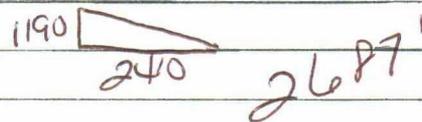


County \_\_\_\_\_ Pool \_\_\_\_\_

TOWNSHIP		Range				NMPM	
6	5	4	3	2	1		
7	8	9	10	11	12		
18	17	16	15	14	13		
19	20	21	22	23	24		
30	29	28	27	26	25		
31	32	33	34	35	36		



CALCULATED CEMENT TOPS for AREA OF REVIEW RANDOM GROUP

Proposed Injection Well: Billy "AES" No.2 / Hoover "ADR" No.2  
 Proposed Injection Zone: 3763 to 3782  
 Formation: Queen  
 Minimum Required TOC: 3200-5000 Yield: 70%

Well Name	No.	Type	T.D.	Casing	Depth	Borehole	Cement	TOC	Remarks	TOC Note
L.C. Harris State	#1	P & A	11733	13.375 9.625 5.5	377 4665 5290	15.5 11.5 6.75	400 sx 430 200	(610) 3,021 3,312		O.K. O.K. <b>CAUTION*</b>
Hoover "ADR" State	#3	SWD	8890	13.375 5.5	1515 3900	15.5 6.75	775 sx 325	(398) 686 ERR		O.K. O.K. ERR
Sweet Thing "AEB" State	#1	OIL	8805	8.625 5.5	406 3900	10.25 10.25	275 sx 1030	(952) 1,815 ERR		O.K. O.K. ERR
Hoover "ADR" State	#5	OIL	8925	8.625 5.5	1520 4750	12.25 8.25	775 sx 700	(31) 1,946 ERR		O.K. O.K. ERR
Hoover "ADR" State	#4	OIL	8812	8.625 5.5	1537 3900	12.25 6.75	775 sx 225	(14) 1,675 ERR		O.K. O.K. ERR
Hoover "ADR" State	#6	OIL	4750	8.625 5.5	1535 4750	12.25 7.25	775 sx 515	(16) 1,254 ERR	PBTD @ 3950'	O.K. O.K. ERR
Petrus "D" State	#5	OIL	3840	8.625 5.5	1496 3840	12.25 8.25	800 sx 903	(105) 223 ERR		O.K. O.K. ERR
Petrus "D" State	#8	T/A	6895	8.625 5.5	1424 5114	12.25 12.25	1000 sx 2400	(577) 2,080 ERR	PBTD @ 4200'	O.K. O.K. ERR
Billy "AES" State	#1	OIL	4800	8.625 5.5	1550 4800	11.25 8.25	725 sx 515	(555) 2,737 ERR		O.K. O.K. ERR
State "B"	#2	P & A	11120	11.75 8.625	387 4700	15.5 10.25	400 sx 250	(206) 3,466 ERR		O.K. [REDACTED] ERR

Numbers in ( ) denote negative values, i.e., cement circulated to surface.

MARTIN YATES, III  
1912 - 1985  
FRANK W. YATES  
1936 - 1986



105 SOUTH FOURTH STREET  
ARTESIA, NEW MEXICO 88210  
TELEPHONE (505) 748-1471

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SECRETARY  
DENNIS G. KINSEY  
TREASURER

August 19, 1993

State of New Mexico  
Commissioner of Public Lands  
P. O. Box 1148  
Santa Fe, New Mexico 87504-1148

Attention: Mr. Ray B. Powell

Re: Preliminary Approval  
Sanmal Queen Water Flood Unit  
Lea County, New Mexico

Dear Mr. Powell:

This letter is in response to your correspondence of July 30, 1993 in which you requested additional information before giving approval to the Sanmal Queen Water Flood Unit. Enclosed are the Engineering report with the geological data and initial plan of operation you requested as well as a table showing the re-designation of well names and numbers.

We are aware of the fact that the use of fresh water on State water flood units is discouraged except where the operator can demonstrate that the use of salt water poses an excessive technological or financial burden. We submitted this required information and received Water Rights Agreement No. WR-29 and Water Development Easement No. WD-29, both dated October 5, 1992. Copies of these referenced agreements are enclosed.

If additional information would be helpful, please contact me at 505-748-1471 or at 505-622-6992. Thank you for your attention.

Sincerely,

A handwritten signature in cursive script that reads 'Carolyn Bulovas Yates'.

Carolyn Bulovas Yates  
Petroleum Engineer

cc: Pete Martinez  
David Catanach-NMOCD  
Enclosures

Proposed Sanmal Queen Unit  
Engineering Report

Sanmal Queen Field  
Lea County, New Mexico

Prepared By  
YATES PETROLEUM CORPORATION

C. B. Yates  
August, 1993

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## RECOMMENDATIONS

1. Unitize the interval from the top of the upper sandstone member of the Queen formation to 30 feet below the base of the Queen within the proposed unit boundaries (see Figure 2).
2. The unit participation formula shall be 40% cum oil, 30% average daily production, and 30% So Phi H A. The tract participation shall be as shown in Table 7.
3. Submit the unit proposal and water development plan to the Commission of Public Lands for approval.
4. Form a unit for the purpose of secondary recovery with the approval of the New Mexico Oil Conservation Division.
5. Commence injection operations by January 1, 1994 or as soon as approval is received from the appropriate state agencies and conversion of wells and construction of facilities is complete.

## INTRODUCTION

The purpose of this report is to show the feasibility of water flooding the upper sandstone member of the Queen formation in the Sanmal Queen Field in Lea County, New Mexico. Also, a plan for unitization and secondary recovery is presented.

## CONCLUSIONS

1. The cumulative oil production for the proposed unitized area as of May 1, 1993 was 285,960 barrels.
2. Technically it is feasible to recover additional hydrocarbons by secondary recovery through water flooding.
3. The incremental oil recovery via water flooding is projected to be 204,228 barrels. The secondary/primary ratio would then be 0.73.
4. The water flood project is estimated to cost \$ 317,070. The proposed water flood project has a present value profit of \$509,599 at a 15% discount rate. This is \$1.55/Bbl to develop these secondary reserves.

## DISCUSSION

### Location

The Sanmal Queen Field is located in the northwestern portion of Lea County, New Mexico (Figure 1). The proposed unit covers approximately 440 acres in portions of Sections 1 and 12 of Township 17 South, Range 33 East (Figure 2). The proposed unitized interval extends from the top of the Queen sand to thirty feet below the base of the said formation. This interval is depicted in Figure 3 which is a type log from Yates Petroleum Corporation's Hoover "ADR" State #4 located 990 feet FSL and 1980 feet FWL in Section 1 of Township 17 South, Range 33 East, Lea County, New Mexico.

### Geology

The Sanmal Queen Field produces oil and associated gas from the upper sandstone member of the Queen formation. The trapping mechanism on all sides except the southeast side is stratigraphic. The southeastern edge has a water leg. The porosities vary widely both horizontally and vertically across the reservoir. Some wells have porosities as low as 7-8% and others as high as 20-22%. Figure 4 is the structure map for this area and Figure 5 is the hydrocarbon feet map for the Sanmal Queen Field.

### Well Data

The discovery well for this field was Yates Petroleum's Hoover "ADR" State #1 in Unit I of Section 1, Township 17S and Range 33E, Lea County, New Mexico. This well was originally drilled as a Wolf camp test but was not productive. It was successfully completed in the Queen for 48 BOPD in March, 1986. In November, 1990, this well was converted to a salt water disposal well as per Administrative Order No. SWD-402. The Hoover "ADR" State #1 is a proposed injection well for the Sanmal Queen Water Flood Unit.

There are ten wells in this proposed water flood unit. Three proposed injectors and seven producers. Table 1 lists the wells to be included in the proposed Sanmal Queen Unit and their completion information. Of the three proposed injectors, one is a salt water disposal well, as discussed in the previous paragraph. The other two are the Billy "AES" State #2 in Unit C of Section 12 which has been shut-in since December, 1987 and the Sweet Thing "AEB" State #2 in Unit H of Section 1 which has been shut-in since November, 1991.

The wells in the proposed Sanmal Queen Unit made a combined total of 34 BOPD and 219 BWPD for the month of April, 1993. Their cumulative production as of May 1, 1993 was 285,960 barrels of oil and 478,625 barrels of water. Most of the produced water came from the wells in the southeastern part of the field. The Hoover "ADR" State #2 makes almost half of this produced water (106 BWPD for April, 1993). It is slated to be converted to injector so the daily produced water volume will then be about 113 BWPD.

Oil recovery statistics by individual wells can be found in Table 2. A plot of the total primary production from these ten wells can be found in Figure 6. The individual well production curves for the wells in the proposed unit can be found in Figures 7 through 16.

## WATER FLOOD DEVELOPMENT

### Injection Plan

The plan is to inject water down dip into the water leg on the southeast portion of the Sanmal Queen Field in order to sweep the oil to the producers. There will be three injectors and seven producers (see Figure 2). The Hoover "ADR" State #1 is currently a salt water disposal well. It recently had a step rate injection test run on it and is allowed to take water at an injection pressure of 950 psi. Two other wells will need work to convert them to injection status. These are the Hoover "ADR" State #2 and the Billy "AES" State #2. It is proposed that the average injection pressure on these two wells be 750 psi until a step rate injection test is run on them to determine if the allowed injection pressure should be increased. The 750 psi would not exceed the current pressure limitation (0.2 psi/foot to the top of the injection interval) which is used to make sure that the formation parting pressure is not exceeded.

### Water Injection Requirements

The initial average injection volume proposed is 500 barrels of water per day per injection well. This is an average of 1500 barrels of water per day. It is estimated that a total of 3,832,500 barrels of water will be used over the seven year life of the project. This would be a ratio of approximately 19:1 injected water to produced oil. The water injected would be a combination of produced water and fresh make-up water. Approximately 1400 barrels of fresh water make-up per day would be needed initially if we inject at 500 BWPD per injection well. This will be supplied by a fresh water well drilled into the Ogallala aquifer. The water rights to do this were obtained October 5, 1992 as per Water Rights Agreement No. WR-29. The easement to develop these water rights was approved October 5, 1992 as per Water Development Easement No. WD-29.

With this injection, the peak oil production should be approximately 3,800 barrels of oil per month. This peak response should occur about 36 months after injection commences (see Figure 17).

## PROJECT ECONOMICS

A summary of the economics of this water flood project is found in Table 3. The total investment is estimated at \$317,070. A breakdown of the total investment for the project can be found in Table 4. The incremental oil recovery is estimated to be 204,228 barrels. This is \$1.55/BO to develop the secondary reserves. For this analysis, the price of oil and gas were assumed to be \$19/BO and \$1.50/MCF, respectively. The present value profit of this project at a 15% discount rate is \$509,599. This project has a rate of return of 46% and an income/investment ratio of 4.63.

## UNITIZATION

### Unit Area

The proposed secondary recovery unit is composed of three tracts in Sections 1 and 12 of Township 17S and Range 33E (Figure 2). A description of the proposed unitized leases can be found in Table 5. The Queen formation is proposed to be unitized within these unit boundaries.

### Equity Parameters

The parameters that were used to establish equity in the proposed unit were :

1. Cumulative oil production as of 5/1/93.
2. Average production rate calculated over the period of time from 1/1/93 to 5/1/93.
3. Net oil saturated porosity thickness.

Table 6 lists these parameters by tract number.

### Participation Formula

The suggested formula for determining participation in this unit is :

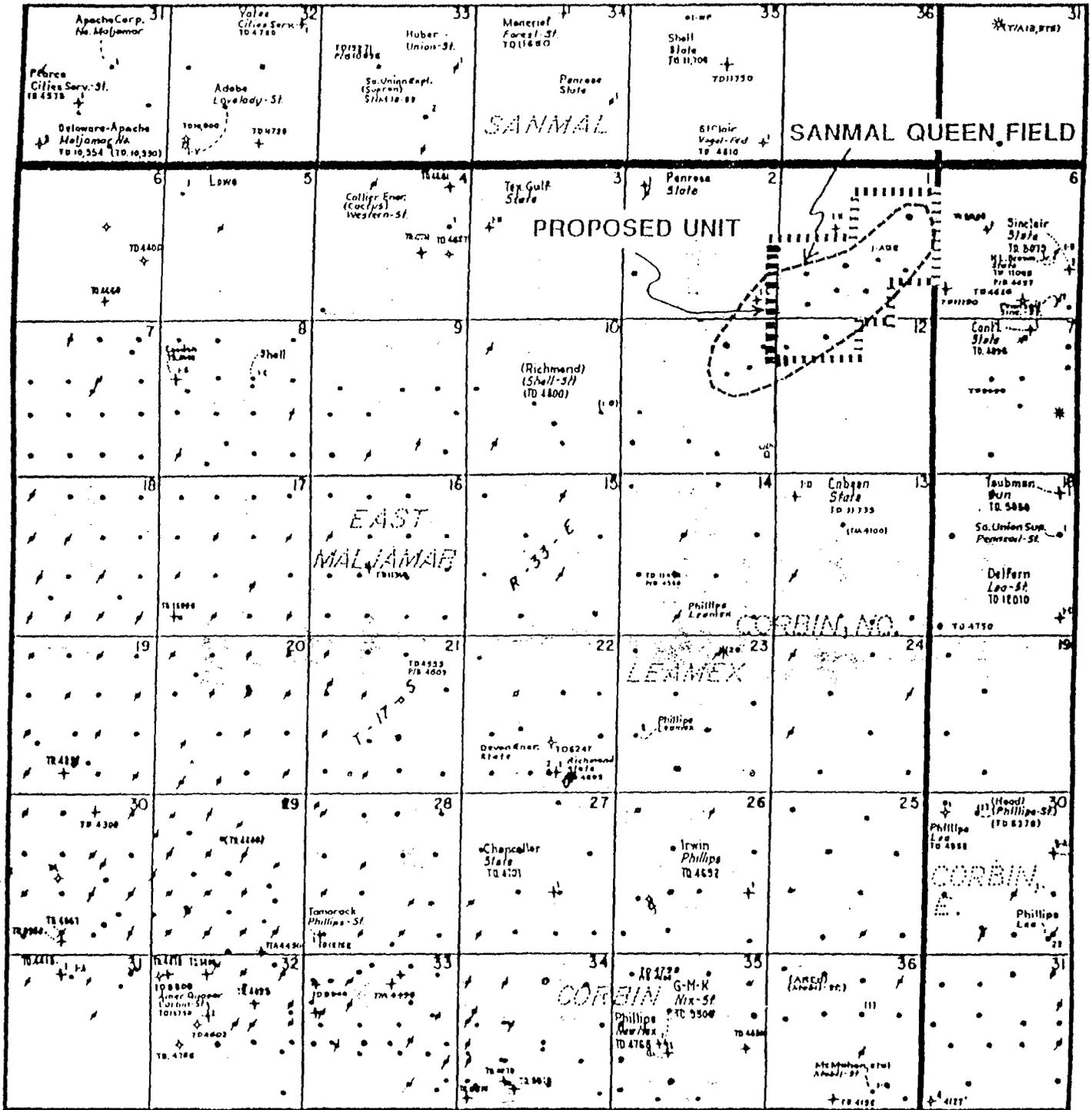
- 40% Cumulative oil production as of 5/1/93.
- 30% Average production rate from 1/1/93 to 5/1/93.
- 30% Net oil saturated porosity thickness.

This formula was chosen to give the greatest weight to cumulative oil production because it was the most significant factor. The rest of the weight of the formula was divided between average production rate and net oil saturated porosity thickness which were also considered important factors toward secondary recovery.

Using the proposed participation formula and the tract values for the respective equity parameters, the participation for each tract is shown in Table 7. Summaries of the working interest owners and basic royalty interest owners participation in the proposed Sanmal Queen Water Flood Unit are provided in Tables 8 and 9. The net revenue interest for each participant in the proposed unit is provided in Table 10.

## FIGURES

<u>FIGURE NUMBER</u>	<u>TITLE</u>	<u>PAGE NUMBER</u>
1	Area Map	8
2	Unit Map	9
3	Type Log	10
4	Structure Map	11
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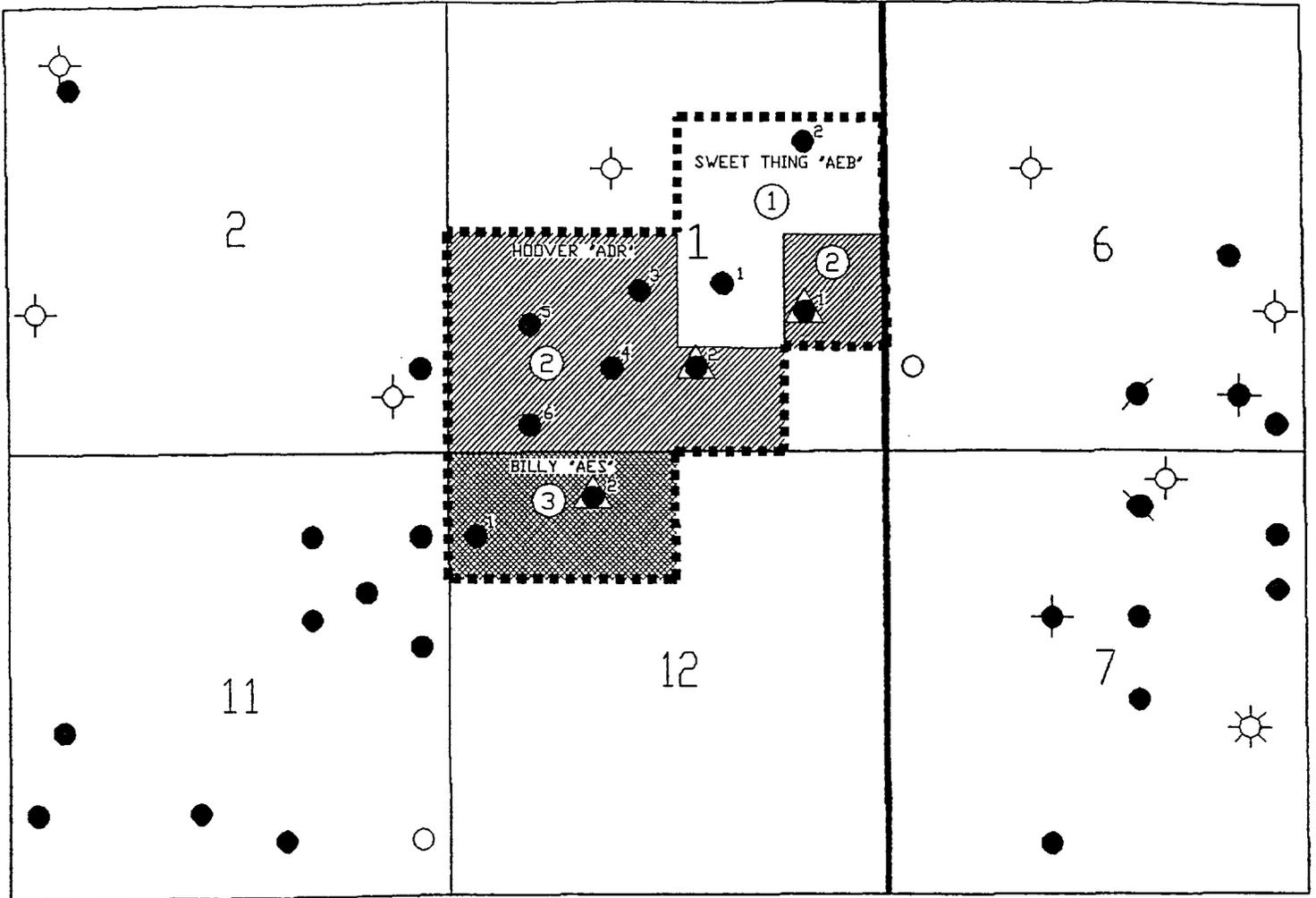


YATES PETROLEUM CORPORATION  
 SANMAL QUEEN UNIT  
 AREA MAP  
 Figure 1  
 1/14/91 PMC

R33E

R34E

T  
17  
S




**ATES  
PETROLEUM  
CORPORATION**  
 105 South Fourth (505) 748-1471  
 ARTESIA, NEW MEXICO 88210

Figure 2

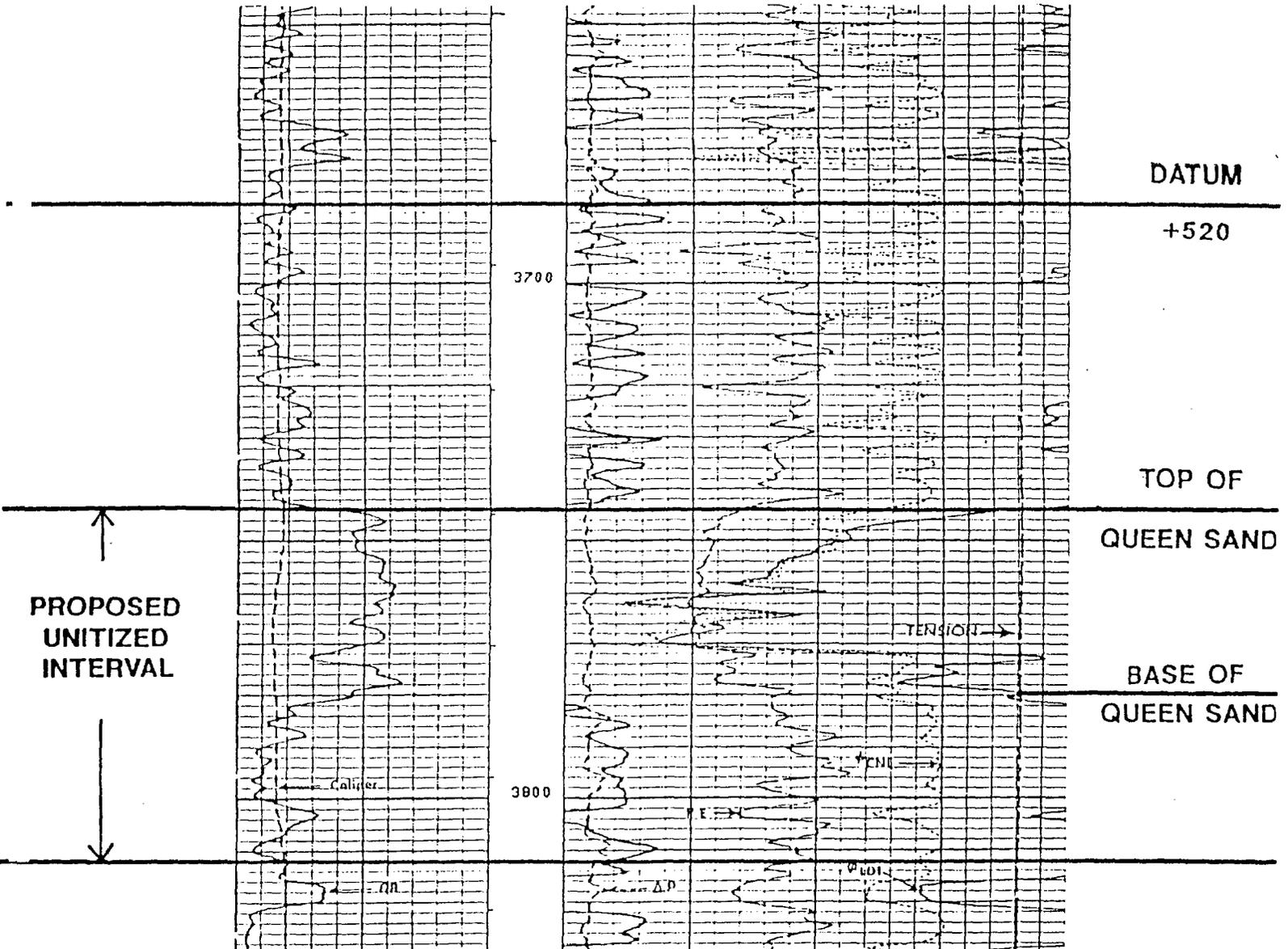
PROPOSED SANMAL QUEEN UNIT  
 LEA COUNTY, NEW MEXICO

PROPOSED INJECTION  $\triangle$   
 UNIT OUTLINE  A93010

Figure 3

# YATES PETROLEUM CORP.

HOOVER "ADR" STATE #4  
SEC. 1 - 17S - 33E  
990' FSL & 1980' FWL  
LEA CO., NEW MEXICO  
KB 4155'



TYPICAL LOG & PROPOSED SECTION TO BE UNITIZED

SANMAL QUEEN UNIT  
SANMAL QUEEN FIELD

LEA COUNTY, NEW MEXICO



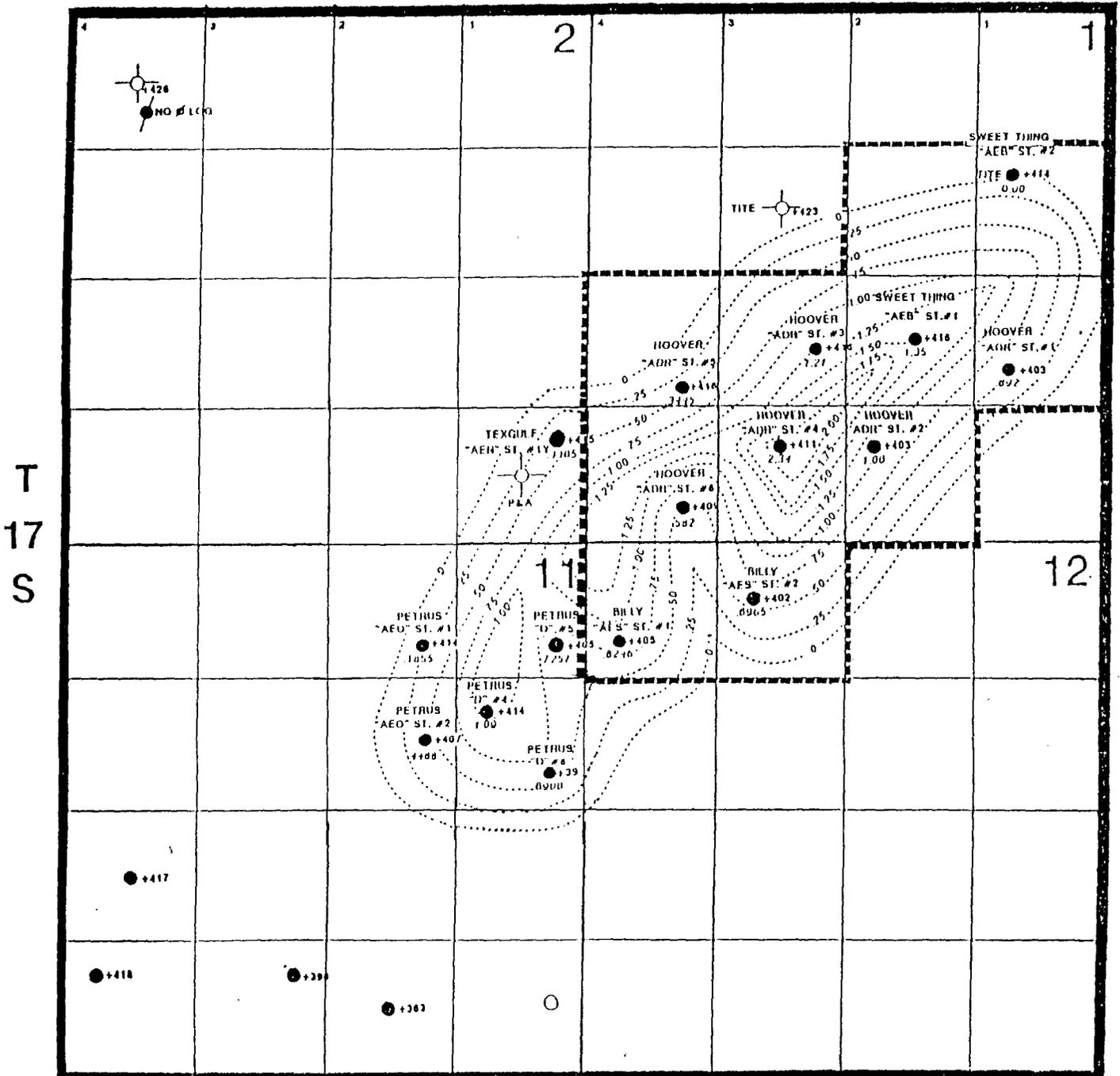


Figure 5

**YATES PETROLEUM CORP.**  
**SANMAL QUEEN FIELD**  
(0 FT) (1 Sw) = HYDROCARBON FT. C.I. = .25  
LESLIE BENTZ : GEOLOGIST

# PRODUCTION HISTORY

Date: 04/30/93  
Time: 09:01.57

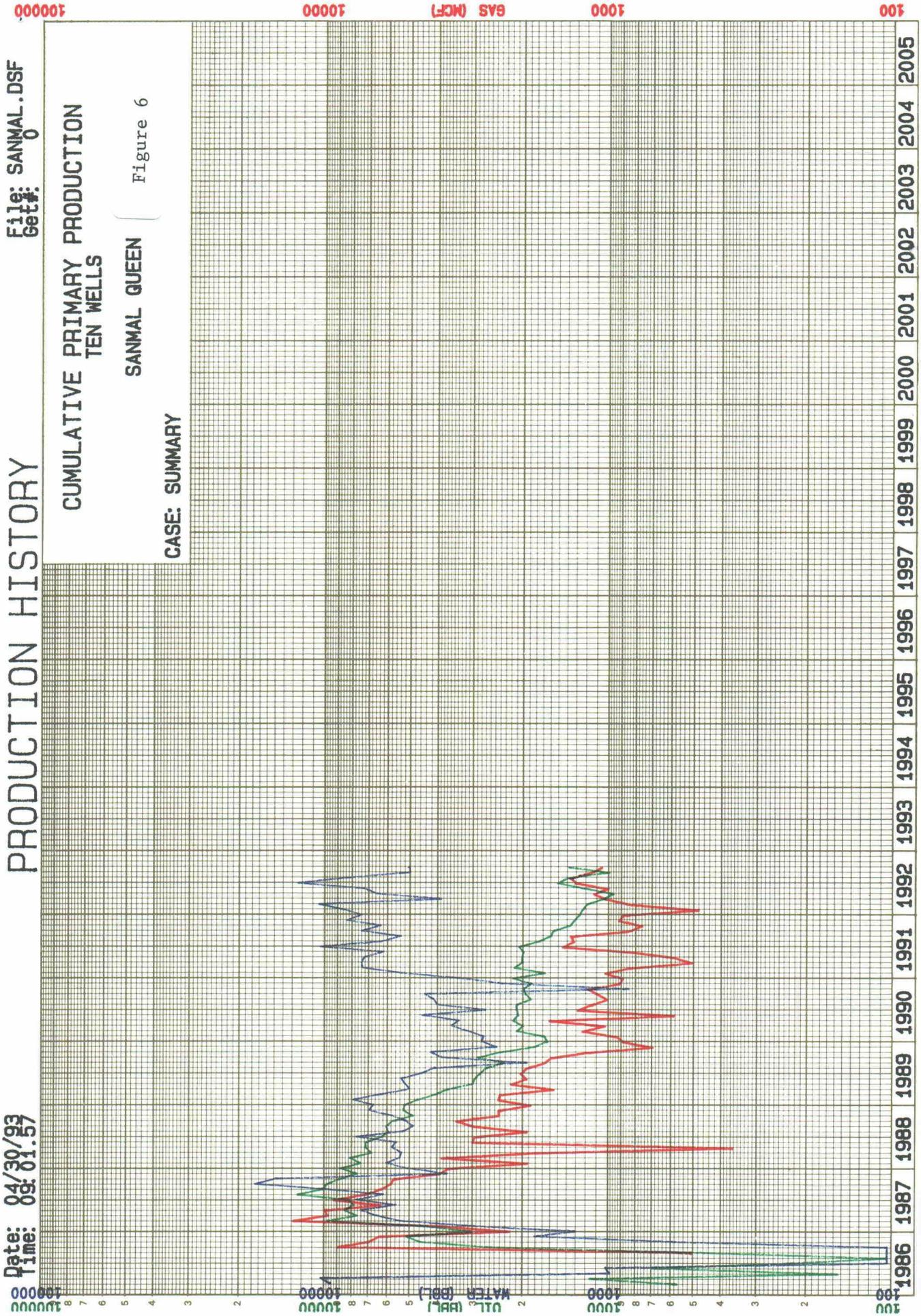
File: SANMAL.DSF  
Get#: 0

CUMULATIVE PRIMARY PRODUCTION  
TEN WELLS

SANMAL QUEEN

Figure 6

CASE: SUMMARY



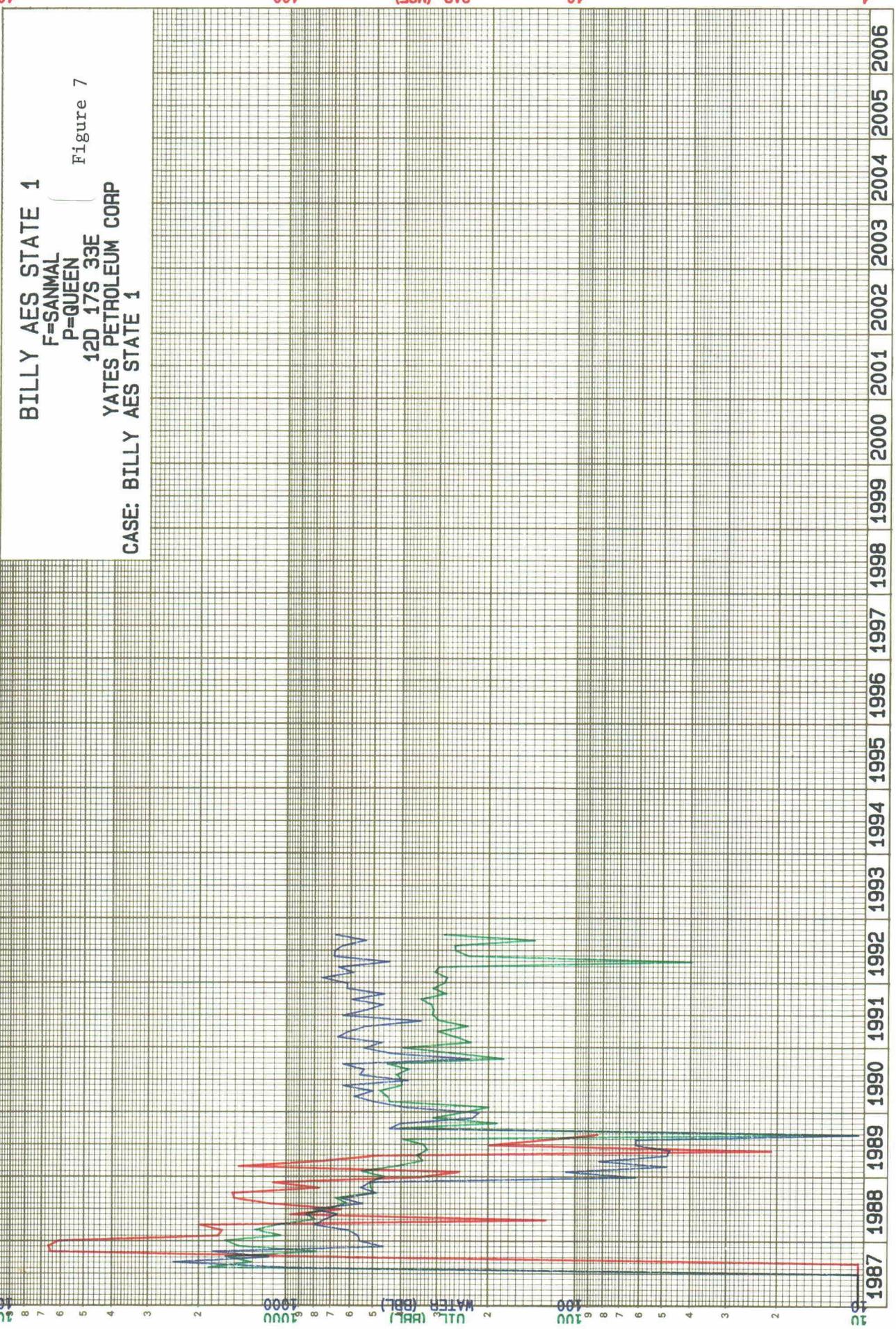
CUMULATIVE OIL (BBL) = 278894.  
DPC & A  
YEARS  
SL 20 3 3  
CUMULATIVE GAS (MCF) = 186018.

Date: 8/10/93  
Time: 11:26:41

# PRODUCTION HISTORY

File: SANMAL.DSF  
Get#: 16

BILLY AES STATE 1  
F=SANMAL  
P=QUEEN  
12D 17S 33E  
YATES PETROLEUM CORP  
CASE: BILLY AES STATE 1



CUMULATIVE OIL (BBL) = 30072.  
CUMULATIVE GAS (MCF) = 3492.

DPC & A  
SL 20 3 3  
YEARS

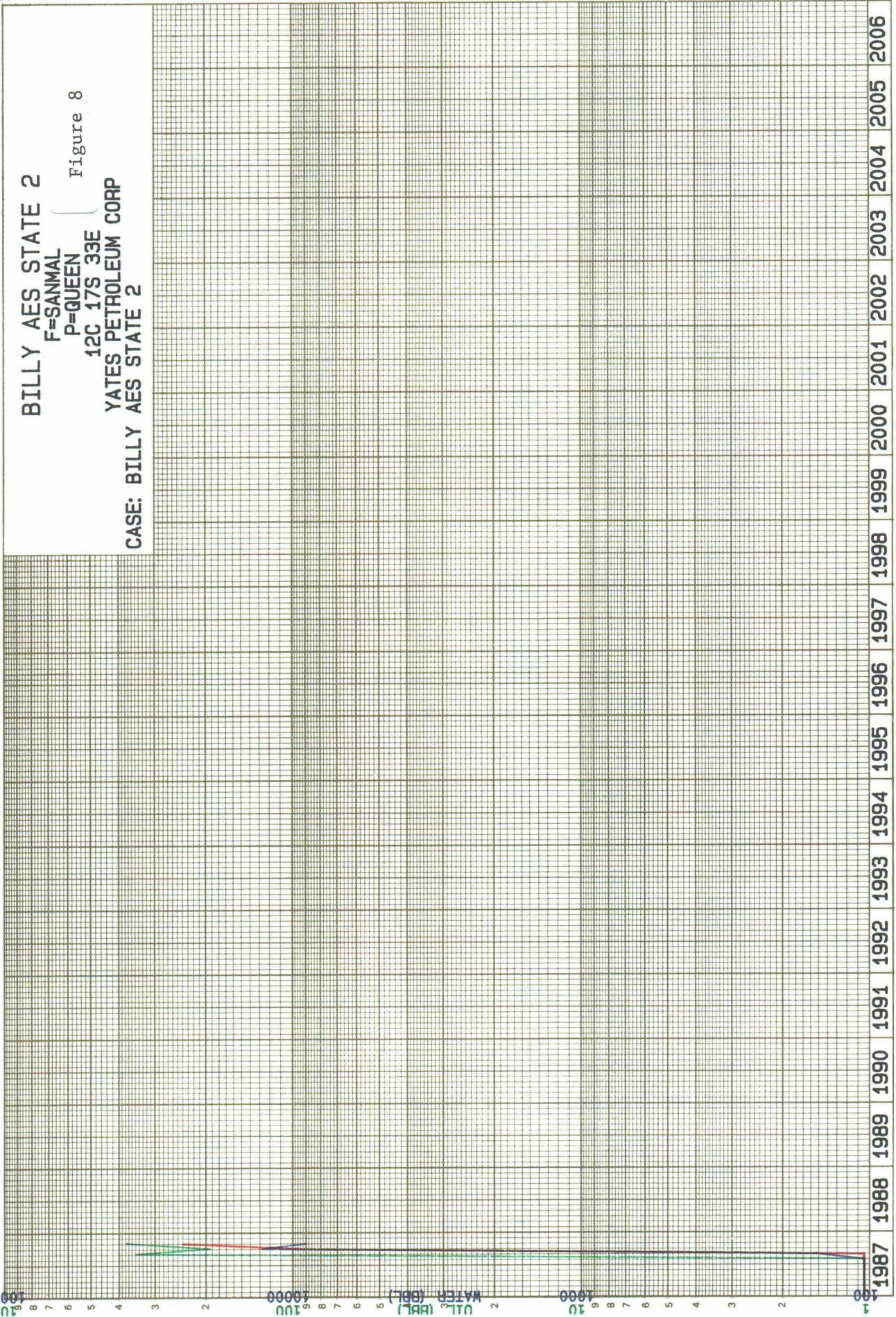
# PRODUCTION HISTORY

Date: 8/10/93  
Time: 11:26:41

File: SANMAL.DSF  
Get#: 15

BILLY AES STATE 2  
F=SANMAL  
P=QUEEN  
12C 17S 33E  
YATES PETROLEUM CORP  
CASE: BILLY AES STATE 2

Figure 8



CUMULATIVE OIL (BBL) = 875.

DPC & A

YEARS

SL 20 3 3

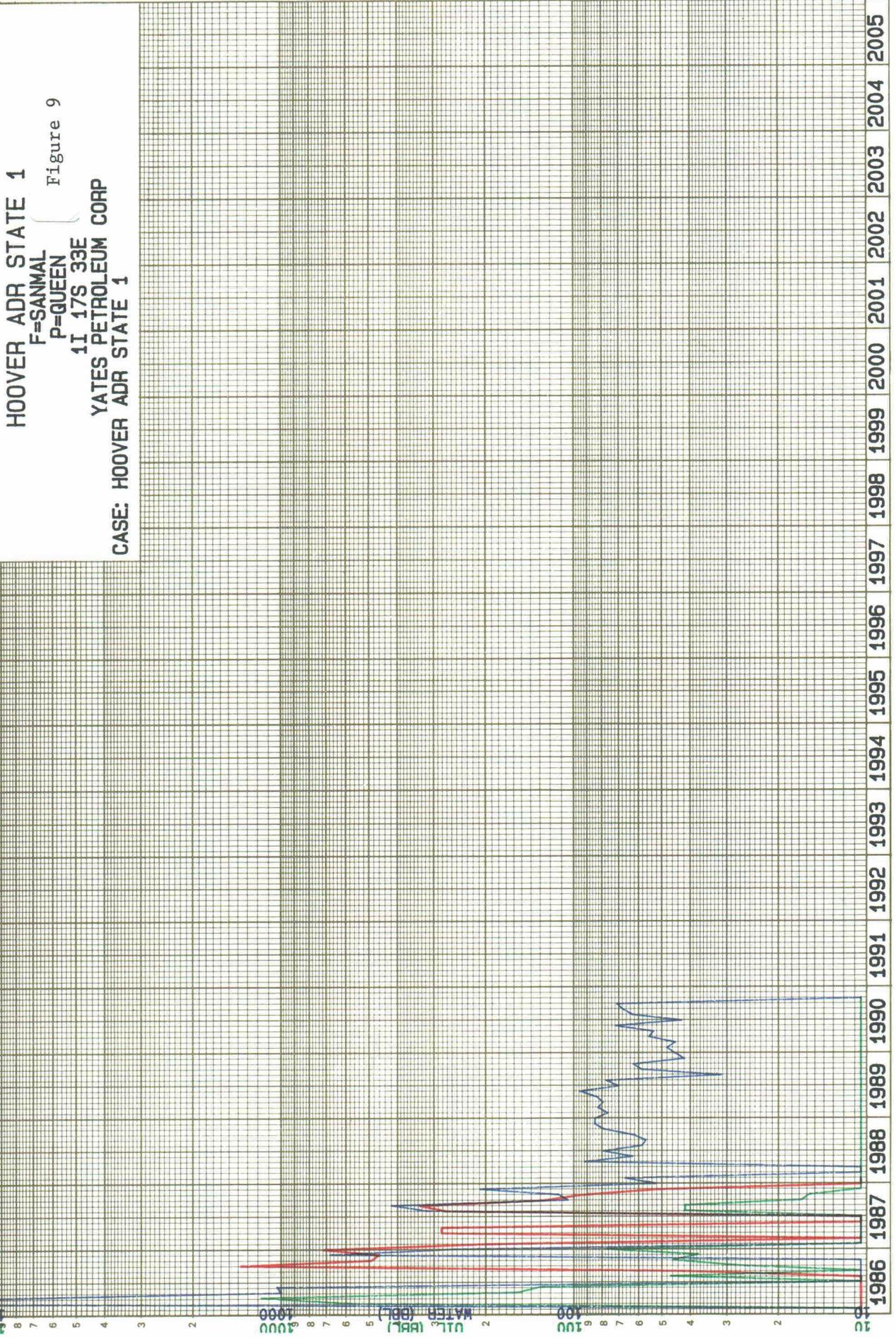
CUMULATIVE GAS (MCF) = 312.

# PRODUCTION HISTORY

Date: 8/10/93  
Time: 11:26:41

File: SANMAL.DSF  
Get#: 17

HOOVER ADR STATE 1  
 F=SANMAL  
 P=QUEEN  
 1I 17S 33E  
 YATES PETROLEUM CORP  
 CASE: HOOVER ADR STATE 1



CUMULATIVE OIL (BBL) = 2351.

DPC & A

YEARS

SL 20 3 3

CUMULATIVE GAS (MCF) = 454.

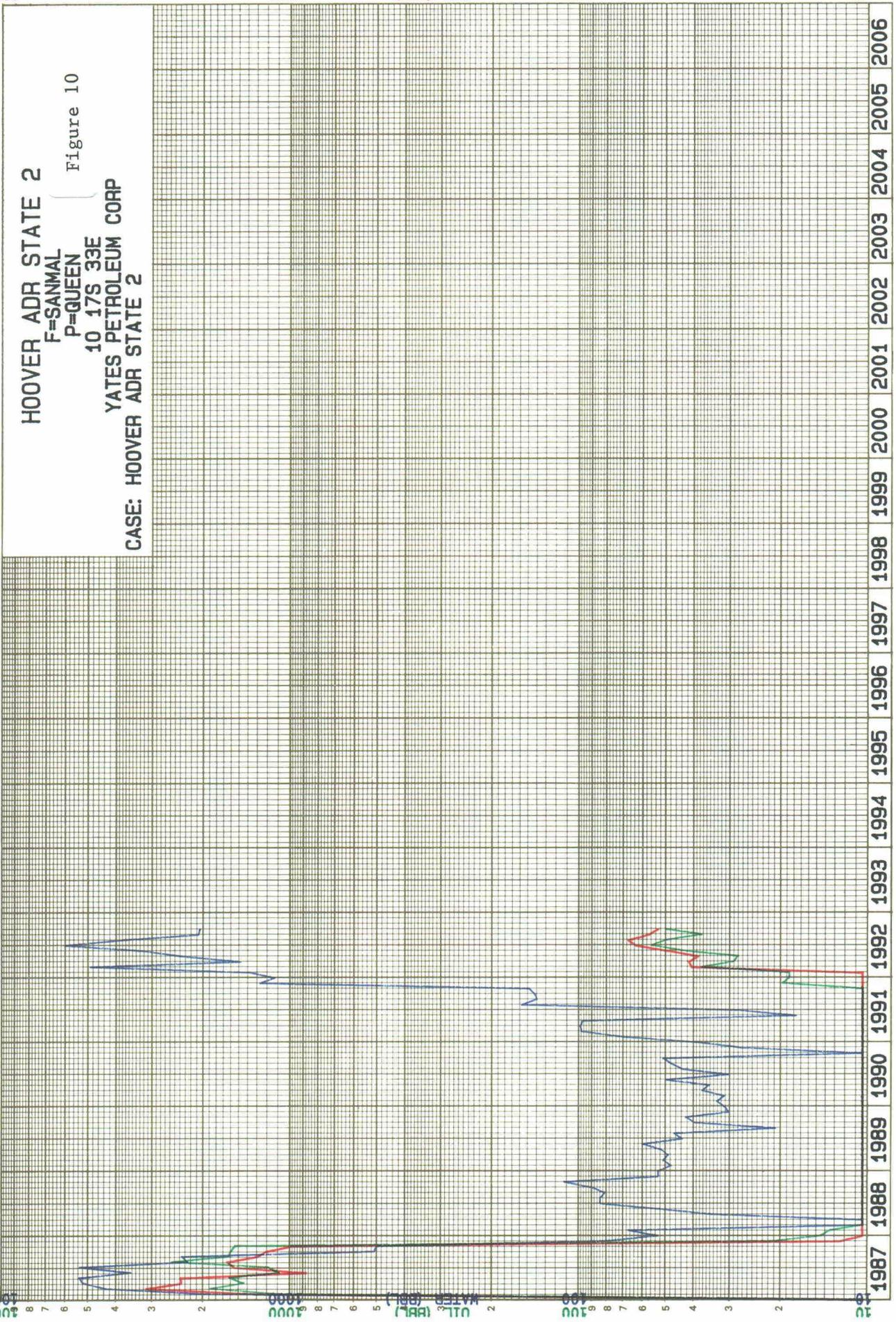
# PRODUCTION HISTORY

Date: 8/10/93  
Time: 11:26:41

File: SANMAL.DSF  
Get#: 8

HOOVER ADR STATE 2  
F=SANMAL  
P=QUEEN  
10 17S 33E  
YATES PETROLEUM CORP  
CASE: HOOVER ADR STATE 2

Figure 10



CUMULATIVE OIL (BBL) = 15534.  
DPC & A  
YEARS  
SL 20 3 3  
CUMULATIVE GAS (MCF) = 16453.

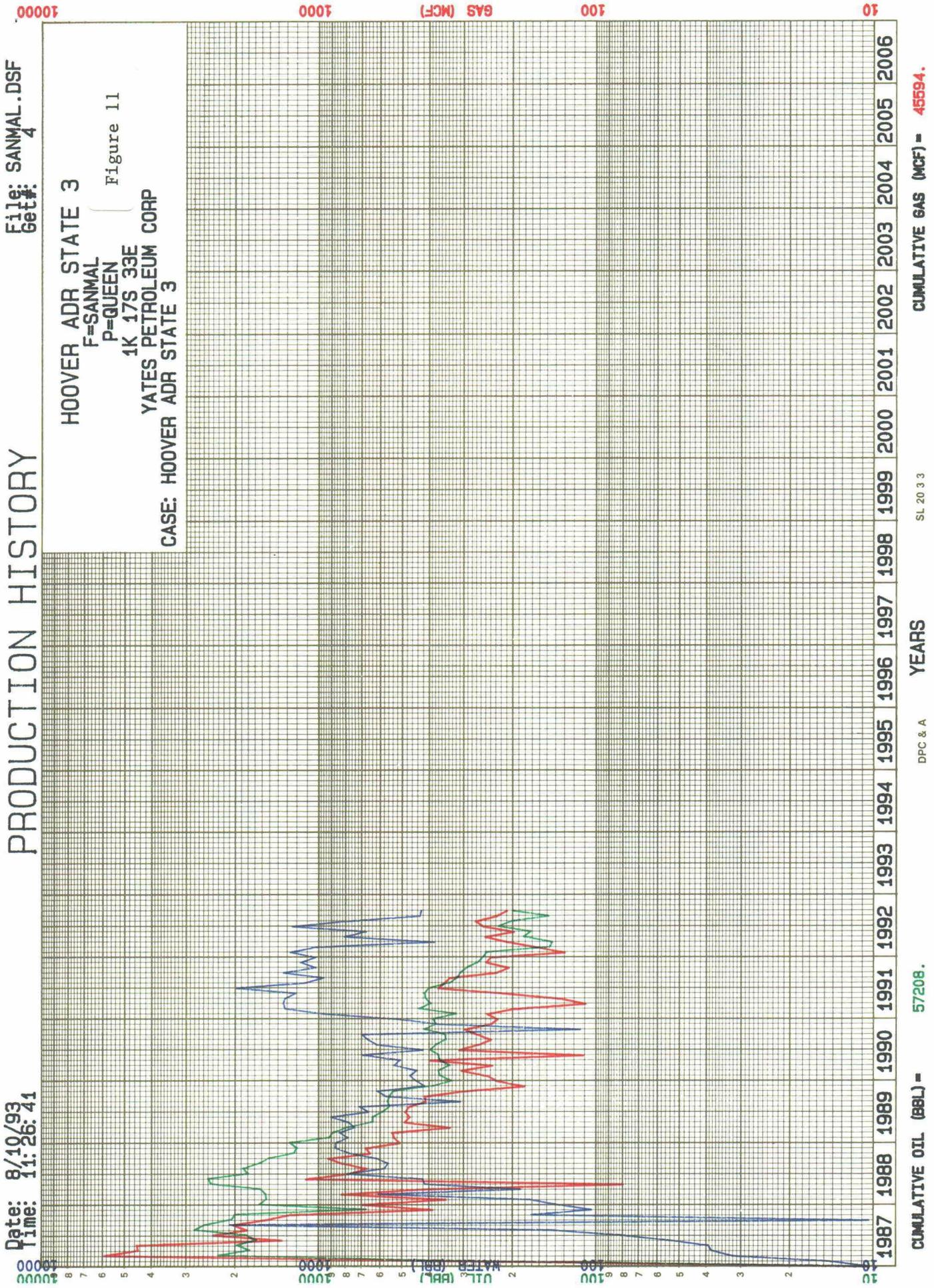
# PRODUCTION HISTORY

Date: 8/10/93  
Time: 11:26:41

File: SANMAL.DSF  
Get#: 4

HOOVER ADR STATE 3  
F=SANMAL  
P=GUEEN  
4K 17S 33E  
YATES PETROLEUM CORP  
CASE: HOOVER ADR STATE 3

Figure 11



SL 20 3 3 DPC & A YEARS

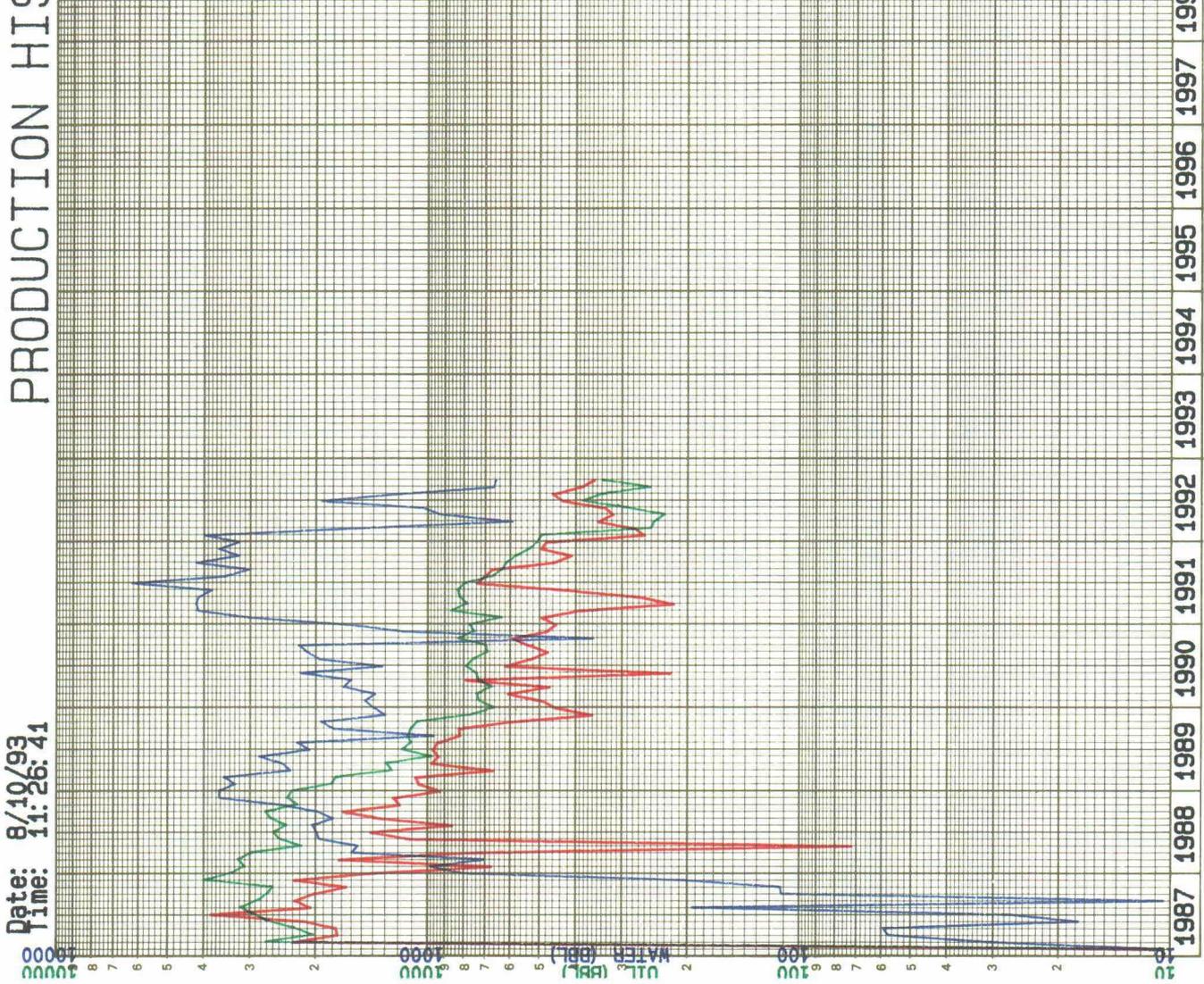
Date: 8/10/93  
Time: 11:26:41

# PRODUCTION HISTORY

File: SANMAL.DSF  
Get#:

HOOVER ADR STATE 4  
F=SANMAL  
P=QUEEN  
IN 17S 33E  
YATES PETROLEUM CORP  
CASE: HOOVER ADR STATE 4

Figure 12



CUMULATIVE OIL (BBL) = 92316.  
DPC & A  
YEARS  
CUMULATIVE GAS (MCF) = 58608.

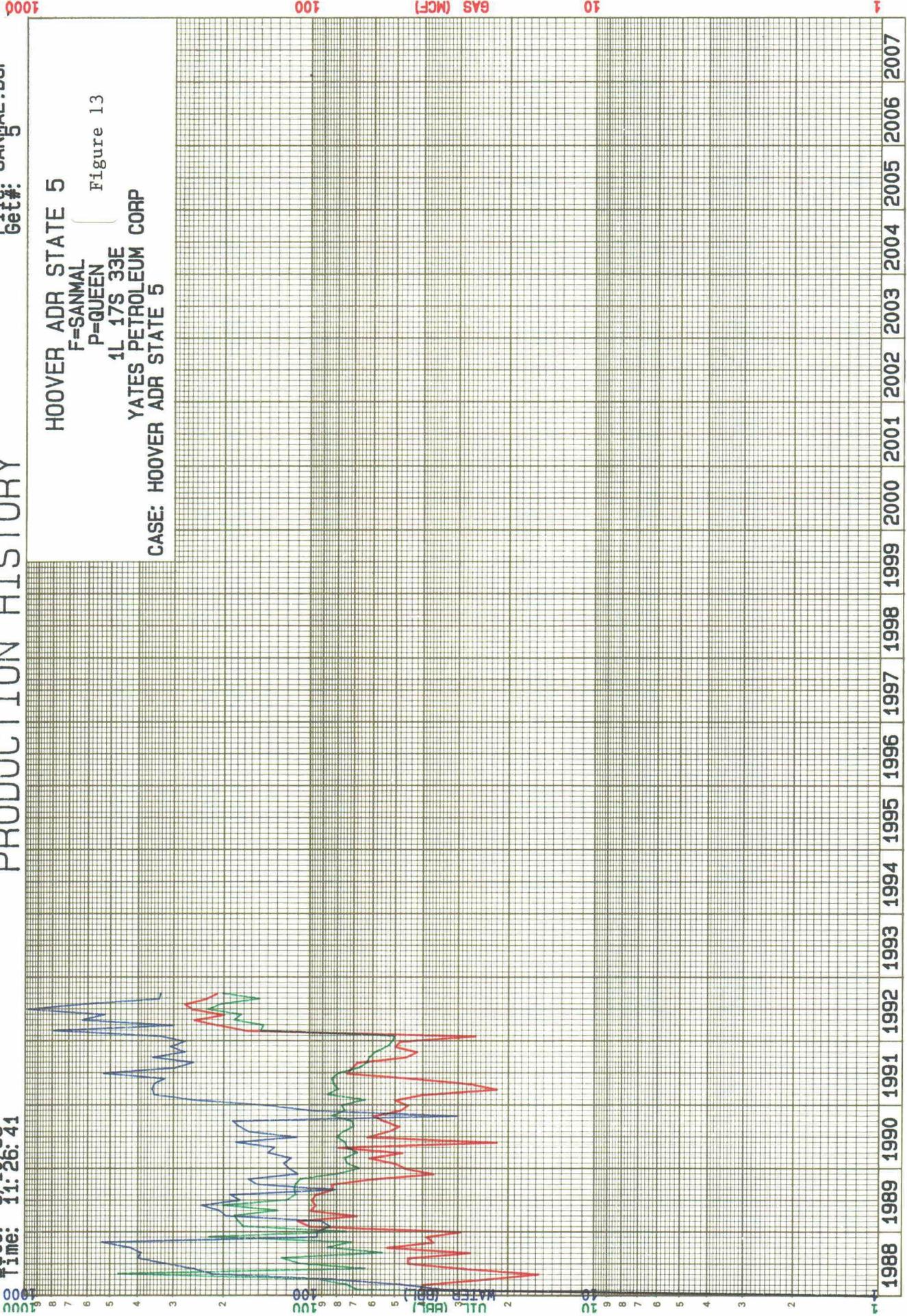
# PRODUCTION HISTORY

Date: 8/10/93  
Time: 11:26:41

File: SANMAL.DSF  
Get#: 5

HOOVER ADR STATE 5  
F=SANMAL  
P=GUEEN  
1L 17S 33E  
YATES PETROLEUM CORP  
CASE: HOOVER ADR STATE 5

Figure 13



CUMULATIVE OIL (BBL) = 6026.  
DPC & A  
YEARS  
CUMULATIVE GAS (MCF) = 4239.

SL 20 3 3

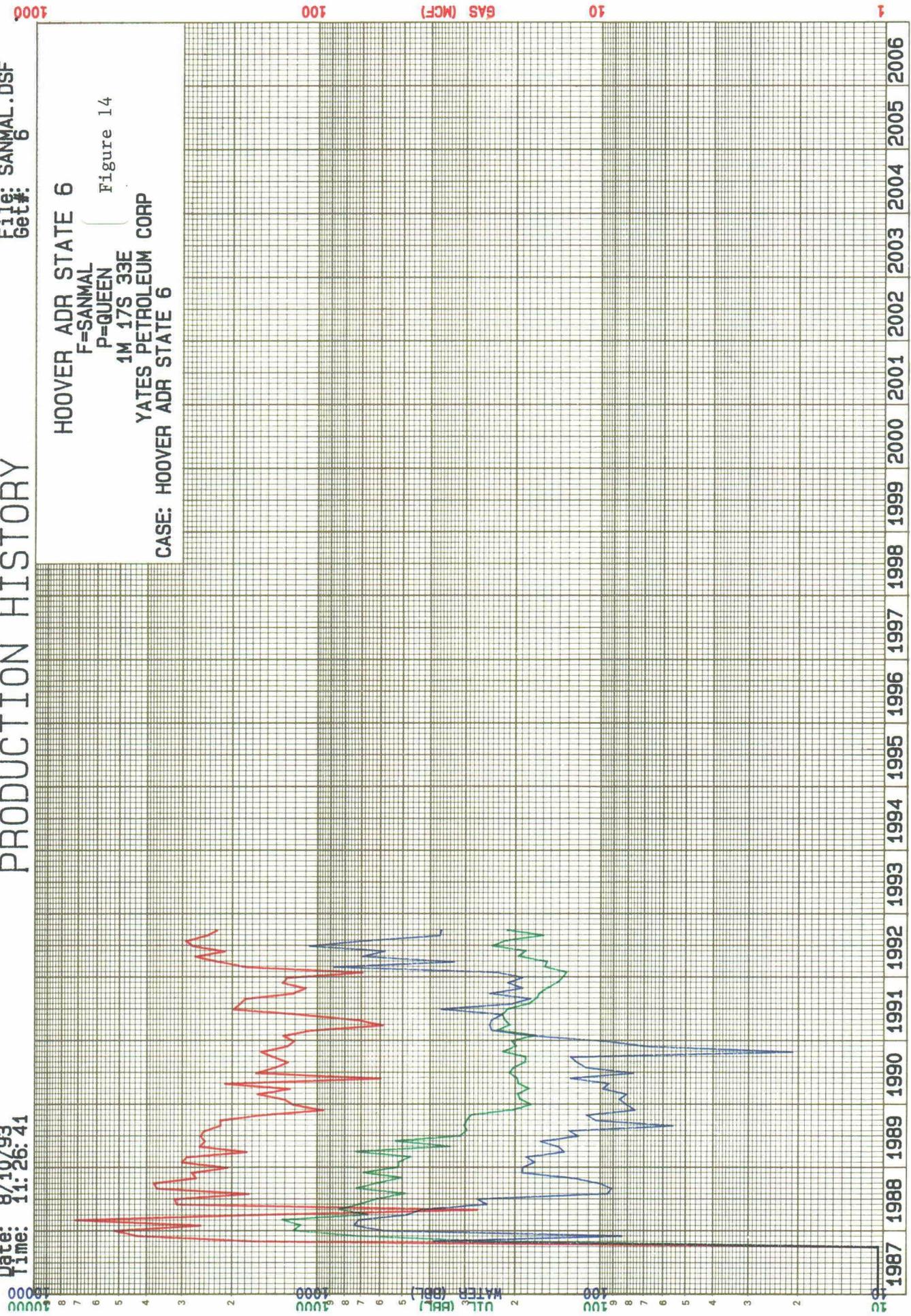
# PRODUCTION HISTORY

Date: 8/10/93  
Time: 11:26:41

File: SANMAL.DSF  
Get#: 6

HOOVER ADR STATE 6  
F=SANMAL  
P=QUEEN  
1M 17S 33E  
YATES PETROLEUM CORP  
CASE: HOOVER ADR STATE 6

Figure 14



CUMULATIVE OIL (BBL) = 20757  
CUMULATIVE GAS (MCF) = 11802

SL 20 3 3

DPC & A

YEARS

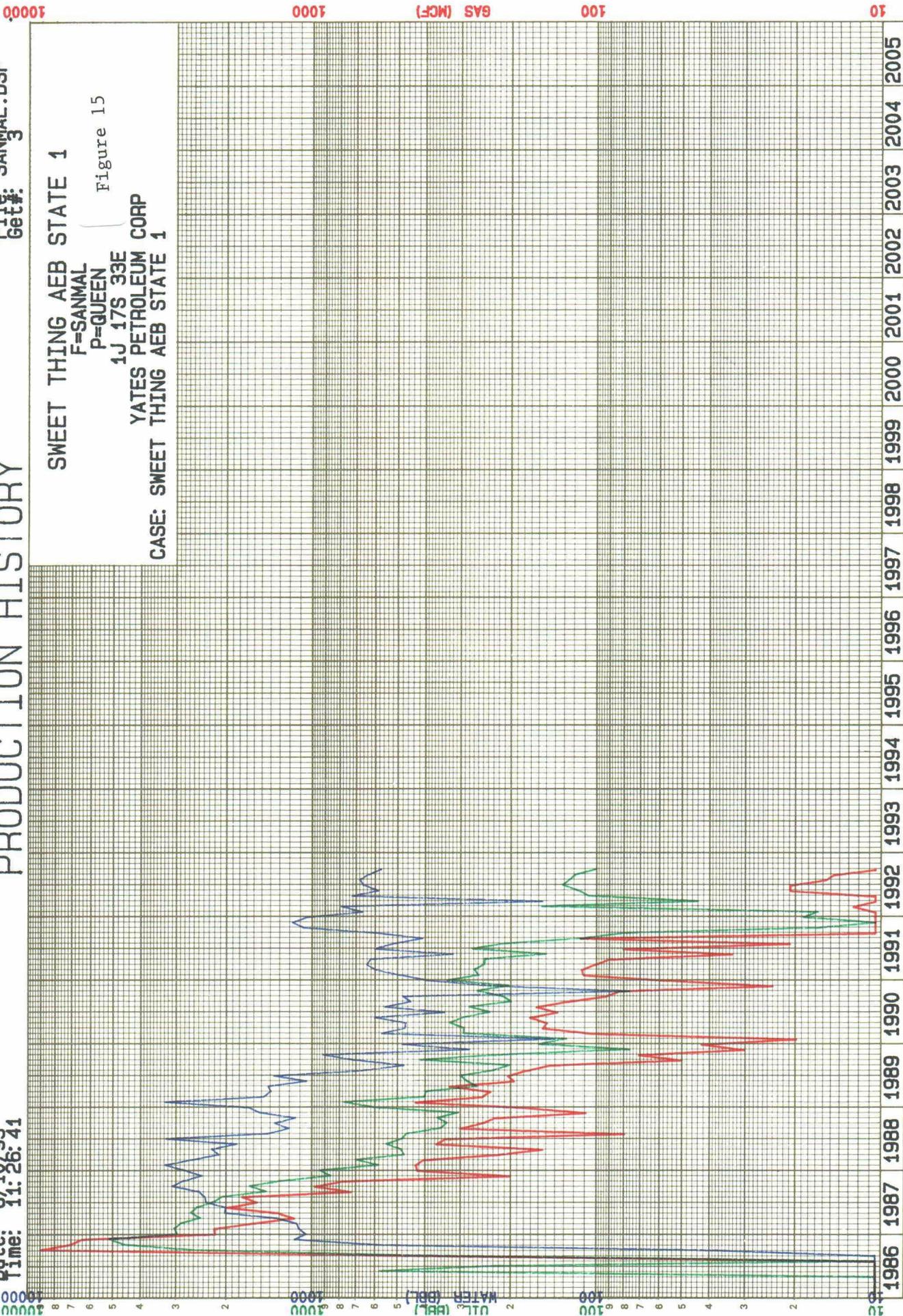
# PRODUCTION HISTORY

Date: 8/10/93  
Time: 11:26:41

File: SANMAL.DSF  
Get#: 3

SWEET THING AEB STATE 1  
 F=SANMAL  
 P=QUEEN  
 1J 17S 33E  
 YATES PETROLEUM CORP  
 CASE: SWEET THING AEB STATE 1

Figure 15



CUMULATIVE OIL (BBL) = 53404.  
 CUMULATIVE GAS (MCF) = 44876.  
 DPC & A  
 SL 20 3 3

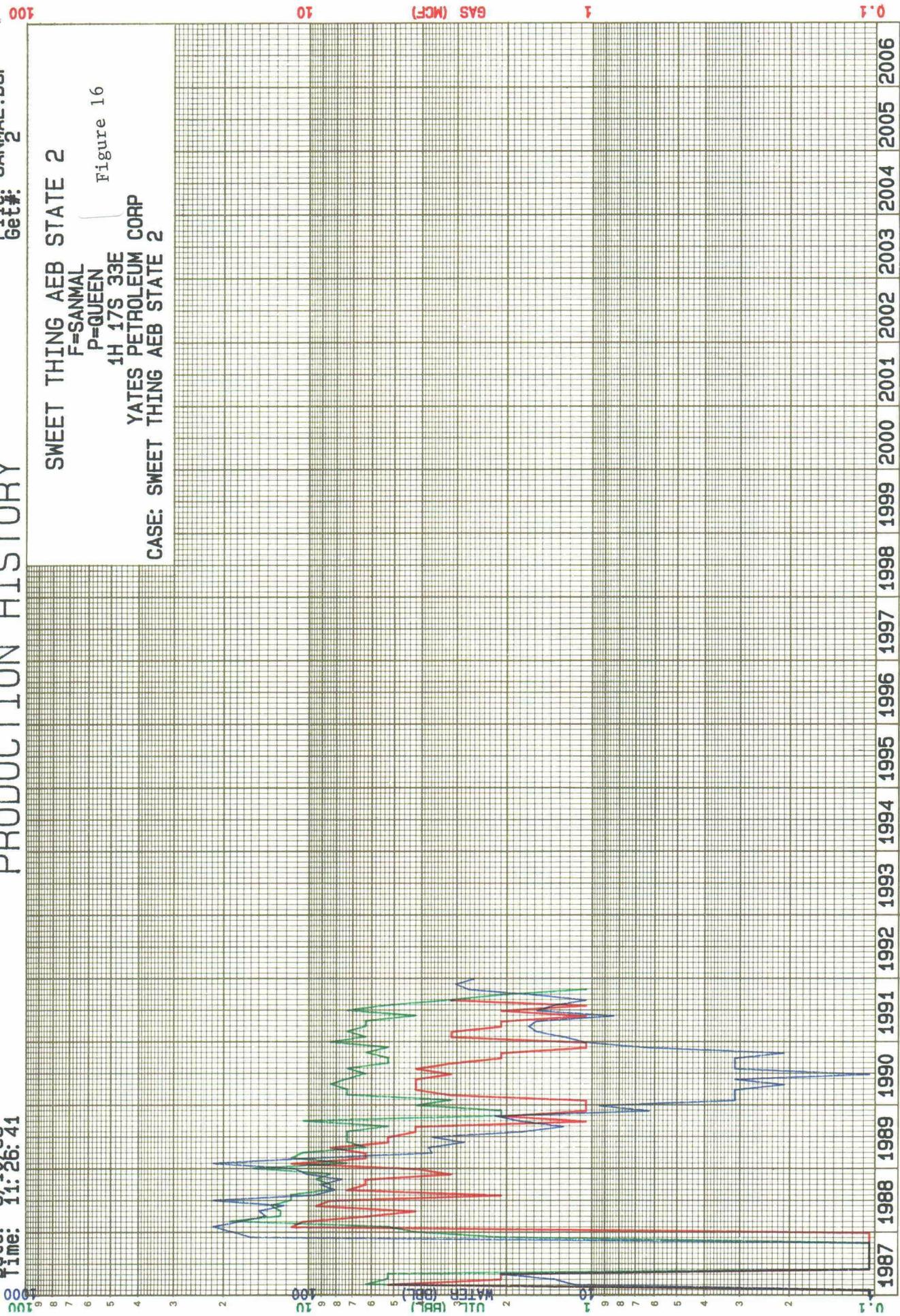
# PRODUCTION HISTORY

Date: 8/10/93  
Time: 11:26:41

File: SANMAL.DSF  
Get#: 2

SWEET THING AEB STATE 2  
F=SANMAL  
P=QUEEN  
1H 17S 33E  
YATES PETROLEUM CORP  
CASE: SWEET THING AEB STATE 2

Figure 16

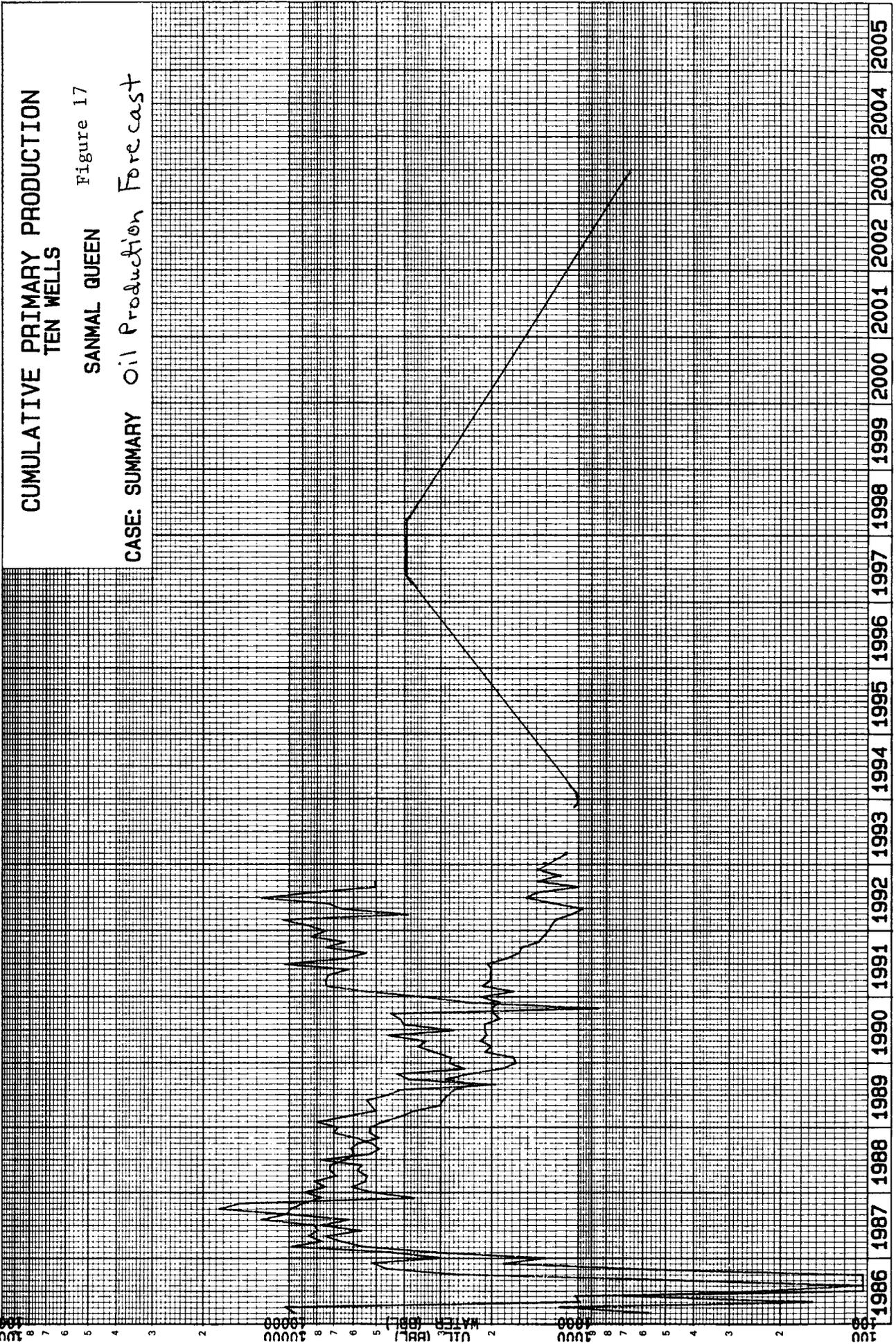


CUMULATIVE OIL (BBL) = 351.  
DPC & A  
YEARS  
SL 20 3 3  
CUMULATIVE GAS (MCF) = 188.

Date: 04/30/93  
Time: 09:01.57

# PRODUCTION HISTORY

File: SANMAL.DSF  
Get#:



CUMULATIVE PRIMARY PRODUCTION  
TEN WELLS

SANMAL QUEEN

Figure 17

CASE: SUMMARY Oil Production Forecast

CUMULATIVE OIL (BBL) = 278694.

DPC & A

YEARS

SL 20 3 3

CUMULATIVE GAS (MCF) =

## TABLES

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**SANMAL QUEEN WATER FLOOD UNIT  
INDIVIDUAL WELL DATA**

**TABLE 1**

WELL NAME	LOCATION	OPERATOR	WELL TYPE	SPUD DATE	COMPLETION DATE	ID (FT)	PRODUCTION PERFORATIONS		COMPLETION INFORMATION
							ZONE	(FT)	
Sweet Thing "AEB" State #2	H 1-17S-33E	Yates Pet. Corp.	Oil	10/13/86	3/15/87	3,900	Queen	3742-3752	20" @ 40'; 8 5/8" @ 1552' w/720 sx; 5 1/2" @ 3900' w/600 sx; 2 7/8" tubing @ 3720'. Acidized 3742'-3752' w/2500 gal 7 1/2% acid + 50 ball sealers. SF w/10,000 gals KCL water + 20,000# 20/40 sand.
Hoover "ADR" State #1	I 1-17S-33E	Yates Pet. Corp.	SWD	12/31/85	4/10/86 CTI=11/90	11,825 PB 4352	Queen	3767-3774	20" @ 38'; 13 3/8" @ 448' w/425 sx; 8 5/8" @ 4530' with 1725 sx; 2 7/8" tubing @ 3698'. Acidized 3767'-3774' w/2000 gals 7 1/2% acid + ball sealers. For CTI, acidized w/1500 gals 15% HCL and set 2 7/8" IPC tubing @ 3698' & Guiberson Uni VI packer @ 3700'.
Sweet Thing "AEB" State #1	J 1-17S-33E	Yates Pet. Corp.	Oil	5/22/86	7/4/86	3,900 PB 3850	Queen	3744-3761	20" @ 40'; 8 5/8" @ 406' w/275 sx; 5 1/2" @ 3900' w/1030 sx; 2 7/8" tubing @ 3685'. Acidized 3744'-3761' w/4000 gals 7 1/2% acid; Frac w/10,000 gals gel KCL + 20,000 # sand.
Hoover "ADR" State #3	K 1-17S-33E	Yates Pet. Corp.	Oil	2/6/87	2/26/87	3900 PB 3840	Queen	3745-3762	8 5/8" @ 1515' w/775 sx; 5 1/2" @ 3900' w/325 sx; 2 7/8" tubing @ 3364'. Acidized 3745'-3762' w/2500 gals 7 1/2% HCL. Frac w/15,000 gals gel KCL + 26,000 # sand.
Hoover "ADR" State #5	L 1-17S-33E	Yates Pet. Corp.	Oil	1/16/88	3/15/88	4750 PB 4692	Queen	3752-3764	8 5/8" @ 1520' with 775 sx; 5 1/2" @ 4750' w/700 sx; 2 7/8" tubing @ 3681'. Acidized 3752'-3764' w/1500 gals 7 1/2% acid. Frac w/60,000 gals gel KCL + 100,000 # sand.
Hoover "ADR" State #6	M 1-17S-33E	Yates Pet. Corp.	Oil	6/22/87	12/10/87	4750 PB 3950	Queen	3757-3767 3771-3775	8 5/8" @ 1535' w/775 sx; 5 1/2" @ 4750' w/515 sx; 2 7/8" @ 3667'. Acidized w/1500 gals 7 1/2% NEFE plus ball sealers. Frac 3757'-3775' w/40,000 gals gelled 2% KCL + 60,000# sand; Frac 3757'-3775' w/120,000 gals gel + 192,500# sand. Perfed 4661'-65' and AT w/1000 gals 7 1/2% NEFE; Perfed 4596'-4600' and AT w/1000 gals 15% NEFE; Perfed 4596'-4600' and AT w/5000 gals gelled 2% KCL + 10,000 gals 20% NEFE gelled acid; Acidized 4470'-74' w/1000 gals 7 1/2% NEFE. Acidized 4521'-26' w/1000 gals 7 1/2% NEFE; SF 4470'-4600' w/52,000 gals 40# gel + 90,000 # sand.

**SANMAL QUEEN WATER FLOOD UNIT  
INDIVIDUAL WELL DATA**

**TABLE 1**

WELL NAME	LOCATION	OPERATOR	WELL TYPE	SPUD DATE	COMPLETION DATE	TD (FT)	PRODUCTION PERFORATIONS		COMPLETION INFORMATION
							ZONE	(FT)	
Hoover "ADR" State #4	N 1-17S-33E	Yates Pet. Corp.	Oil	2/16/87	3/24/87	3900 PB 3853	Queen	3753-3763	8 5/8" @ 1537' w/775 sx; 5 1/2" @ 3900' w/225 sx; 2 7/8" tubing @ 3677'. Acidized 3753'-3763' w/2000 gals 7 1/2% NEFE plus ball sealers.
Hoover "ADR" State #2	O 1-17S-33E	Yates Pet. Corp.	Oil	1/8/87	2/23/87	3900 PB 3833	Queen	3762 (2 JS holes)	8 5/8" @ 1505' w/775 sx; 5 1/2" @ 3900' w/300 sx; 2 7/8" tubing @ 3763'. Acidized 3762' w/750 gals 7 1/2% acid.
Billy "AES" State #2	C 12-17S-33E	Yates Pet. Corp.	Oil S/I	8/14/87	10/7/87	4800 PB 3796	Queen	3766-3772	9 5/8" @ 1534' w/600 sx; 7" @ 4800' w/750 sx; 2 3/8" tubing @ 3800'. Acidized 3766'-3772' with 750 gal 7 1/2% NEFE.
Billy "AES" State #1	D 12-17S-33E	Yates Pet. Corp.	Oil	7/12/87	8/15/87	4800 PB 4750	Queen	3767-3784	8 5/8" @ 1550' w/725 sx; 5 1/2" @ 4800' w/515 sx; 2 7/8" tubing @ 3721'. Acidized 3767'-3784' with 1500 gals 7 1/2% acid. Frac w/30,000 gals gel KCL + 50,000# sand.

TABLE 2

PROPOSED SANMAL QUEEN UNIT  
OIL RECOVERY STATISTICS BY WELL

WELL NAME	1986 (BBL)	1987 (BBL)	1988 (BBL)	1989 (BBL)	1990 (BBL)	1991 (BBL)	1992 (BBL)	1993 (BBL) (as of 5/1/93)	CUM OIL TO 5/1/93 (BBL)
Hoover ADR State #1	2108	193	25	14	11	0	0	0	2351
Hoover ADR State #2	0	15053	55	15	14	42	445	177	15801
Hoover ADR State #3	0	19233	19729	8016	4250	4126	2213	705	58272
Hoover ADR State #4	0	26645	30854	15056	8415	8156	3797	1191	94114
Hoover ADR State #5	0	0	1379	1510	852	819	1825	705	7090
Hoover ADR State #6	0	963	9090	4579	2236	2178	2093	750	21889
Sweet Thing AEB St #1	13043	24847	5763	3984	2768	2106	1083	236	53830
Sweet Thing AEB St #2	0	18	119	89	70	55	0	0	351
Billy AES State #1	0	6703	9690	3887	4082	3432	2788	805	31387
Billy AES State #2	0	875	0	0	0	0	0	0	875
	15151	94530	76704	37150	22698	20914	14244	4569	285960

Table 3

**PROPOSED SANMAL QUEEN UNIT  
ECONOMIC SUMMARY**

	Incremental Waterflood
Investment (M\$)	317.07
Operating Expenses (M\$/YR)	282.00
Oil Reserves (MSTB)	204,228
Cost to Develop (\$/BO)	1.55

**PROFITABILITY**

Present Value Profit @ 15%

Discount Rate (M\$)	509.599
Rate of Return (%)	46
Income/Investment Ratio	4.63

Proposed Sanmal Queen Unit  
Investment Summary

Table 4

<u>Description</u>	<u>Cost (\$)</u>
1. <u>Waterflood Plant &amp; Injection Distribution</u>	
2-20'x24'x12' metal building	20,000
1-Triplex PD pump w/75HP	30,000
1200 RPM TEFC Toshiba electric motor, suction & discharge stabilizers	
1-500 BBL Fiberglass Gunbarrel	9,000
1-500 BBL Fiberglass Saltwater Tank	5,800
1-500 BBL Fiberglass Fresh Water Tank	5,800
1-500 BBL Fiberglass Surge Tank	5,800
1-300 BBL Fiberglass Skim Tank	4,100
4300' 2 7/8" Fiberglass injection line @ \$5.40/ft	23,220
4300' injection line ditching @ \$5/ft	21,500
Right-of-way	5,000
Connections	24,000
Labor	12,000
Electrical	10,200
Trucking	<u>3,000</u>
<b>Subtotal</b>	<b>179,420</b>
2. <u>Fresh Water Supply</u>	
1-Fresh water well drilled & Completed w/elec. sub pump & PVC casing	<u>12,000</u>
<b>Subtotal</b>	<b>12,000</b>
3. <u>Injection Well Conversions</u>	
2-Injection Wellhead assemblies	8,000
2-Nickel plated packers	19,200
7,500' x 2 7/8" J-55 IPC tubing	37,000
Clean & acidize 2 wells	<u>15,000</u>
<b>Subtotal</b>	<b>79,200</b>
4. <u>Central Tank Battery</u>	
3-210 BBL Steel Tank	4,050
1-210 BBL Fiberglass Tank	1,300
2-6x20 Heater Treater	11,000
Trucking	2000
Labor	6000
Connections	9,600
Flowlines	6,000
Dirtwork	4,000
Right-of-way	1,000
Electrical	<u>1,500</u>
<b>Subtotal</b>	<b>46,450</b>
<b>Grandtotal</b>	<b>317,070</b>

Table 5 SCHEDULE OF OWNERSHIP

Schedule Showing All Lands and Leases  
 Within the SANMAL QUEEN UNIT  
 LEA COUNTY, NEW MEXICO

TRACT NO.	DESCRIPTION OF LANDS	ACRES	SERIAL NUMBER & EXPIRATION DATE	BASIC ROYALTY AND PERCENTAGE	LESSEE OF RECORD	OVERRIDING ROYALTY & PERCENTAGE	WORKING INTEREST AND PERCENTAGE	BENEFICIARY STATE OF NEW MEXICO
1.	<u>I17S-R33E</u> Sec. 1: S/2NE/4, NW/4SE/4	120	LG-8961-3 HBP	State of NM 1/8	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc. John A. Yates Estate of Peggy A. Yates Estate of Lillie M. Yates Estate of Martin Yates III S.P. Yates Weed Oil & Gas	- 40.75% - 9.75 - 9.75 - 9.75 - 5.00 - 5.00 - 5.00 - 5.00 - 7.75 - 2.25
2.	<u>I17S-R33E</u> Sec. 1: SW/4, NE/4SE/4, SW/4SE/4	240	LG-3345 HBP	State of NM 1/8	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc. John A. Yates Estate of Peggy A. Yates Estate of Lillie M. Yates Estate of Martin Yates III S.P. Yates Weed Oil & Gas	- 21.0000 - 13.0000 - 13.0000 - 13.0000 - 6.6667 - 6.6666 - 6.6667 - 6.6666 - 10.3334 - 3.0000
3.	<u>I17S-R33E</u> Sec. 12: N/2NW/4	80	V-1671 HBP	State of NM 1/6	Yates Petroleum Corporation	None	Yates Petroleum Corporation Yates Drilling Company Abo Petroleum Corporation Myco Industries, Inc.	- 70% - 10 - 10 - 10

Table 6

Proposed Sanmal Queen Unit Equity Parameters						
Tract Number	Cum Oil as of 5/1/93 (STB)	Fraction of Total Cum Oil 5/1/93	Average Prod. Rate (BOPD)	Fraction of Total Avg. Prod. Rate	SoPhiHA (ac-ft)	Fraction of Total SoPhiHA
1	54,181	0.189470	2	0.051282	71.1	0.2475627
2	199,517	0.697710	30	0.769231	175.6	0.6114206
3	<u>32,262</u>	<u>0.112820</u>	<u>7</u>	<u>0.179487</u>	<u>40.5</u>	<u>0.1410167</u>
Total	285,960	1.000000	39	1.000000	287.2	1.0000000

Table 7

Proposed Sanmal  
Queen Unit  
Tract Participation

Tract Number	Fraction of Total Cum Oil 5/1/93	Cum Oil Part. Fraction	Fraction of		Avg. Prod. Rate Part.		Fraction of		SoPhiHA Part. Fraction	Total Tract Allocation (%)
			Total Avg. Prod. Rate	Prod. Rate	Total	SoPhiHA	Total	SoPhiHA		
1	0.189470	0.075788	0.051282		0.015385		0.2475627		0.074269	16.5442
2	0.697710	0.279084	0.769231		0.230769		0.6114206		0.183426	69.3279
3	0.112820	0.045128	0.179487		0.053846		0.1410167		0.042305	14.1279
TOTAL	1.000000	0.400000	1.000000		0.300000		1.0000000		0.300000	100.0000

TABLE 8

SANMAL QUEEN FIELD				
PROPOSED SANMAL QUEEN UNIT				
WORKING INTEREST PARTICIPATION				
TRACT NO.	WORKING INTEREST OWNER	WORKING INTEREST %	TRACT ALLOCATION % OF UNIT	WORKING INTEREST PARTICIPATION % OF UNIT
1	Yates Petroleum Corp.	40.7500	16.5442	6.74176
	Yates Drilling Company	9.7500		1.61306
	Abo Petroleum Corp.	9.7500		1.61306
	Myco Industries, Inc.	9.7500		1.61306
	John A. Yates	5.0000		0.82721
	Estate of Peggy A. Yates	5.0000		0.82721
	Estate of Lillie M. Yates	5.0000		0.82721
	Estate of Martin Yates III	5.0000		0.82721
	S. P. Yates	7.7500		1.28218
	Weed Oil & Gas	2.2500		0.37224
2	Yates Petroleum Corp.	21.0000	69.3279	14.55886
	Yates Drilling Company	13.0000		9.01263
	Abo Petroleum Corp.	13.0000		9.01263
	Myco Industries, Inc.	13.0000		9.01263
	John A. Yates	6.6667		4.62188
	Estate of Peggy A. Yates	6.6666		4.62181
	Estate of Lillie M. Yates	6.6667		4.62188
	Estate of Martin Yates III	6.6666		4.62181
	S. P. Yates	10.3334		7.16393
	Weed Oil & Gas	3.0000		2.07984
3	Yates Petroleum Corp.	70.0000	14.1279	9.8895
	Yates Drilling Company	10.0000		1.4128
	Abo Petroleum Corp.	10.0000		1.4128
	Myco Industries, Inc.	10.0000		1.4128

TABLE 9

PROPOSED SANMAL QUEEN UNIT				
BASIC ROYALTY INTEREST PARTICIPATION				
TRACT NO.	BASIC ROYALTY OWNER	BASIC ROYALTY INTEREST %	TRACT ALLOCATION % OF UNIT	BASIC ROYALTY PARTICIPATION % OF UNIT
1	State of New Mexico	12.50	16.5442	2.0680
2	State of New Mexico	12.50	69.3279	8.6660
3	State of New Mexico	16.67	14.1279	2.3551

TABLE 10

SANMAL QUEEN FIELD  
PROPOSED SANMAL QUEEN UNIT  
NET REVENUE INTEREST PARTICIPATION

Yates Petroleum Corp.	26.87899
Yates Drilling Company	10.47475
Abo Petroleum Corp.	10.47475
Myco Industries, Inc.	10.47475
John A. Yates	4.76796
Estate of Peggy A. Yates	4.76790
Estate of Lillie M. Yates	4.76796
Estate of Martin Yates III	4.76790
S. P. Yates	7.39034
Weed Oil & Gas	2.14557
State of New Mexico	<u>13.08913</u>
TOTAL	100.00000



STATE OF NEW MEXICO  
ENERGY, MINERALS AND NATURAL RESOURCES DEPARTMENT

OIL CONSERVATION DIVISION



POST OFFICE BOX 2088  
STATE LAND OFFICE BUILDING  
SANTA FE, NEW MEXICO 87504  
(505) 827-5800

BRUCE KING  
GOVERNOR

ANITA LOCKWOOD  
CABINET SECRETARY

September 10, 1993

RE: CASE NO. 10794  
Order No. R-9961

Mr. William F. Carr  
Campbell, Carr, Berge & Sheridan  
Attorneys at Law  
Post Office Box 2208  
Santa Fe, New Mexico 87504-2208

Dear Mr. Carr:

Enclosed herewith are two copies of the above-referenced Division order recently entered in the subject case.

Sincerely,

A handwritten signature in cursive script that reads "Florene Davidson".

Florene Davidson  
OC Staff Specialist

Copy of order also sent to:

Hobbs OCD   x    
Artesia OCD   x    
Aztec OCD

PROPOSED SANMAL QUEEN UNIT  
WELL NAME CHANGES

NEW UNIT WELL NAME	PREVIOUS WELL NAME
Sanmal Queen Unit #1	Sweet Thing "AEB" State #2
Sanmal Queen Unit #2	Hoover "ADR" State #5
Sanmal Queen Unit #3	Hoover "ADR" State #3
Sanmal Queen Unit #4	Sweet Thing "AEB" State #1
Sanmal Queen Unit #5	Hoover "ADR" State #1
Sanmal Queen Unit #6	Hoover "ADR" State #6
Sanmal Queen Unit #7	Hoover "ADR" State #4
Sanmal Queen Unit #8	Hoover "ADR" State #2
Sanmal Queen Unit #9	Billy "AES" State #1
Sanmal Queen Unit #10	Billy "AES" State #2

NEW MEXICO STATE LAND OFFICE  
WATER DEVELOPMENT APPLICATION/EASEMENT

Water Development Easement No. WD-29

THIS AGREEMENT, dated this 5th day of Oct, 1992, made and entered into between the State of New Mexico, acting by and through the undersigned, its Commissioner of Public Lands, hereinafter called the Commissioner, and Yates Petroleum Corporation of (address) 105 South Fourth Street, Artesia, N.M., hereinafter called the Grantee.  
88210

The Grantee has filed in the Land Office an application for a Water Development Easement and has tendered the sum of \$330.00, which sum includes the \$30.00 application fee and the first year's annual rental.

In consideration of the foregoing sum, the Commissioner grants to the Grantee a Water Development Easement for the sole and only purpose of appropriation, production, and development of groundwater under the following described lands, and putting such water to beneficial use:

Date Well Completed:

State Land Office Well Number:

State Engineer Office Well Number: Water Rights # L-10,212

<u>TOWNSHIP/RANGE</u>	<u>SECTION/SUBDIVISION</u>	<u>ACRES</u>
T-17-S R-33-E	2 SE $\frac{1}{4}$ SE $\frac{1}{4}$	2.5

(ONE WELL LOCATED WITHIN THE SE $\frac{1}{4}$ SE $\frac{1}{4}$ )

together with the right to make such reasonable use of the land described for each well site as may be necessary to appropriate and develop the water therefrom. The grant under this easement is subject to all the terms and conditions set forth herein:

1. The grant of this Water Development Easement is for a term of five years, commencing October 5 1992, and ending 1997,

unless terminated earlier as provided herein.

2. Additional well sites may be added to this easement by amendment. The term of the easement shall be unaffected by such amendments. Each amendment shall be accompanied by an amendment filing fee of \$ 30.00 and an annual fee of \$300.00 per well.

3. The parties agree that the intention and purpose of this agreement is for the purpose of supplementing wells Water Rights #L-10,212.

4. Grantee shall pay to the Commissioner as consideration \$300.00 per well per year. :

5. Grantee shall act prudently in drilling, developing, appropriating, transporting and using water and water rights from state trust lands. "Prudent" within the context of this provision means that standard of care, operation and action of a reasonable water user acting pursuant to provisions of New Mexico water law.

6. Grantee shall not impair existing appropriations of water on state trust lands within the easement or on state trust lands in adjacent areas.

7. Grantee shall not be required to obtain a separate right of way grant from the Commissioner for pipelines and other facilities within the limited boundaries of the Water Development Easement. Right of way outside the boundaries of this easement must be obtained from the Commissioner where other state lands are crossed.

8. With the consent of the Commissioner and payment of a fee of \$30.00, the Grantee may surrender or relinquish this Water Development Easement, in whole or in part, to the Commissioner; provided, however, that this surrender clause shall become absolutely inoperative immediately and concurrently with the filing of any suit in any court of law or equity by the Commissioner or Grantee or any assignee to enforce any of the terms of this Water Development Easement.

9. Grantee, with the consent of the Commissioner, may assign this Water Development Easement, in whole or in part; provided, however, that no assignment of any undivided interest in the Water Development Easement or any part thereof, or any assignment of less than a legal subdivision, shall be recognized or approved by the Commissioner. Upon approval of the assignment, in writing, by the Commissioner, Grantee shall

stand relieved from all obligations to the Commissioner with respect to the lands embraced in the assignment, and the Commissioner shall likewise be relieved from all obligations to the assignor as to such tracts, and the assignee shall succeed to all of the rights and privileges of the assignor with respect to such tracts and shall be held to have assumed all of the duties and obligations of the assignor to the Commissioner as to such tracts.

10. The Commissioner may cancel this Water Development Easement for nonpayment of the annual consideration or for violation of any of the terms and covenants, herein; provided, however that before any such cancellation shall be made, the Commissioner must mail to the Grantee, by certified mail, addressed to the post office address of Grantee, shown by the records, a thirty day notice of intention to cancel said water easement, specifying the default for which the Water Development Easement is subject to cancellation. No proof of receipt of notice shall be necessary and thirty days after such mailing the commissioner may enter cancellation unless Grantee shall have sooner remedied the default.

11. Grantee shall furnish copies of records and such reports and plats of his operation, including but not limited to well logs, drill cores, and other data relating to hydrology and geological formations as the Commissioner may reasonably deem necessary to his administration of the lands.

12. Grantee may make or place such improvements and equipment upon the granted land as may reasonably be necessary to appropriate the water, and upon termination of this Water Development Easement for any reason, Grantee may remove such improvements and equipment as can be removed without material injury to the premises; provided, however that all sums due the Commissioner have been paid and that such removal is accomplished within (60) days of the termination date or before such earlier date as the Commissioner may set upon thirty (30) days written notice to the Grantee. All improvements and equipment remaining upon the premises after the removal date, as set forth in accordance with this paragraph, shall be forfeited to the Commissioner without compensation. It is expressly understood and agreed that water rights are not improvements of the Grantee. All pipelines constructed hereunder shall be buried below plow depth on tillable soils and no wells shall be drilled within one-fourth miles of any existing well without the prior written permission of the Commissioner.

13. Grantee shall survey each well site and submit a copy of the survey plat to the Commissioner. Grantee shall post on each well a sign with the Grantee's name, Water Development Easement number, State Land Office well number, State Engineer Office permit number and location by legal description.

14. This Water Development Easement is made subject to all the provisions and requirements applicable thereto which are to be found in various acts of the legislature of New Mexico and the rules of the Commissioner of Public Lands of the State of New Mexico, the same as though they were fully set forth herein, and said laws and rules, so far as applicable to this Water Development Easement, are to be taken as a part hereof.

15. All the obligations, covenants, agreements, rights and privileges of this Water Development Easement shall extend to and be binding and inure to the benefit of the lawful and recognized assigns or successors in interest of the parties hereto.

16. Nothing contained herein shall be construed as depriving the lawful holder, present or future of any geothermal resource, oil and gas, grazing, mineral, or business lease, or the holder of any water easement or Water Development Easement, present or future, upon the same lands herein embraced of their right to develop water or to use the land to develop and use the water thereupon or therein in accordance with their leases or easements. That is to say, the doctrine of prior appropriation for beneficial use shall prevail and Grantee shall comply with all laws pertaining to, and with all rules and regulations and procedures of, the State Engineer where the State Engineer has assumed jurisdiction over the water.

17. Payment of all sums due hereunder shall be made at the office of the Commissioner of Public Lands, 310 Santa Fe Trail, P. O. Box 1148, Santa Fe, New Mexico 87504-1148.

18. Grantee, including its heirs, assigns, agents and contractors shall at their own expense fully comply with all laws, regulations, rules, ordinances, and requirements of city, county, regional, state and federal authorities and agencies, in all matters and things affecting the premises and operations thereon which may be enacted or promulgated under the governmental police powers pertaining to public health and welfare, including but not limited to conservation, sanitation, aesthetics, pollution, cultural properties, fire, and environment. Such agencies are not

to be deemed third party beneficiaries hereunder; however, this clause is enforceable by the Commissioner as herein provided or as otherwise permitted by law.

19. Grantee shall save and hold harmless, indemnify and defend the State of New Mexico, the Commissioner of Public Lands, and their agents, employees and officers, in their official and individual capacities, from any and all liability claims, losses, or damages arising out of or alleged to arise out of or indirectly connected with the operations of lessee hereunder, off or on the hereinabove described lands, or the presence on said lands of any agent, contractor or sub-contractor of Grantee.

20. Prior to the Commencement of operations under this Water Development Easement, Grantee shall file a good and sufficient bond with the Commissioner in the amount of \$ 500.00 to secure the payment of such damage as may occur to livestock, range, water, crops or tangible improvements on the subject lands as may be suffered by the Commissioner, a lessee or other person utilizing such lands under an agreement with the Commissioner, by reason of the developments use and occupation of such lands by Grantee. Such bond may be utilized for reclamation of disturbed lands following the operations of Grantee under this easement.

21. Grantee shall file all necessary documents regarding declarations of or permits for appropriation of water with the State Engineer's Office. Grantee shall diligently pursue all such filings in order that water rights are perfected in a timely and efficient manner, pursuant to the Water Rights Agreement (WR-17) entered into previously by the parties. The Commissioner, in his discretion, may assist Grantee in any such filings or proceedings before the State Engineer. Grantee shall additionally act promptly and diligently to protect any water rights developed under this easement from impairment. Grantee shall notify the Commissioner of any actions before or filings with the State Engineer, whether by Grantee or others, which affect water underlying state trust lands within this easement or water rights developed under this agreement. The Commissioner will notify Grantee of any such actions or filings which he has received actual notice.

IN WITNESS WHEREOF, the State of New Mexico has hereunto signed and caused its name to be signed by its Commissioner of Public Lands, thereunto duly authorized with the seal of this office affixed, and Grantee has signed this agreement to be effective the day and year above written.

STATE OF NEW MEXICO

(SEAL)

Jim Baca  
COMMISSIONER OF PUBLIC LANDS

GRANTEE

YATES PETROLEUM CORPORATION  
BY: Clifton R. May  
TITLE PERMIT AGENT

Subscribed and sworn to before me this 29<sup>th</sup> day of September 1992.

My commission expires:

3-1-94

William A. Hollow  
NOTARY PUBLIC



NEW MEXICO STATE LAND OFFICE

WATER RIGHTS AGREEMENT

WATER RIGHTS AGREEMENT NO. WR-29

THIS AGREEMENT, is made and entered into this 5th day of October, 1992 by and between the State of New Mexico, acting by and through the Commissioner of Public Lands, hereinafter called the "Commissioner," and Yates Petroleum Corporation of 105 South Fourth Street, Artesia, New Mexico 88210, hereinafter called "Grantee."

WHEREAS, Grantee has made application to the Commissioner for the right to enter upon state trust lands described in Paragraph 1 below (hereinafter "subject lands"), for the purpose of establishing a point(s) for the discovery, appropriation, and diversion of groundwater to be put to beneficial use; and

WHEREAS, the Commissioner, in his fiduciary role as administrator of the subject lands for a designated beneficiary, has the duty to act exclusively for the interest of that beneficiary pursuant to the New Mexico Enabling Act, Act of June 20, 1910, 36 Stat. 557, Ch. 310; and

WHEREAS, the Commissioner believes that any water right or rights created by Grantee's beneficial use of water discovered, appropriated, and diverted from subject lands should vest in the Commissioner in trust for the designated beneficiary; and

WHEREAS, Grantee also desires and agrees that any water right or rights created by Grantee's beneficial use of water discovered, appropriated and diverted from subject lands shall vest in the Commissioner in trust for the designated beneficiary.

NOW, THEREFORE, in consideration of the mutual covenants made herein, the Commissioner and Grantee agree as follows:

1. The description of the subject state trust lands for discovering and locating water for development is:

<u>TOWNSHIP/RANGE</u>	<u>SECTION/SUBDIVISION</u>	<u>ACRES</u>
17 SOUTH/31 EAST	2/SE4SE4	40.00

2. Any water rights created at any time by the beneficial use of the water by Grantee appropriated from the subject lands shall vest from the date of initiation of activities to appropriate water in the Commissioner of Public Lands, State of New Mexico, on behalf of the particular beneficiary of the subject land. The date of initiation is understood to be the first affirmative step taken to explore for or develop water rights or, in the case of a declared underground water basin, it is understood to be the date of filing an application for a permit to appropriate water. Grantee shall file all necessary documents with the State Engineer to perfect said rights in the name of the Commissioner of Public Lands. The date of initiation shall be utilized by Grantee

in all filings with the State Engineer which may have the effect of establishing a water right priority date. Grantee shall be responsible for protection of the water rights perfected under this and subsequent agreements arising herefrom.

3. The parties agree that the intention of this agreement, and of subsequent agreements arising herefrom, is for the exploration for, development of and appropriation to beneficial use of approximately 100 acre feet of water of a fresh nature (approximately 0 to 1000 mg. dissolved solids/liter) for the purpose(s) of secondary oil recovery, waterflood projects at the following location(s):

<u>TOWNSHIP/RANGE</u>	<u>SECTION/SUBDIVISION</u>	<u>ACRES</u>
PROPOSED SANMAL QUEEN WATERFLOOD UNIT		
17 SOUTH/33 EAST	1 / S $\frac{1}{2}$ and NE $\frac{1}{4}$	480.00
17 SOUTH/33 EAST	2 / SE $\frac{1}{4}$ SE $\frac{1}{4}$	40.00
17 SOUTH/33 EAST	11 / NE $\frac{1}{4}$	160.00
17 SOUTH/33 EAST	12 / N $\frac{1}{2}$ NW $\frac{1}{4}$	80.00
		<u>760.00</u>

Any substantial deviation in water quantity, water quality, place of use or purpose of use from that stated herein shall constitute grounds by the Commissioner to amend, modify, renegotiate, cancel or otherwise change this agreement.

4. Upon the location and identification by Grantee of well sites for appropriation and development of water and upon the timely filing of an application the Commissioner will issue Grantee a Water Development Easement for well site location(s) for the purpose of appropriating and developing water for b

use.

5. The consideration paid by Grantee to the Commissioner for the granting of the use of water from the sites identified by the Water Development Easement shall be the \$ 300.00 per well annual fee referred to in Paragraph 4 above.

6. The terms of this agreement are binding upon the successors in interest, heirs, devisees, agents and assigns of the Commissioner and Grantee.

Witness the hands and seal of the parties hereto the day and year first written above.

YATES PETROLEUM CORPORATION  
GRANTEE  
By: Clifton R. May  
Clifton R. May  
Permit Agent  
TITLE

Subscribed and sworn to before me this 14th day of September, 1992.

My Commission Expires: March 9, 1996

Rhonda A. Becker  
NOTARY PUBLIC

STATE OF NEW MEXICO

Jim Baca  
COMMISSIONER OF PUBLIC LANDS