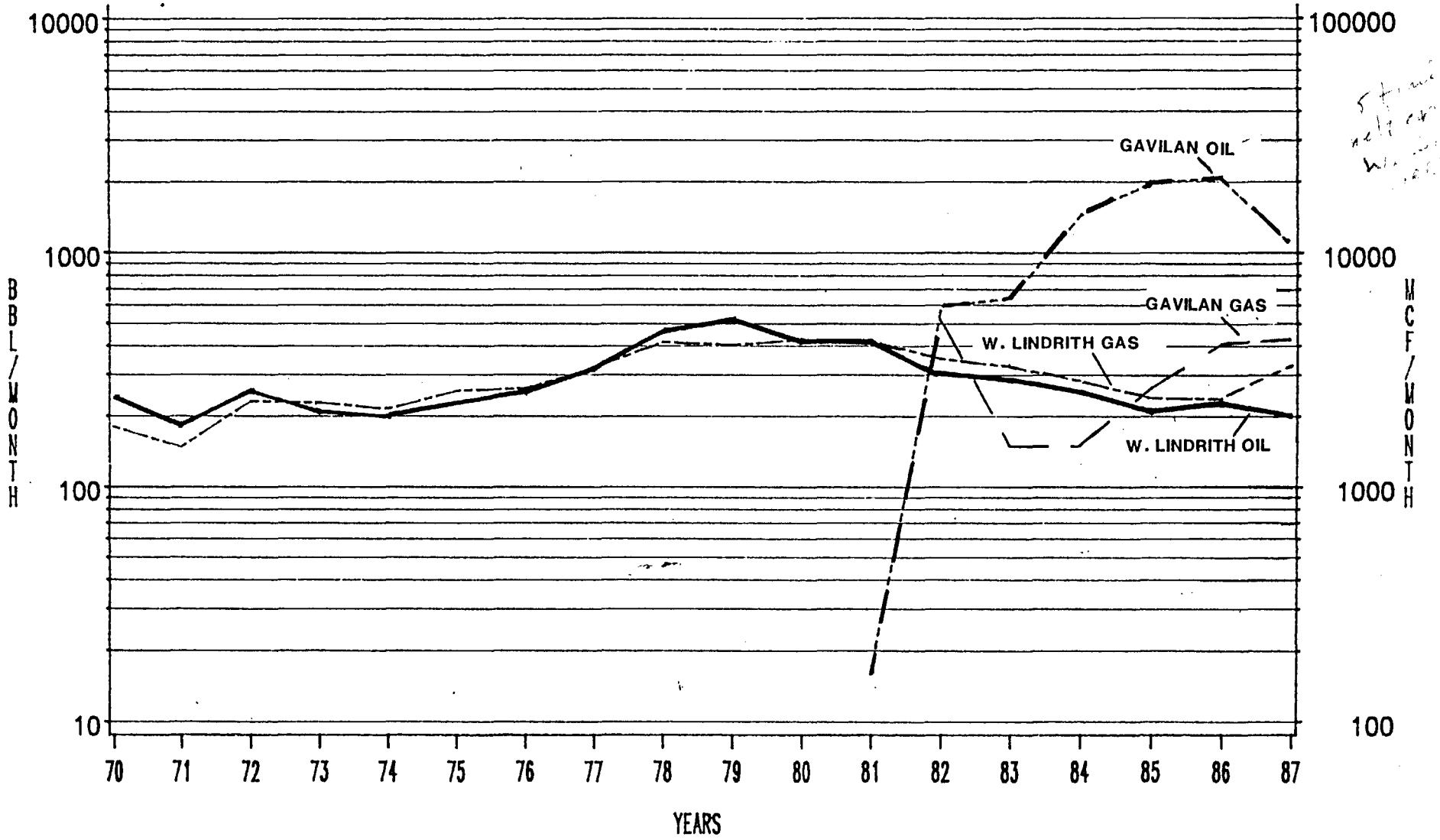
LINDRITH OIL _
LINDRITH GAS _ . _ . _

LINDRITH FIELD AND GAVILAN FIELD
AVERAGE PRODUCTION PER MONTH



LINDRITH OIL _ GAVILAN OIL _ _
LINDRITH GAS _ . _ . _ GAVILAN GAS _ _ _

LINDRITH FIELD AND GAVILAN FIELD
AVERAGE PRODUCTION PER WELL PER MONTH



LINDRITH OIL _ GAVILAN OIL _ _ _
LINDRITH GAS _ . _ . _ GAVILAN GAS _ _ _

NEW MEXICO OIL CONSERVATION DIVISION
CASE NO. 9226

W. LINDRETH
WELL CAPACITY

BOPD	NO. WELLS	CUM WELL COUNT	% OF TOTAL	CUM %
160+	7	7	1%	1%
80-160	3	10	1%	2%
40-80	12	22	3%	5%
20-40	26	48	7%	12%
0-20	348	396	88%	100%

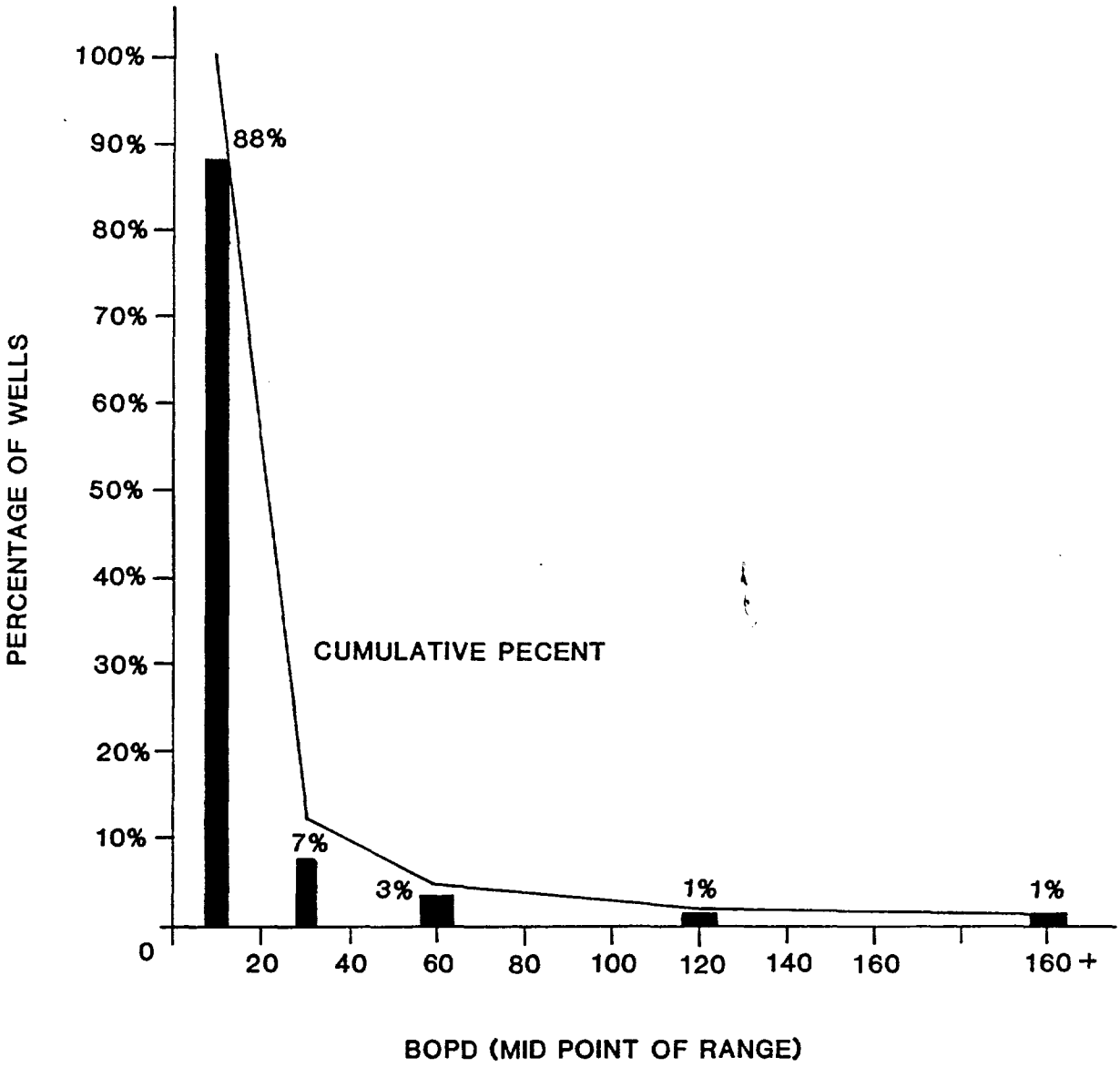
MCFD	NO. WELLS	CUM WELL COUNT	% OF TOTAL	CUM %
800+	15	15	4%	4%
400-800	20	35	5%	9%
200-400	53	88	13%	22%
100-200	94	182	24%	46%
0-100	214	396	54%	100%

1P4/2657

NEW MEXICO OIL CONSERVATION COMMISSION

CASE NO. 9226

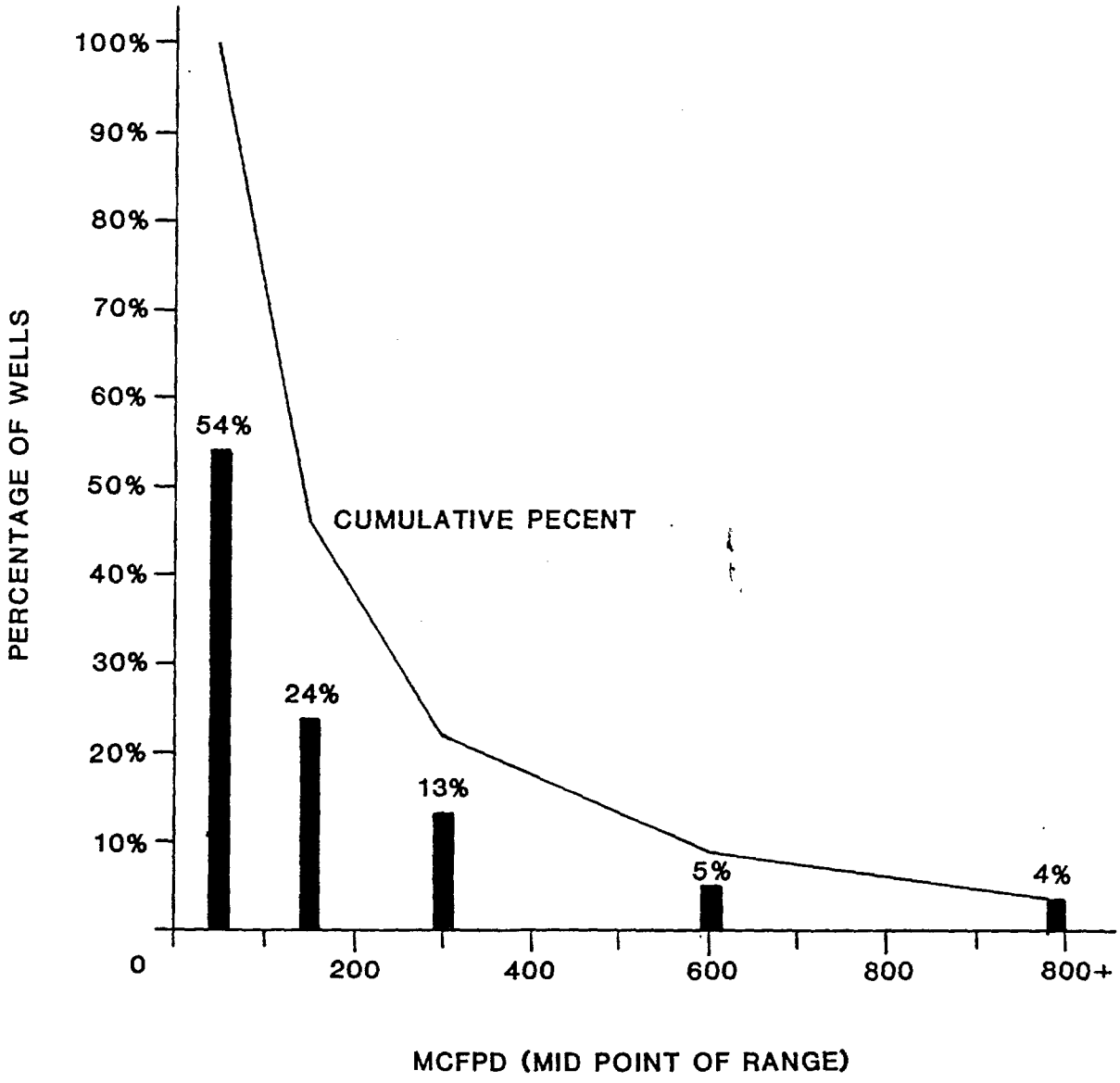
WEST LINDRITH WELL CAPACITY DISTRIBUTION



NEW MEXICO OIL CONSERVATION COMMISSION

CASE NO. 9226

WEST LINDRITH WELL CAPACITY DISTRIBUTION



NEW MEXICO OIL CONSERVATION DIVISION
CASE NO. 9226

GAVILAN WELL CAPACITY

BOPD	No. Wells	Cum Well Count	% of Tot.	Cum %
160+	7	7	11	11
80-160	15	22	24	35
40-80	14	36	23	58
20-40	9	45	15	73
0-20	17	62	27	100

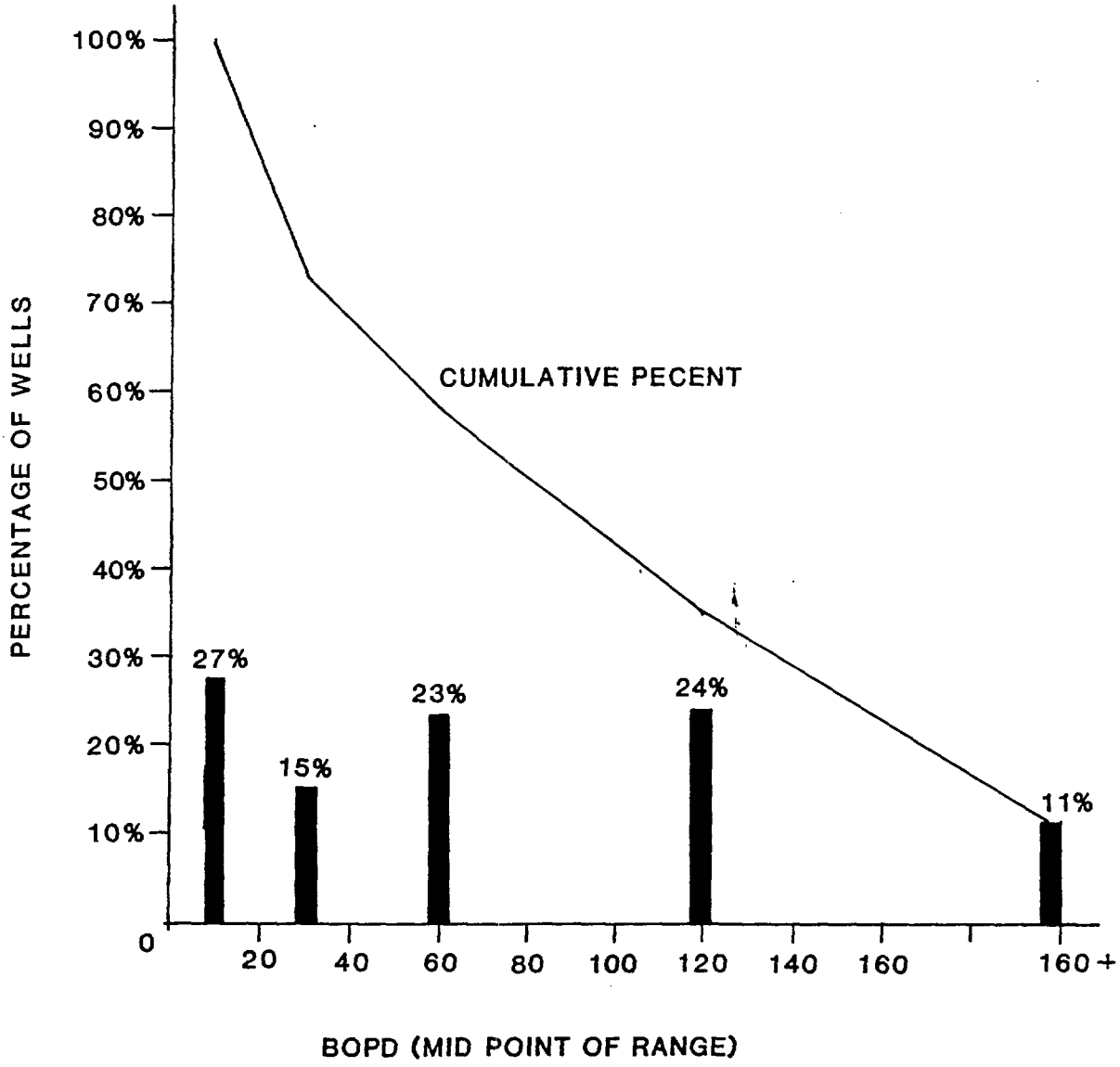
MCFD	No. Wells	Cum Well Count	% of Tot.	Cum %
800+	9	9	15	15
400-800	13	22	21	36
200-400	17	39	27	63
100-200	9	48	14	77
0-100	14	62	23	100

IP2/2817

NEW MEXICO OIL CONSERVATION COMMISSION

CASE NO. 9226

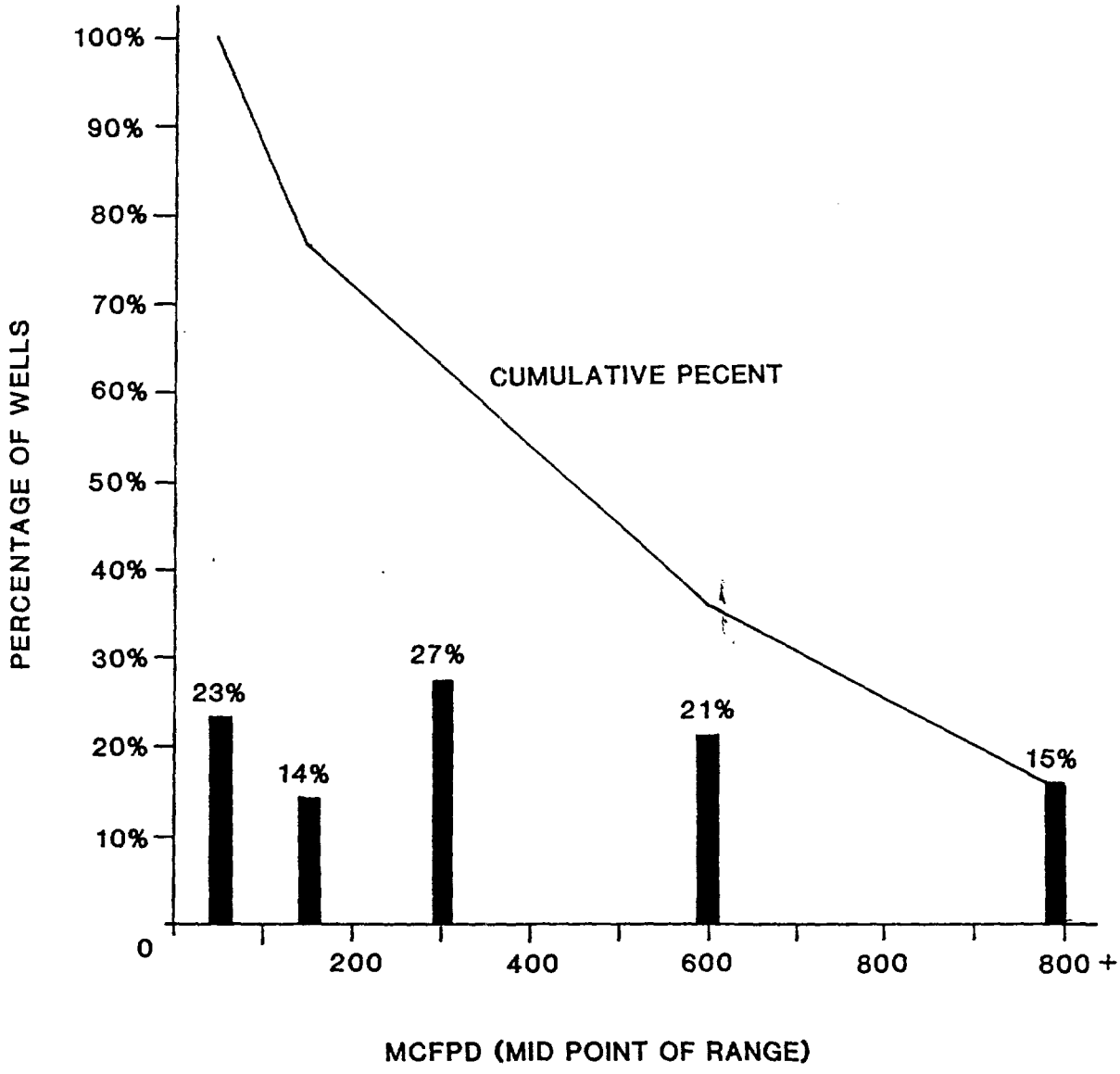
GAVILAN WELL CAPACITY DISTRIBUTION



NEW MEXICO OIL CONSERVATION COMMISSION

CASE NO. 9226

GAVILAN WELL CAPACITY DISTRIBUTION



ADDITION TO CASE 9226, WELL CAPACITY EXHIBITS
MAXIMUM CAPACITY SINCE 1970

OIL, BOPD

Range	W. Lindrith Wells	Ojitos Wells	% of Total	Cum. %
0-20	109	10	28.1	100.0
20-40	92	10	24.0	71.9
40-80	103	17	28.3	47.9
80-160	53	3	13.2	19.6
160+	20	7	6.4	6.4
TOTAL	377	47	100.0	

GAS, MCFPD

Range	W. Lindrith Wells	Ojitos Wells	% of Total	Cum. %
0-100	81	17	23.2	100.0
100-200	100	13	26.7	76.8
200-400	104	9	26.7	50.1
400-800	49	7	13.2	23.4
800+	42	1	10.2	10.2
TOTAL	376	47	100.0	

1P2/2835

SECTON II

NEW MEXICO OIL CONSERVATION COMMISSION
CASE NO. 9226

BUFFER ZONE - EQUAL INCREMENT PROPOSAL
PRESENTED OCTOBER 15, 1987

TOP ALLOWABLE RATES BASED ON 640 ACRE TRACTS

	Gavilan Mancos	Gavilan Westernmost 505 Acres	W. Lindrith Easternmost 320 Acres	West Lindrith
Oil	800	1042.7	1285.3	1528
Increment	0	242.67	242.67	242.67
% Change	0	30.34	23.27	18.88
Gas	480	1338.7	2197.3	3056
Increment	0	858.67	858.67	858.67
% Change	0	178.90	64.14	39.08

Buffer Zone Allowable Formulas:

W. Lindrith = A + 2/3 (B-A) = 1/3 A + 2/3 B
Gavilan = A + 1/3 (B-A) = 2/3 A + 1/3 B
B = W. Lindrith Oil & Gas Allowables
A = Gavilan Mancos Oil & Gas Allowables

ACTUAL TOP ALLOWABLE BASED ON SPACING

	Gavilan 640 Acre Spacing	Gavilan 505 Acre Buffer	W. Lindreth 160 Acre Buffer	W. Lindreth 160 Acre Spacing
Oil	800	823	321	382
Gas	480	1056	549	764

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1P2/2820

NEW MEXICO OIL CONSERVATION COMMISSION
CASE NO. 9226

BUFFER ZONE - EQUAL PERCENTAGE CHANGE PROPOSAL

TOP ALLOWABLE BASED ON 640 ACRE TRACTS

	Gavilan Mancos	Gavilan Westernmost 505 Acres	W. Lindrith Easternmost 320 Acres	West Lindrith
Oil	800	992.6	1231.6	1528
Increment	0	192.6	238.9	296.5
% Change	0	24.07	24.07	24.07
Gas	480	889.6	1648.9	3056
Increment	0	409.6	759.2	1407.2
% Change	0	85.34	85.34	85.34

Buffer Zone Allowable Formulas:

A = Gavilan Oil & Gas Allowable
B = W. Lindrith Oil & Gas Allowable
Equal Percentage Factor = K = $\sqrt[3]{B/A}$
For Gas K = 1.8534
For Oil K = 1.2407
W. Lindrith = (KxK)xA
Gavilan = KxA

ACTUAL TOP ALLOWABLE BASED ON SPACING

	Gavilan 640 Acre Spacing	Gavilan 505 Acre Buffer	W. Lindreth 160 Acre Buffer	W. Lindreth 160 Acre Spacing
Oil	800	783	308	382
Gas	480	702	412	764

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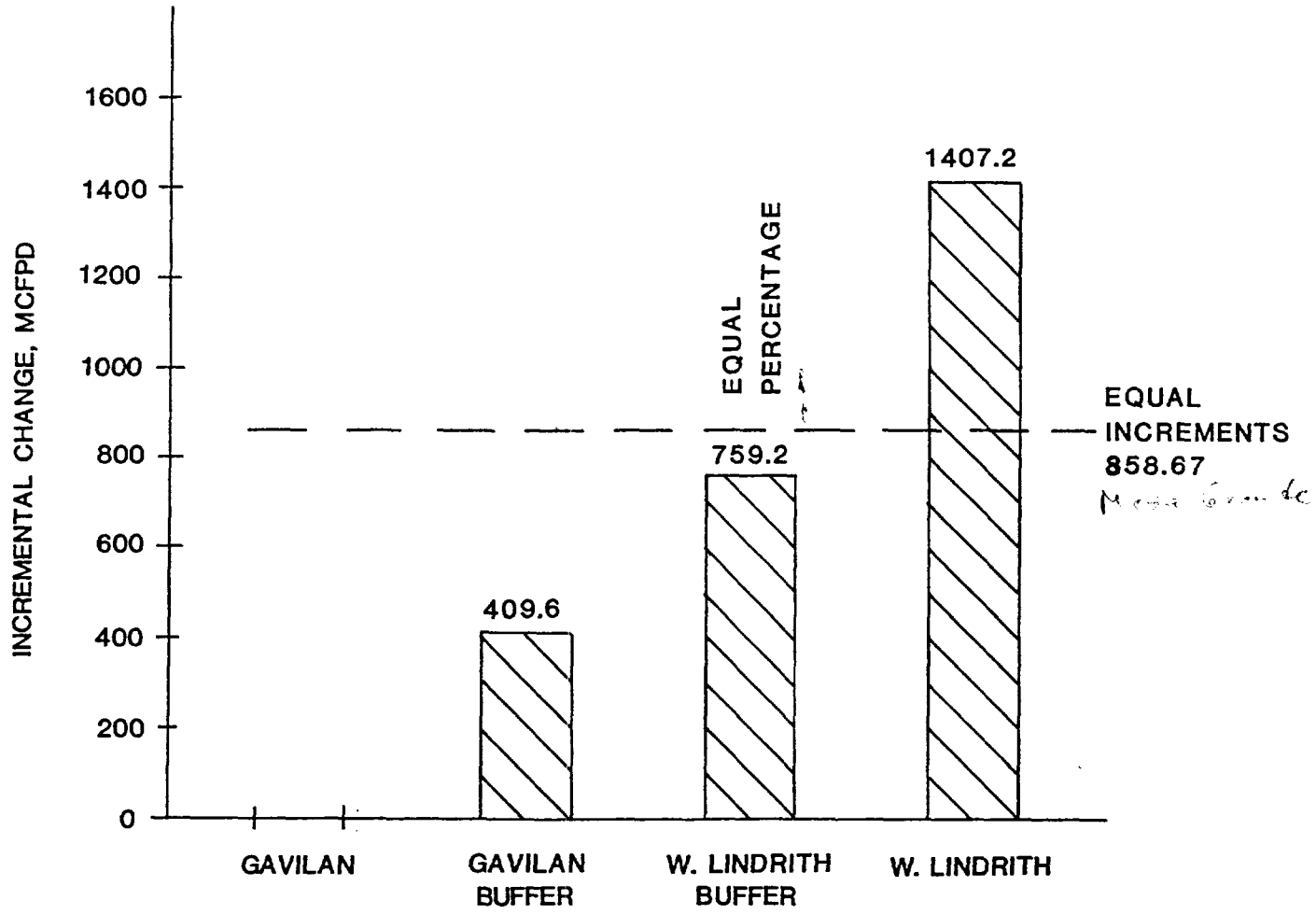
1P2/2820

NEW MEXICO OIL CONSERVATION DIVISION

CASE NO. 9226

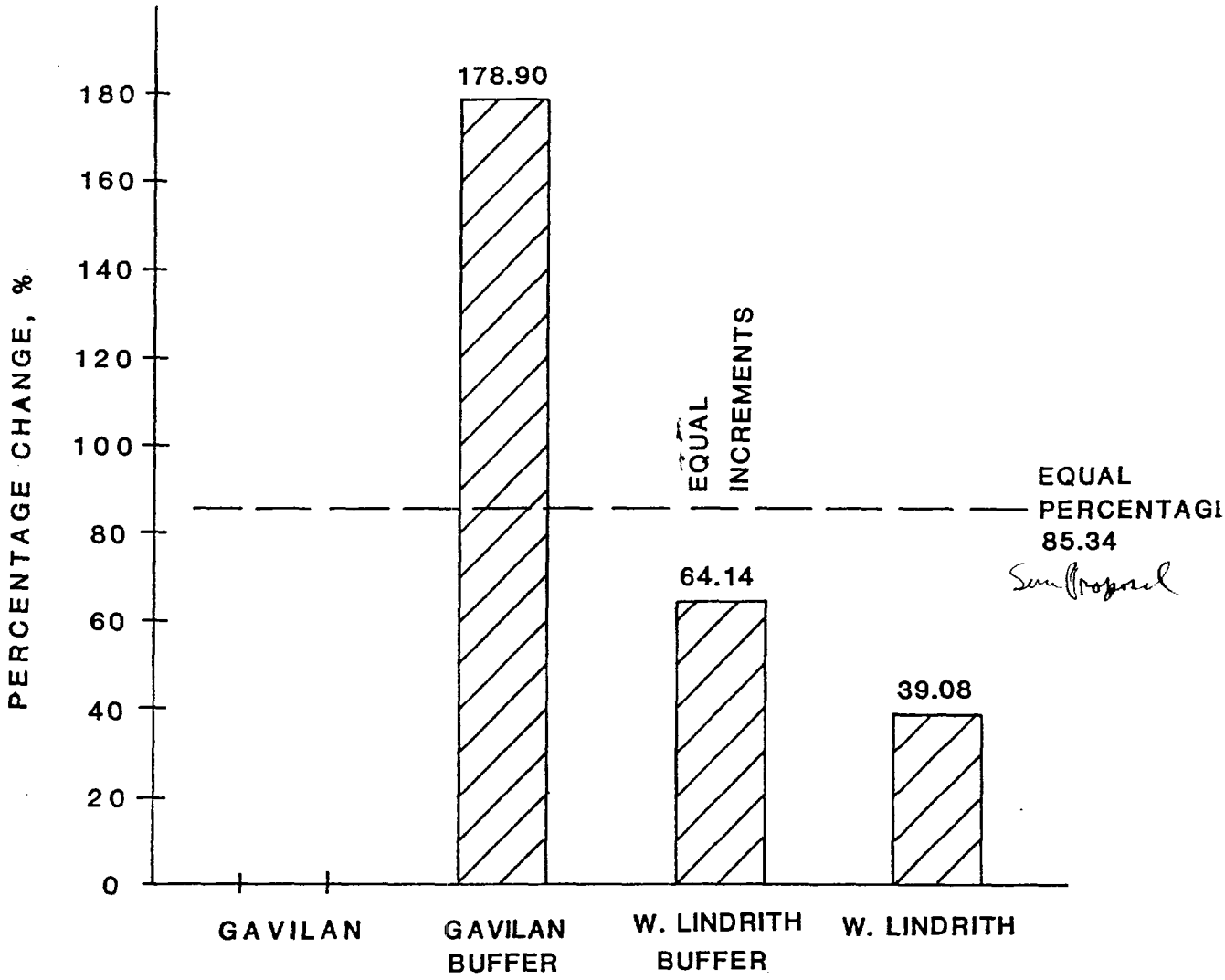
BUFFER ZONE GAS ALLOWABLES



NEW MEXICO OIL CONSERVATION DIVISION

CASE NO. 9226

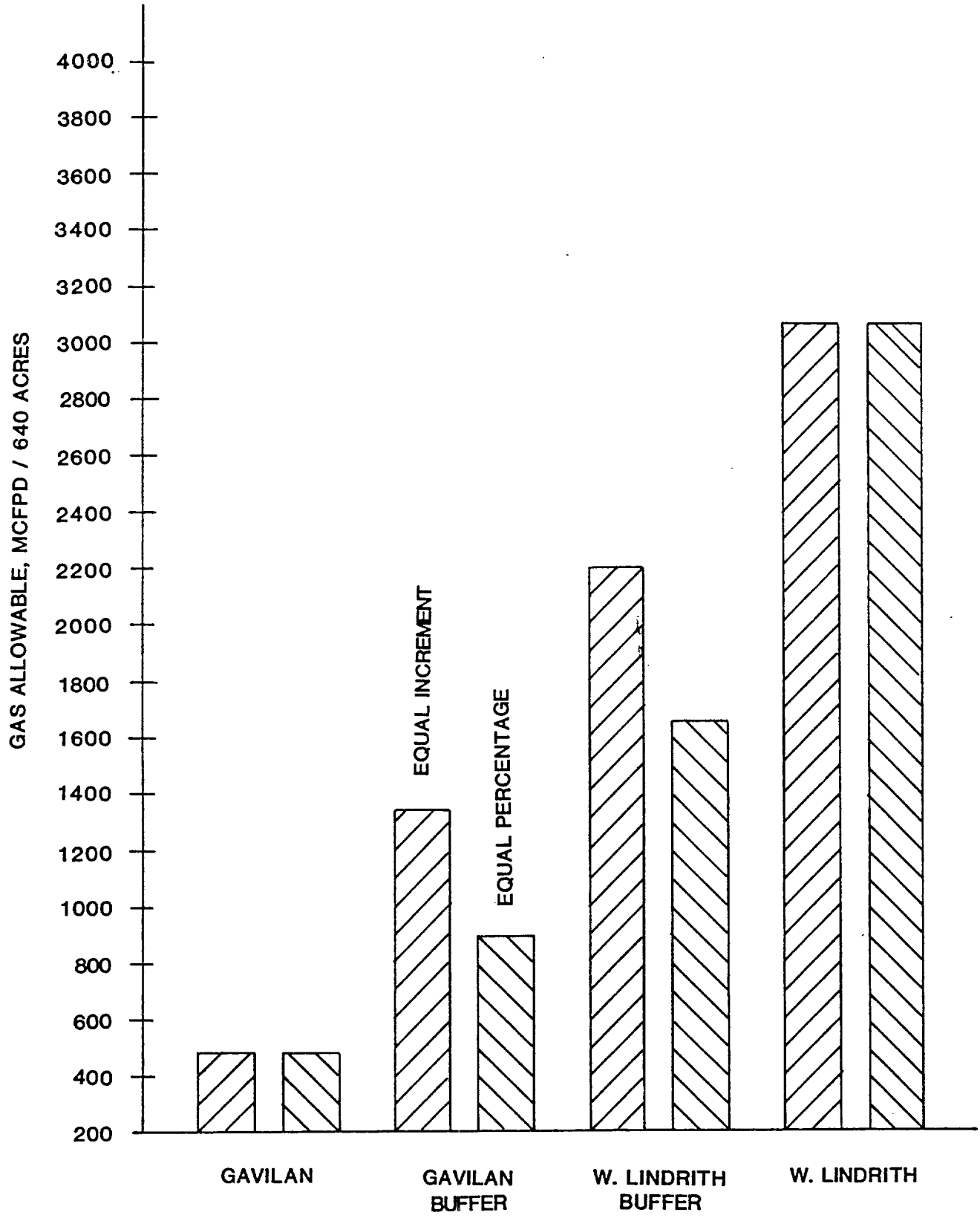
BUFFER ZONE GAS ALLOWABLES



NEW MEXICO OIL CONSERVATION DIVISION

CASE NO. 9226

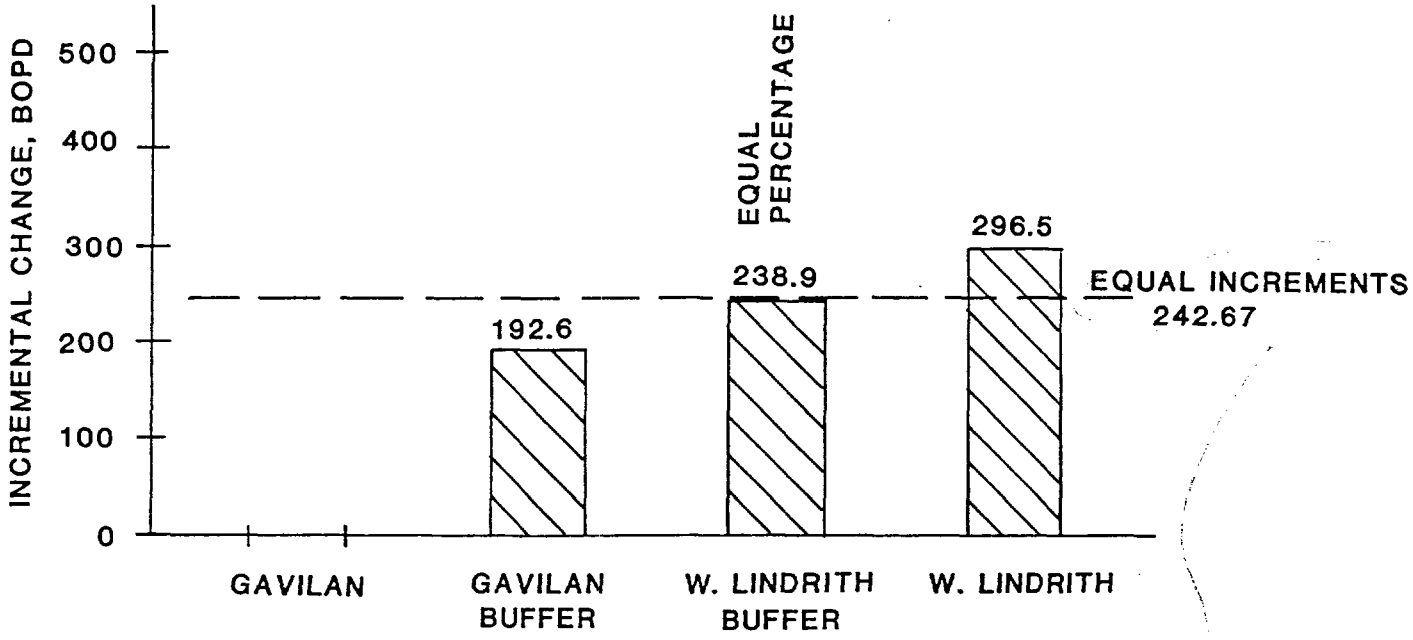
BUFFER ZONE GAS ALLOWABLES

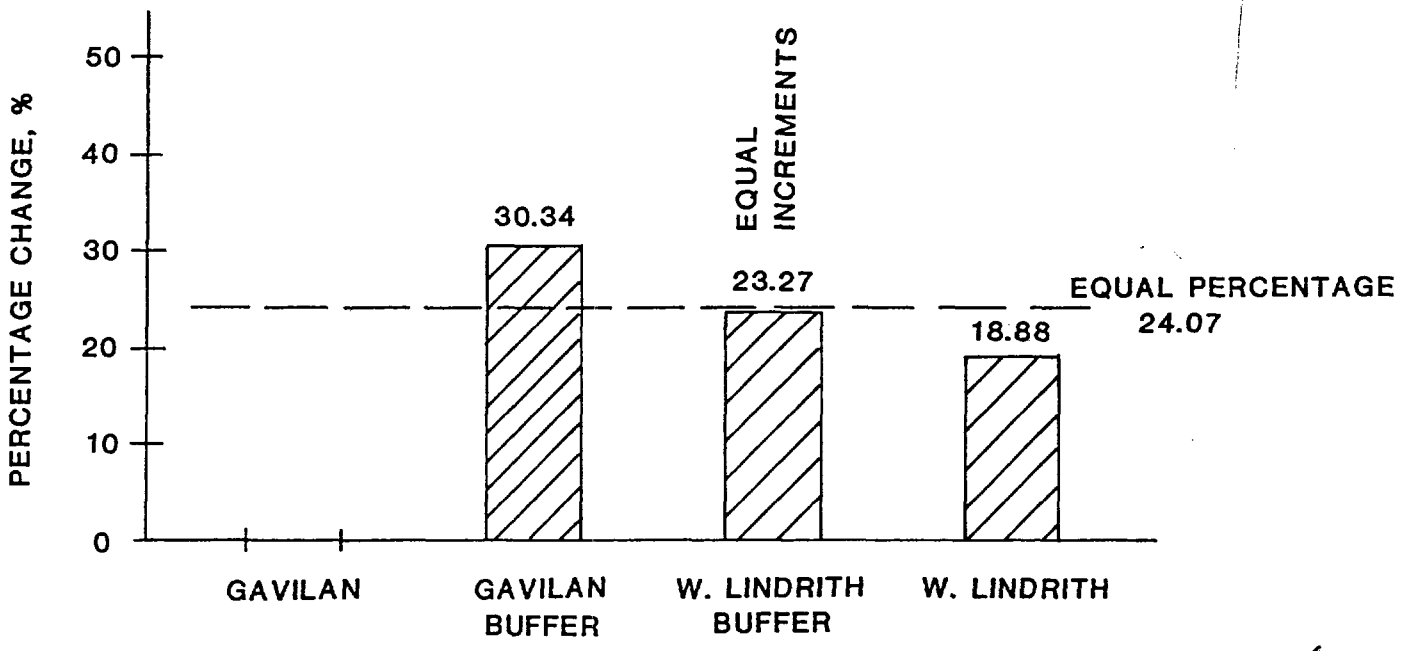


NEW MEXICO OIL CONSERVATION DIVISION

CASE NO. 9226

BUFFER ZONE OIL ALLOWABLES





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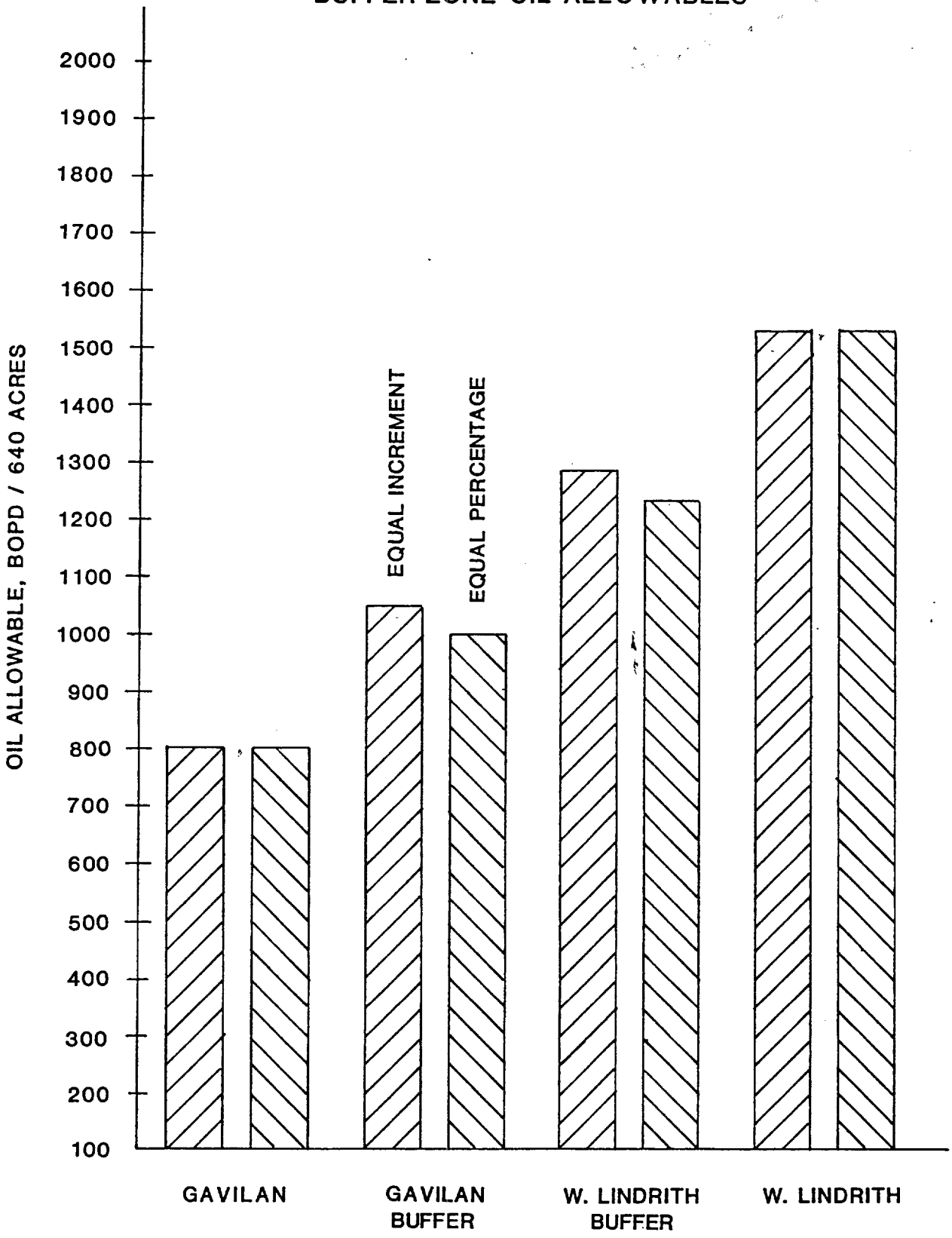
NEW MEXICO OIL CONSERVATION DIVISION

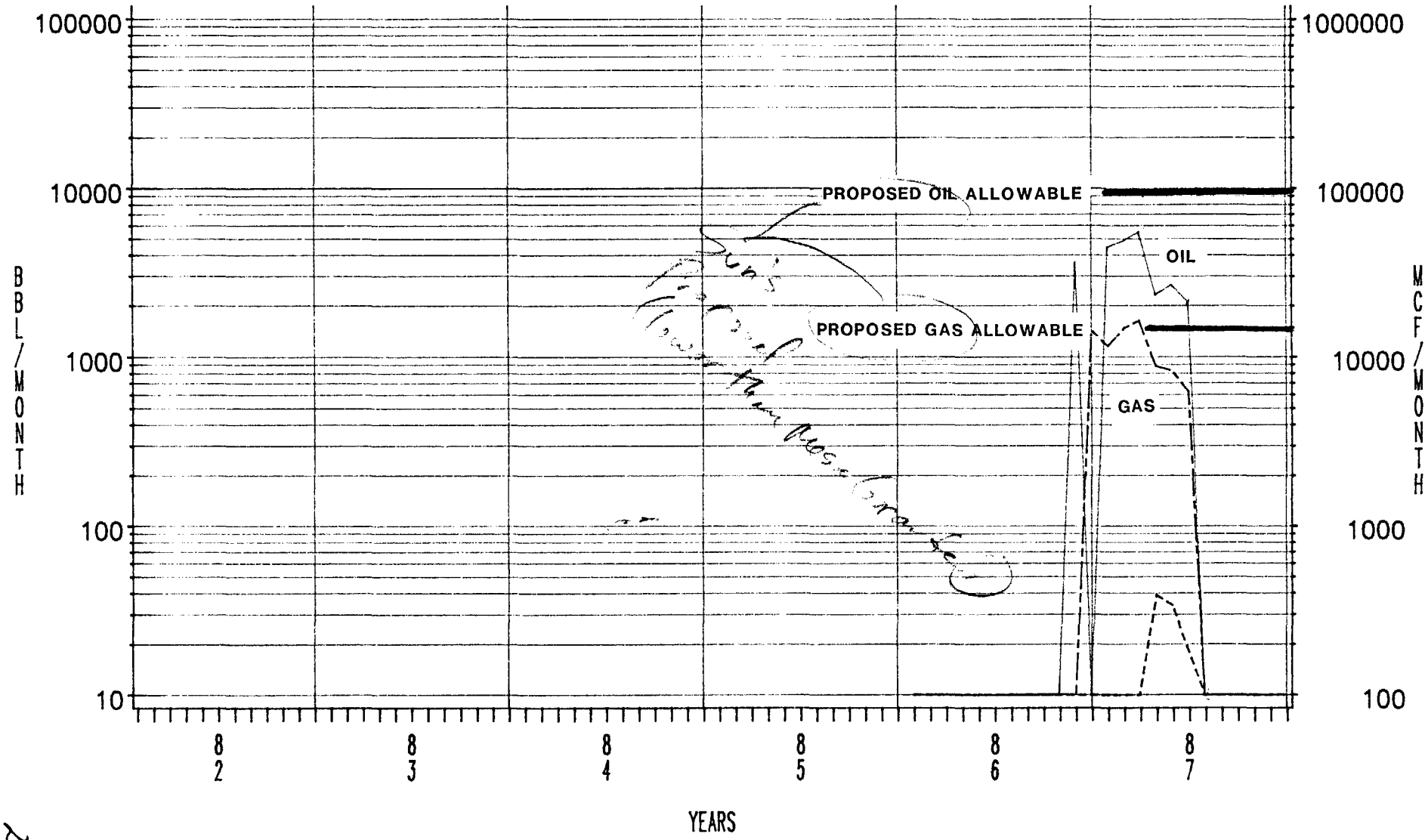
CASE NO. 9226

BUFFER ZONE OIL ALLOWABLES



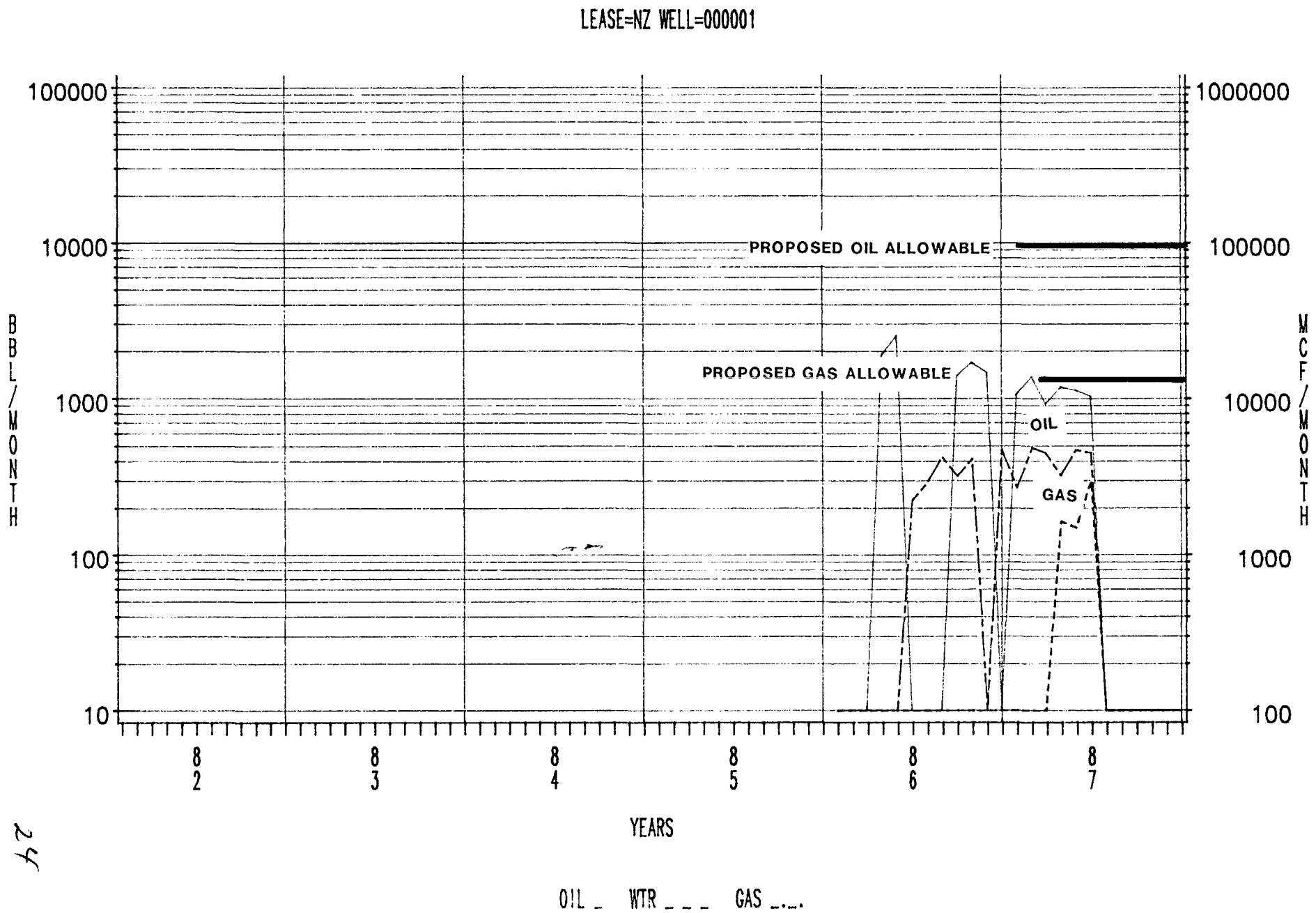
SECTION III

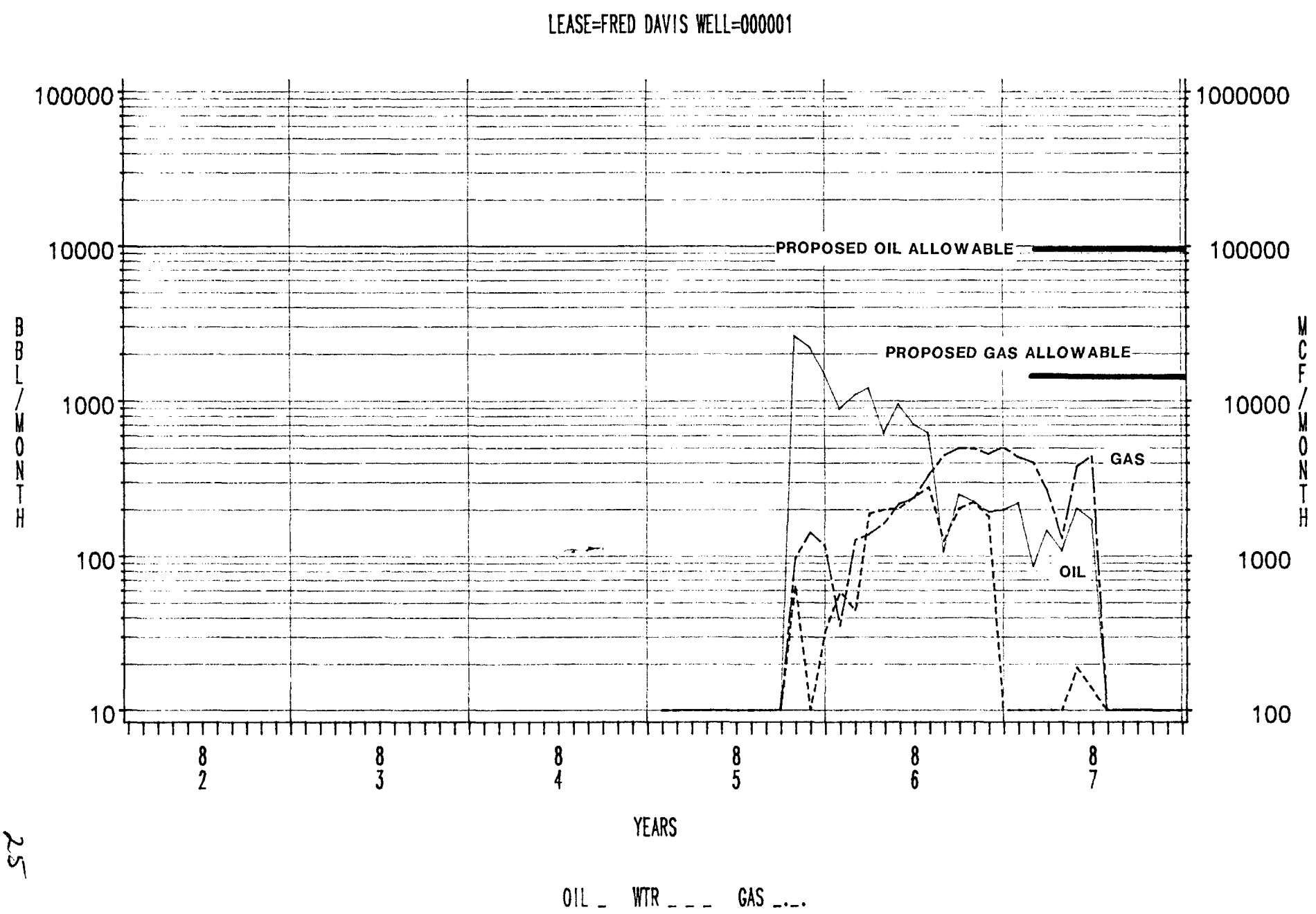
LEASE=NZ WELL=000002

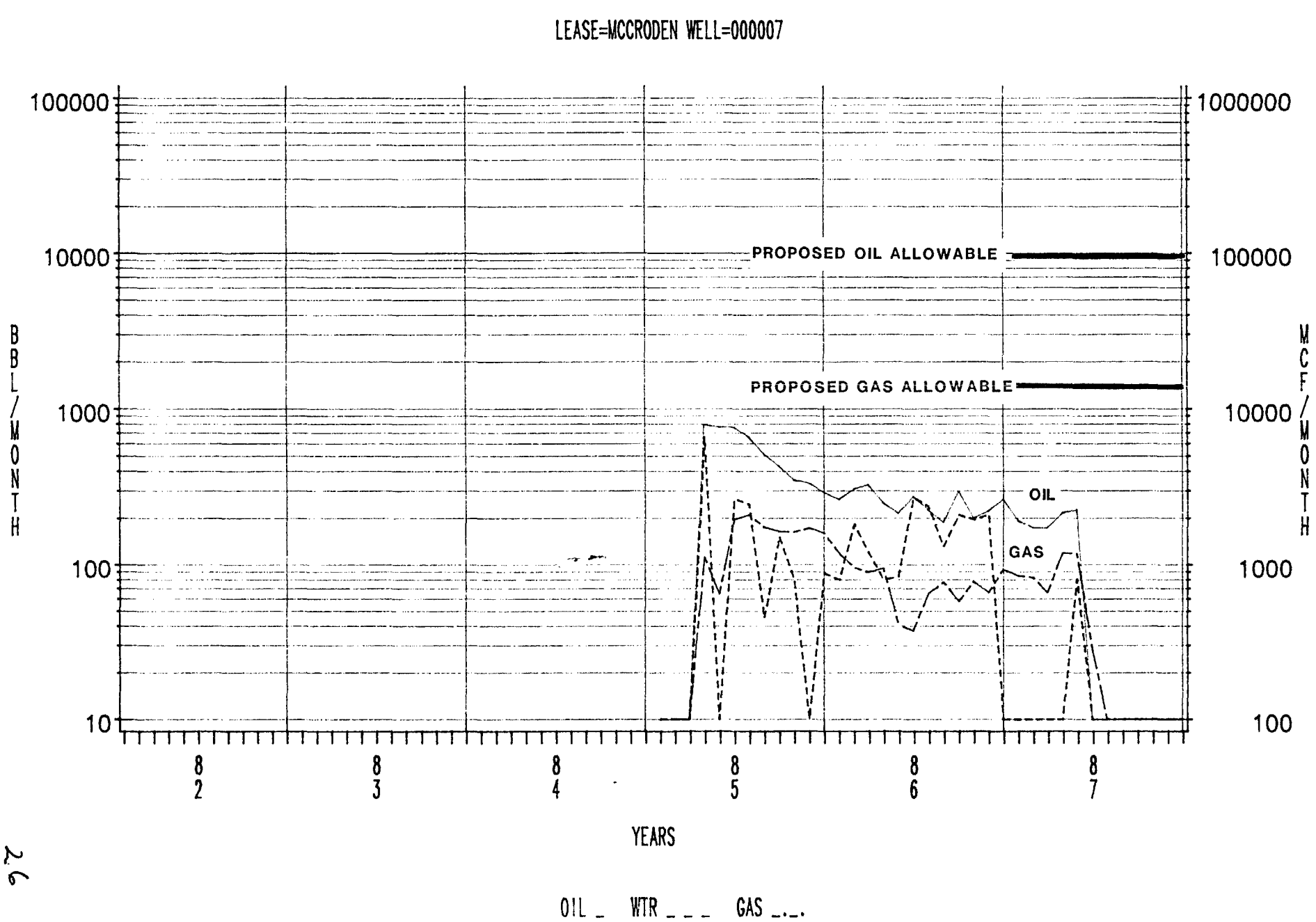


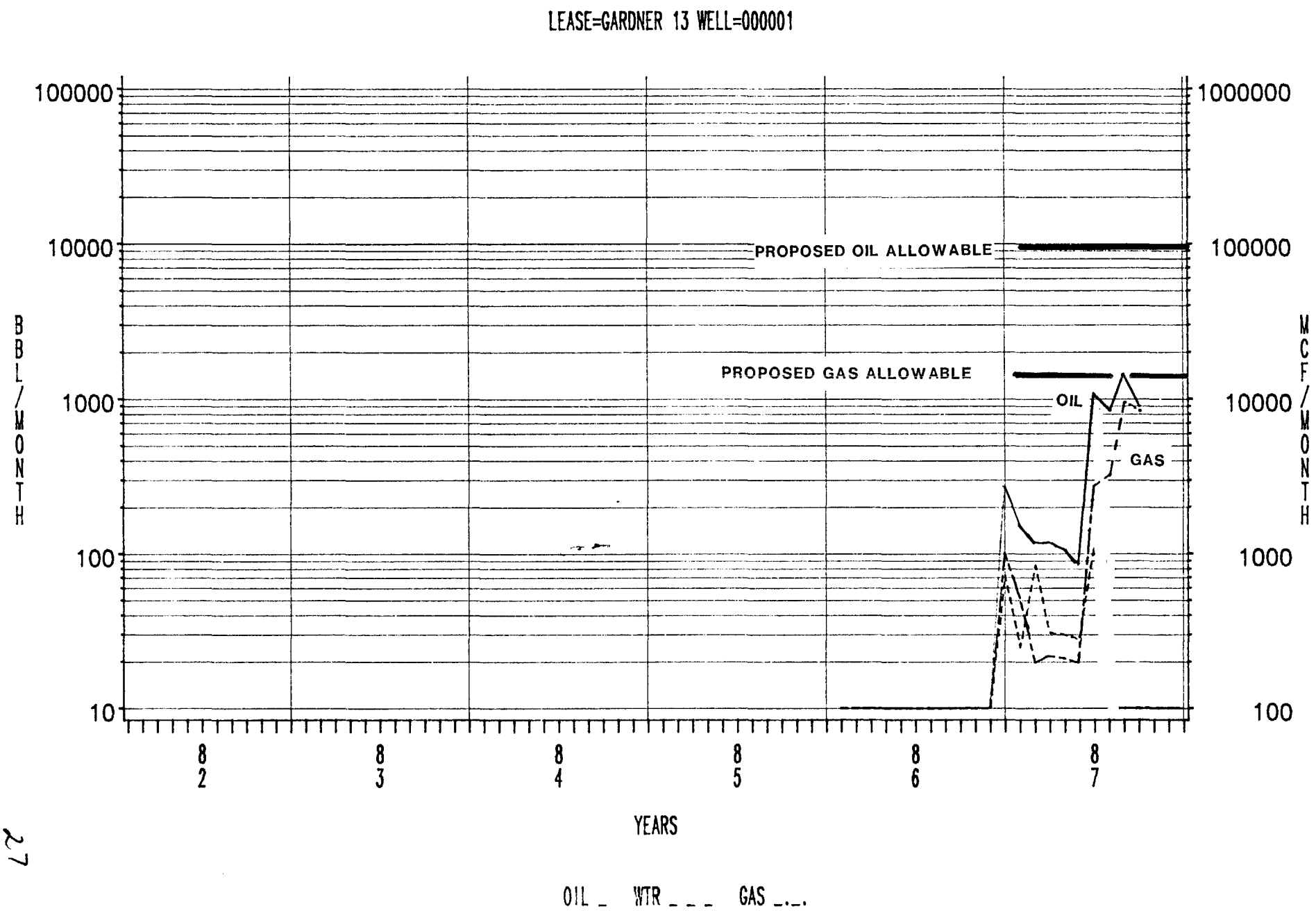
23

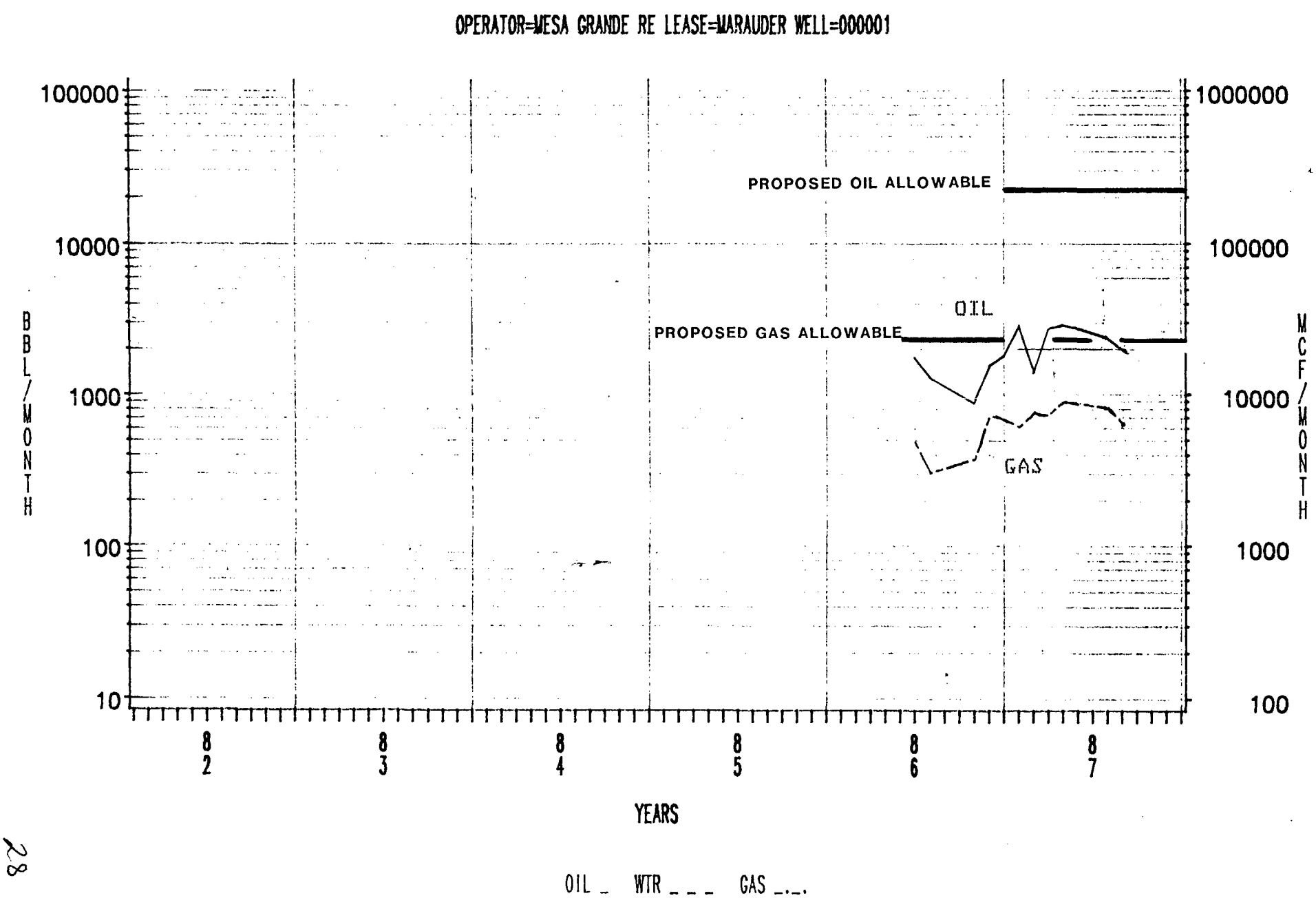
OIL _ WTR _ _ _ GAS _._.


LEASE=NZ WELL=000001
100000
10000
1000
100
10
1000000
100000
10000
1000
100
BBL/MONTH
MCF/MONTH
PROPOSED OIL ALLOWABLE
PROPOSED GAS ALLOWABLE
OIL
GAS
82
83
84
85
86
87
YEARS
OIL _ WTR _ _ _ GAS _._.


LEASE=FRED DAVIS WELL=000001
100000
10000
1000
100
10
1000000
100000
10000
1000
100
PROPOSED OIL ALLOWABLE
PROPOSED GAS ALLOWABLE
GAS
OIL
BBL/MONTH
MCF/MONTH
82
83
84
85
86
87
YEARS
OIL _ WTR _ _ _ GAS _._.


LEASE=MCCRODEN WELL=000007
100000
10000
1000
100
10
1000000
100000
10000
1000
100
BBL/MONTH
MCF/MONTH
PROPOSED OIL ALLOWABLE
PROPOSED GAS ALLOWABLE
OIL
GAS
82
83
84
85
86
87
YEARS
OIL _ WTR _ _ _ GAS _._.


LEASE=GARDNER 13 WELL=000001
100000
10000
1000
100
10
1000000
100000
10000
1000
100
BBL/MONTH
MCF/MONTH
PROPOSED OIL ALLOWABLE
PROPOSED GAS ALLOWABLE
OIL
GAS
82
83
84
85
86
87
YEARS
OIL _ WTR _ _ _ GAS _._.


OPERATOR=MESA GRANDE RE LEASE=MARAUDER WELL=000001
100000
10000
1000
100
10
BBL/MONTH
1000000
100000
10000
1000
100
MCF/MONTH
PROPOSED OIL ALLOWABLE
PROPOSED GAS ALLOWABLE
OIL
GAS
8 2
8 3
8 4
8 5
8 6
8 7
YEARS
OIL _ WTR _ _ _ GAS _._.

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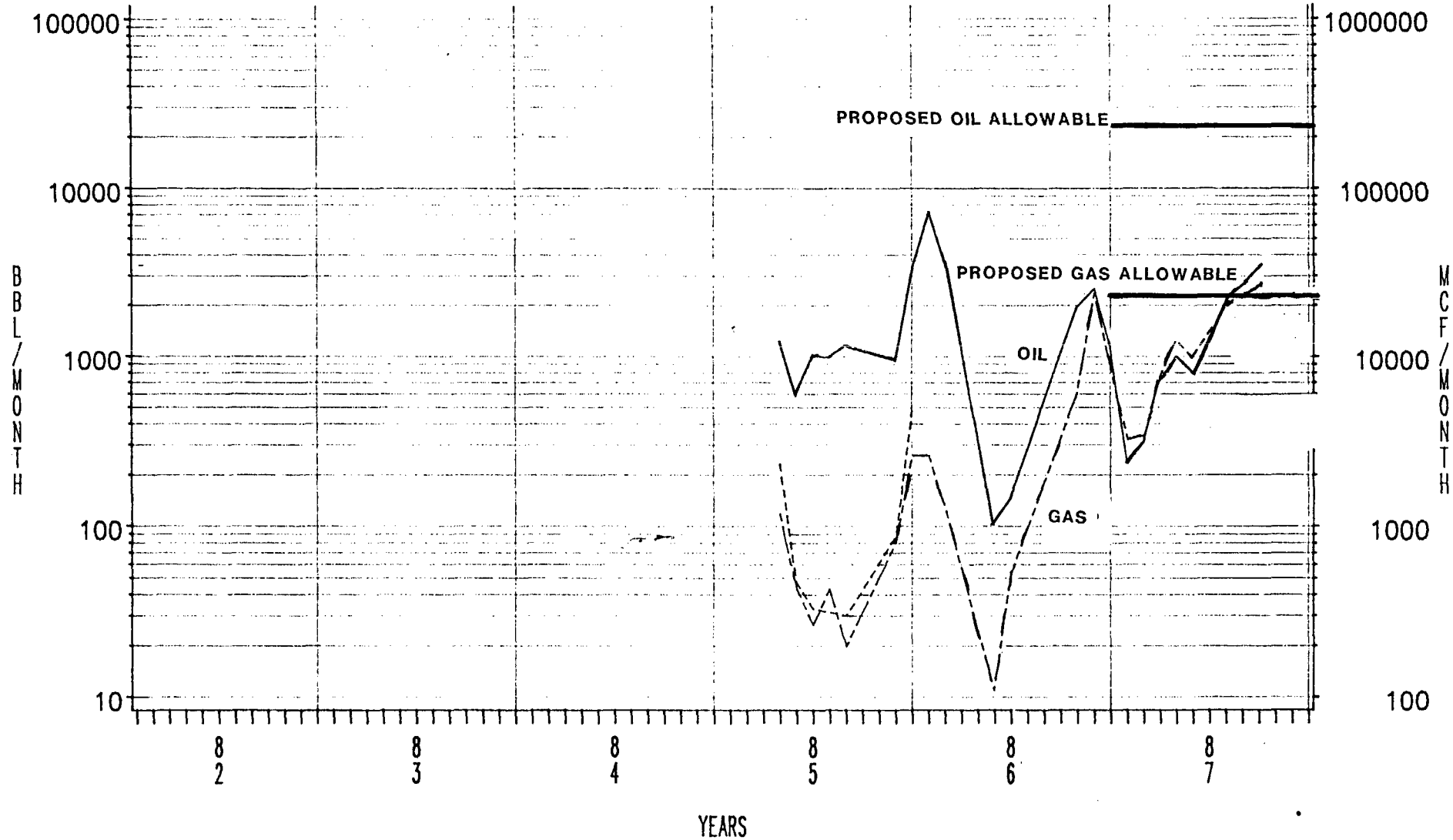
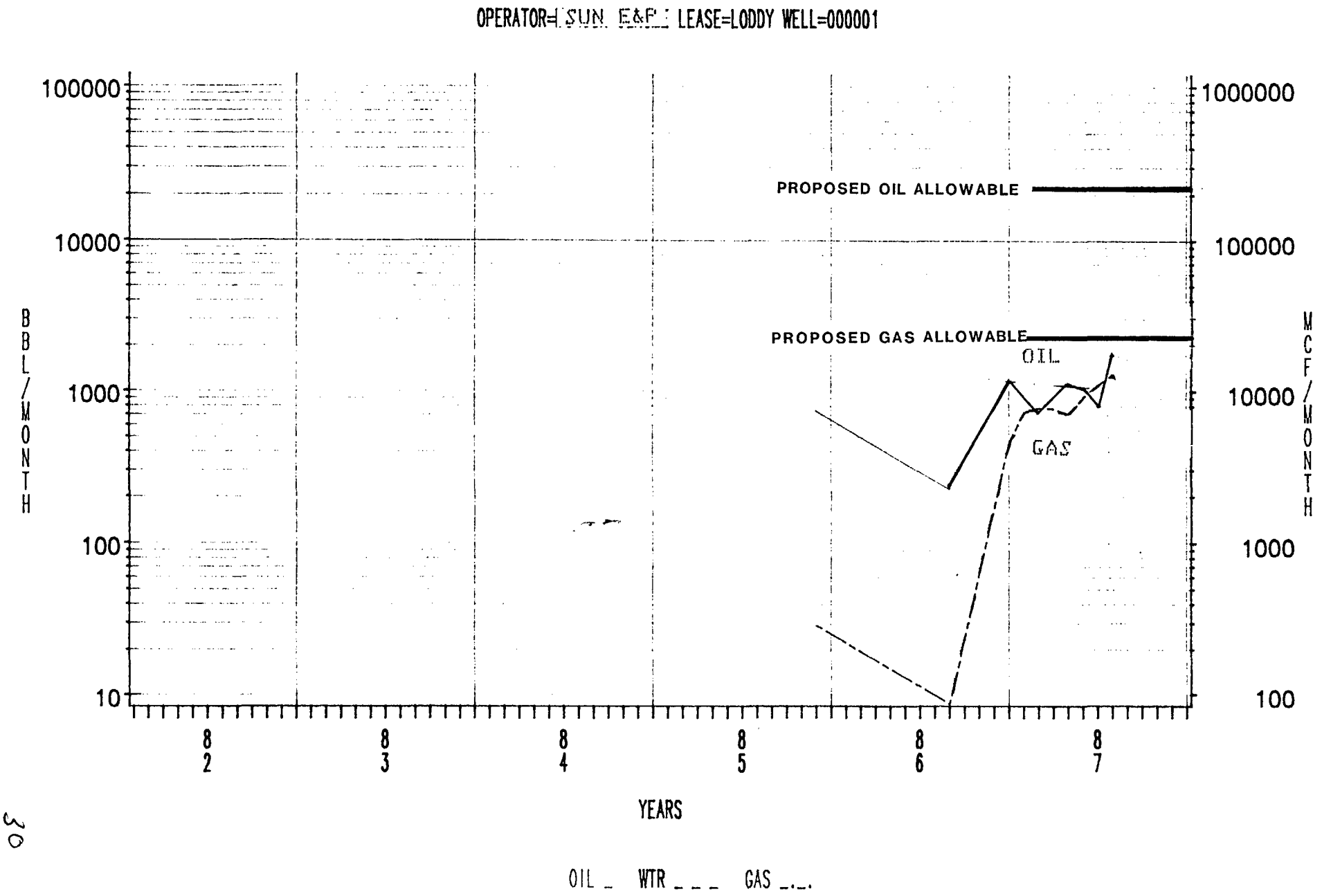
OPERATOR=MESA GRANDE RE LEASE=BROWN WELL=000001



OIL _ WTR _ _ _ GAS _._.


OPERATOR=[SUN E&P] LEASE=LODDY WELL=000001
100000
10000
1000
100
10
BBL/MONTH
1000000
100000
10000
1000
100
MCF/MONTH
PROPOSED OIL ALLOWABLE
PROPOSED GAS ALLOWABLE
OIL
GAS
8 2
8 3
8 4
8 5
8 6
8 7
YEARS
OIL _ WTR _ _ _ GAS _._.

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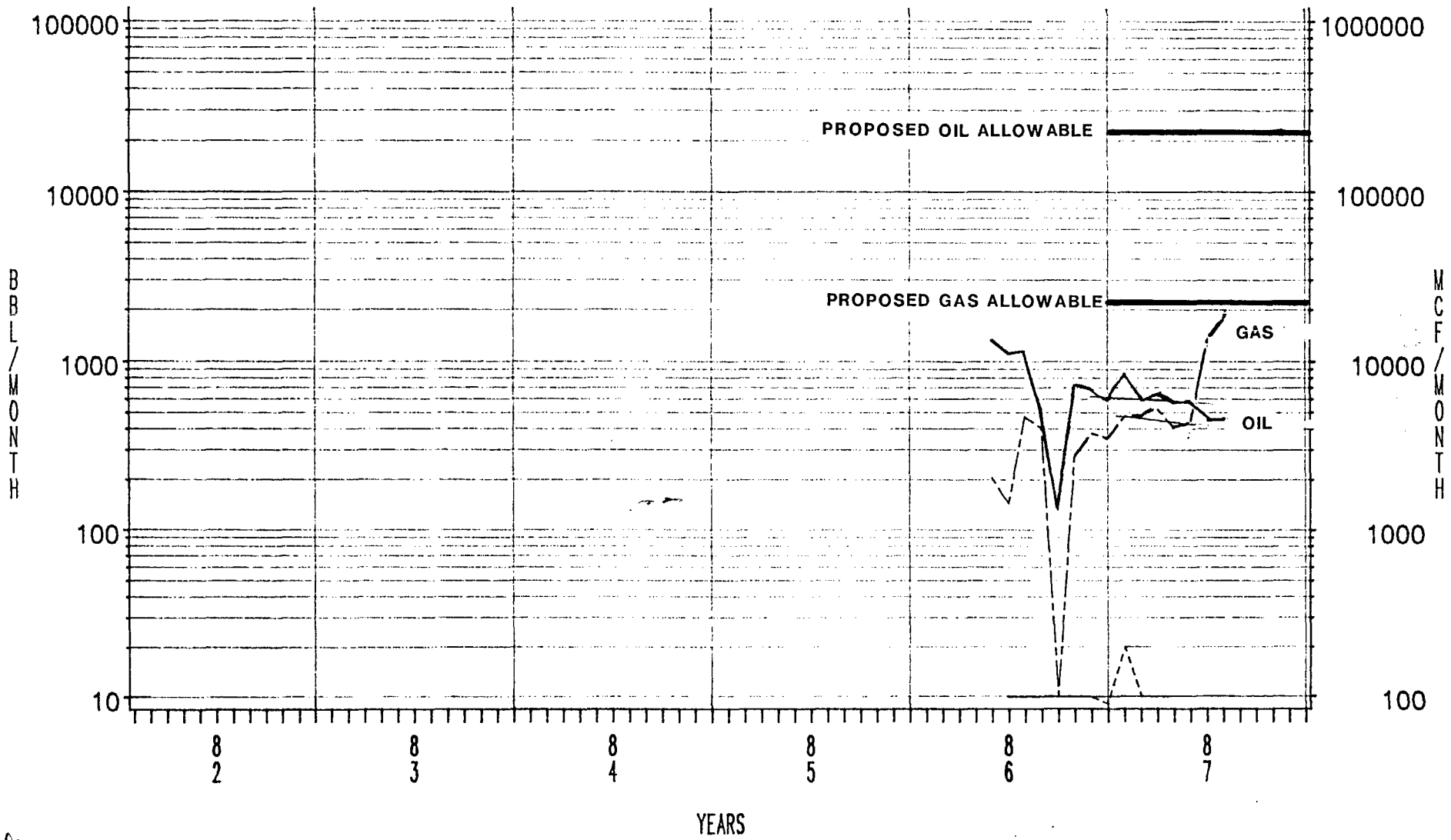
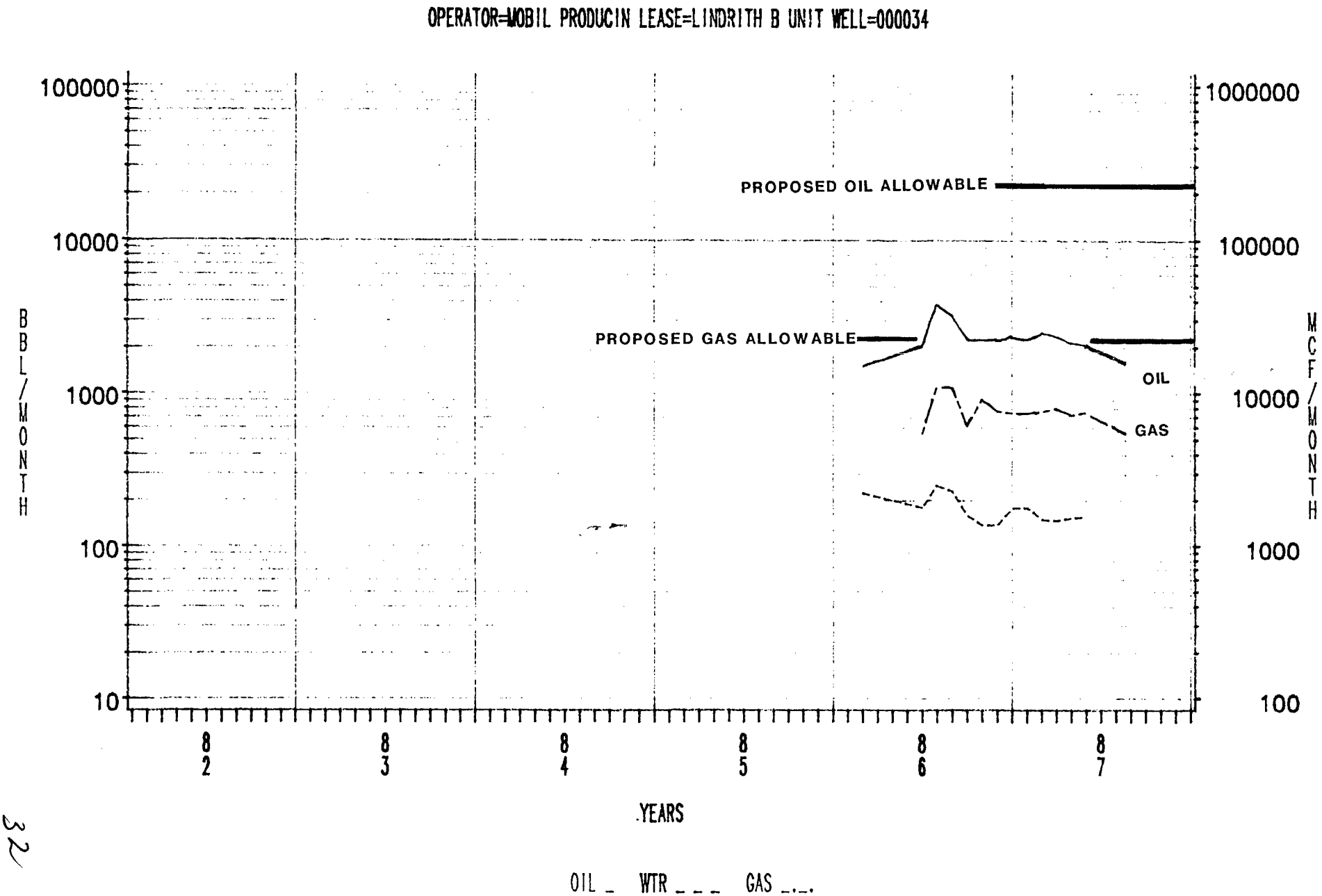
OPERATOR= SUN E&P : LEASE=FULL SAIL WELL=000003



OIL _ WTR _ _ _ GAS _._.


OPERATOR=MOBIL PRODUCIN LEASE=LINDRITH B UNIT WELL=000034
100000
10000
1000
100
10
BBL/MONTH
1000000
100000
10000
1000
100
MCF/MONTH
PROPOSED OIL ALLOWABLE
PROPOSED GAS ALLOWABLE
OIL
GAS
82
83
84
85
86
87
YEARS
OIL _ WTR _ _ _ GAS _._.

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NEW MEXICO OIL CONSERVATION DIVISION
WEST LINDRITH - GAVILAN BOUNDARY
CASE 9226

Section I:
The purpose of this section is to show that, in general, there is no need for a buffer zone. The first series of graphs are Gavilan Field and West Lindrith Field average monthly production for the total field and for an average per well per month. It should be noted that neither field is producing at or near its top allowable and that an average well in neither field can produce its top allowable. The next two graphs compare West Lindrith production to Gavilan production. These graphs show that an average well in Gavilan has a higher productivity than an average West Lindrith well. The West Lindrith Field, approximately 400 wells, produces slightly more than the Gavilan Field, approximately 60 wells.

The next series of plots are statistical plots of current well capacity (1987) for West Lindrith and Gavilan Field. These clearly indicate that the Gavilan Field has a higher percentage of wells with greater production capacity. Also one should note that very few of the wells are capable of making their top oil allowable. Only 4% of the wells in West Lindrith can produce at top gas allowable rates. Thirty-six percent of the wells in Gavilan can produce the top gas allowable rate. Therefore, considering that a maximum of 13 wells in West Lindrith will be in a buffer zone and a maximum of 7 wells in Gavilan will be in a buffer zone, statistically only 3 to 4 wells of the 20 total would be affected by a buffer zone with different top allowables.

Section II:
The purpose of this section is to show that a different buffer zone allowable formula is needed; should a buffer zone be created. The first two exhibits show the original proposed formula and Sun's proposal. The original proposal creates a dramatic percentage increase in the gas allowable going from Gavilan to the Gavilan Buffer area. Sun's proposal is to use a constant percent increase in both oil and gas allowables from Gavilan to West Lindrith. The next series of graphs show the difference in the two concepts. The first proposal has constant incremental changes of 242.67 BOPD and 858.67 MCFPD in the oil and gas allowables, respectively. This proposal yields the highest percentage changes in the Gavilan side of the buffer. Sun's proposal is to keep each percent change constant. This yields a higher incremental rate change on the West Lindrith side of the buffer where the rates need to change more rapidly.

Section III:
The purpose of this section is to show the effect of Sun's proposal on wells in the buffer zone. Since so few wells have been drilled in the buffer zone area, especially on the West Lindrith side, plots of nearby wells are also used to show the effects. This analogy assumes that wells to be drilled in the buffer zone area will produce at comparable rates of their offsets. On the first five plots, only one well on the West Lindrith side of the buffer area would be restricted by Sun's proposed gas allowables, the NZ #2. No wells would be restricted by the proposed oil allowables. On the Gavilan side, the last five plots, only one well would be restricted by Sun's proposed gas allowable, the Brown #1. No wells would be restricted by the oil allowable. Therefore, since so few wells would be near top allowable, Sun recommends that no buffer zone be created.