

Mobil Exploration & Producing U.S. Inc.

P.O. BOX 633
MIDLAND, TEXAS 79702

April 14, 1989

MIDLAND DIVISION

New Mexico Oil Division
P.O. Box 2088
Santa Fe, New Mexico 87501

Attention: Mr. William J. LeMay

EXCEPTION TO RULE 303(A)
BRIDGES STATE #104
VACUUM UPPER PENN AND
VACUUM WOLFCAMP POOLS
LEA COUNTY, NEW MEXICO

Gentlemen:

Mobil Exploration & Producing U.S. Inc., as Agent for Mobil Producing Texas & New Mexico Inc.(MEPUS), requests administrative approval to downhole commingle oil production from the Vacuum Upper Penn and the Vacuum Wolfcamp Pools, in the subject well, located in Unit B, Section 25, T-17-S, R-34-E, Lea County, New Mexico.

The well is currently producing 23 BOPD and 25 BWPD from the Upper Penn. The Wolfcamp was shut-in in 1967. It is recommended that we stimulate the Wolfcamp and put the zone on production.

The subject well meets all prerequisites for commingling, as set out in Rule 303(C). The ownership of these zones is common, and they have been successfully commingled within the Mobil Bridges State and adjacent leases with no incompatibility of fluids found.

In support of this application, the following is submitted:

1. Location Plat
2. Data sheet for both zones
3. Computation of relative values for hydrocarbons
4. Present and proposed wellbore sketches
5. Well test curve, plats and C-116 for the Upper Penn

New Mexico Oil Division
Bridges State #104
Lea County, New Mexico

-2-

April 14, 1989

6. History of wellbore
7. List of offset operators.
8. Notice of application for Downhole Commingle

Although bottom hole pressure data is not available for these two zones, no crossflow is anticipated, since the common pump will keep fluid levels low. Upon completion of the Wolfcamp, allocation of production will be submitted with the potential test.

All offset operators have been notified of MEPUS' request by copy of this application.

In conclusion, MEPUS believes that approval of this request will result in a more efficient recovery of hydrocarbons and will extend the productive life of both zones, thereby preventing waste. If any further information is needed, please call J. W. Dixon at (915) 688-2452.

Sincerely,



M. E. Sweeney
Environmental & Regulatory Manager

Mobil Exploration & Producing U.S. Inc.
as Agent for
Mobil Producing Texas & New Mexico Inc.

JWD/arr

attachments

cc: NMOCD - Hobbs
Offset Operators

Submit to Appropriate
District Office
State Lease - 6 copies
Fee Lease - 5 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-101
Revised 1-1-89

OIL CONSERVATION DIVISION

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

API NO. (assigned by OCD on New Wells)

5. Indicate Type of Lease

STATE ☒ FEE ☐

6. State Oil & Gas Lease No.

B-1520

APPLICATION FOR PERMIT TO DRILL, DEEPEN, OR PLUG BACK

1a. Type of Work:

DRILL ☐ RE-ENTER ☐ DEEPEN ☐ PLUG BACK ☒

b. Type of Well:

OIL WELL ☒ GAS WELL ☐ OTHER ☐

SINGLE ZONE ☐ MULTIPLE ZONE ☒

7. Lease Name or Unit Agreement Name

Bridges State

2. Name of Operator

Mobil Producing Tx. & N.M. Inc.

8. Well No.

104

3. Address of Operator

c/o Mobil Exploration & Producing U.S. Inc.
P.O. Box 633, Midland, Texas 79702

9. Pool name or Wildcat

Vacuum Wolfcamp

4. Well Location

Unit Letter B : 520' Feet From The FNL Line and 2120' Feet From The FEL Line

Section 25 Township T-17-S Range R-34-E NMPM Lea County

10. Proposed Depth

9552-9944'

11. Formation

Wolfcamp

12. Rotary or C.T.

Rotary

13. Elevations (Show whether DF, RT, GR, etc.)

KB: 4009' (11' AGL)

14. Kind & Status Plug. Bond

Active Blanket

15. Drilling Contractor

Unknown

16. Approx. Date Work will start

ASAP

17. PROPOSED CASING AND CEMENT PROGRAM

SIZE OF HOLE	SIZE OF CASING	WEIGHT PER FOOT	SETTING DEPTH	SACKS OF CEMENT	EST. TOP
1 5-5/8"	13-3/8"	48	365'	300'	surface
11-3/4"	9-5/8"	32.5 - 40	5000'	5125'	305'
8-5/8"	7"	23, 26	4824 - 10200'	875'	TOL
8.76"	7"	26	56' - 4824'	420'	56'

1. MIRU Release Paker, POOH W/tbg. & pkr.
2. RIH W/tbg. & seals. Sting into pkr. @ 9970'. Stimulate Upper Penn. 10,016-10,116' w/5500 gal 15%
3. PHHO. RIH w/tbg & pkr. Set pkr. @ 8900'. Stimulated Wolfcamp 9552-9944' w/3000 gal 15%
4. Release pkr., POOH w/tbg. & pkr.
5. RIH w/long tbg. string & pkr. & TAC (dual). Set prod. pkr. @ $\pm$ 9200'. RIH w/short tbg. string, string into dual TAC.
6. RIH w/both rod strings & pump. POP. Allocated DHC Wolfcamp & Upper Penn production.

IN ABOVE SPACE DESCRIBE PROPOSED PROGRAM: IF PROPOSAL IS TO DEEPEN OR PLUG BACK, GIVE DATA ON PRESENT PRODUCTIVE ZONE AND PROPOSED NEW PRODUCTIVE ZONE. GIVE BLOWOUT PREVENTER PROGRAM, IF ANY.

I hereby certify that the information above is true and complete to the best of my knowledge and belief.

SIGNATURE

M. E. Sweeney

TITLE

Manager Environmental & Regulatory
Mobil Producing Texas & New Mexico Inc.
acting by and through its agent
Mobil Exploration & Producing U.S. Inc.

DATE

4-14-89

TYPE OR PRINT NAME

TELEPHONE NO. (915) 688-2452

(This space for State Use)

APPROVED BY

TITLE

DATE

CONDITIONS OF APPROVAL, IF ANY:

Submit to Appropriate
District Office
State Lease - 4 copies
Fee Lease - 3 copies

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-102
Revised 1-1-89

OIL CONSERVATION DIVISION

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240

DISTRICT II
P.O. Drawer DD, Artesia, NM 88210

DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

WELL LOCATION AND ACREAGE DEDICATION PLAT

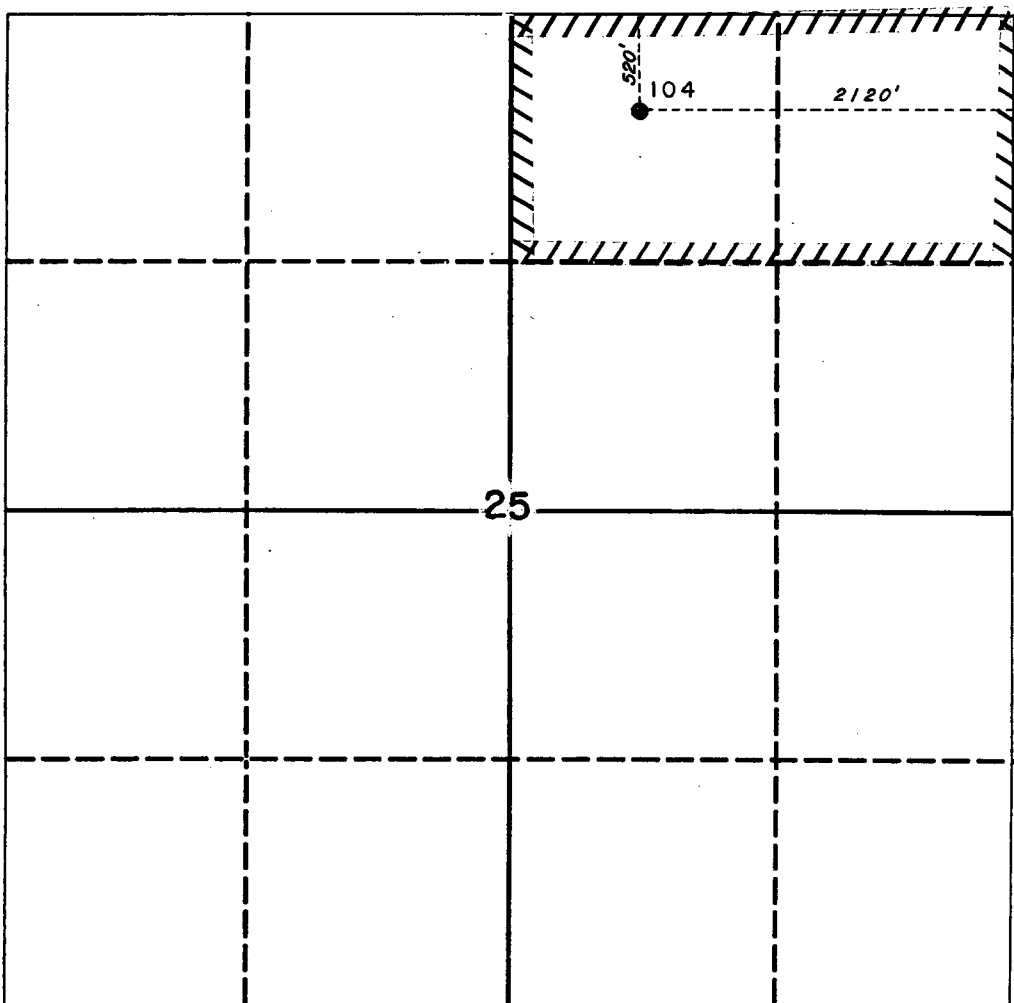
All Distances must be from the outer boundaries of the section

Operator Mobil Producing Tx. & N. M. Inc.			Lease Bridges State		Well No. 104
Unit Letter B	Section 25	Township T-17-S	Range R-34-E	County Lea	
Actual Footage Location of Well: 520' feet from the North line and 2120' feet from the East line					
Ground level Elev. 3998'	Producing Formation Wolfcamp	Pool Vacuum Wolfcamp			Dedicated Acreage: 80 Acres

1. Outline the acreage dedicated to the subject well by colored pencil or hatchure marks on the plat below.
2. If more than one lease is dedicated to the well, outline each and identify the ownership thereof (both as to working interest and royalty).
3. If more than one lease of different ownership is dedicated to the well, have the interest of all owners been consolidated by communitization, unitization, force-pooling, etc.?
☐ Yes ☐ No If answer is "yes" type of consolidation _____

If answer is "no" list the owners and tract descriptions which have actually been consolidated. (Use reverse side of this form if necessary.) _____

No allowable will be assigned to the well until all interests have been consolidated (by communitization, unitization, forced-pooling, or otherwise) or until a non-standard unit, eliminating such interest, has been approved by the Division.



OPERATOR CERTIFICATION

I hereby certify that the information contained herein is true and complete to the best of my knowledge and belief.

Signature

M. E. Sweeney

Printed Name

Manager Environmental & Regulatory
Position

Mobil Producing Texas & New Mexico Inc.
Company

acting by and through its agent
Mobil Exploration & Producing U.S. Inc.

Date

4-14-89

SURVEYOR CERTIFICATION

I hereby certify that the well location shown on this plat was plotted from field notes of actual surveys made by me or under my supervision, and that the same is true and correct to the best of my knowledge and belief.

Date Surveyed

Signature & Seal of
Professional Surveyor

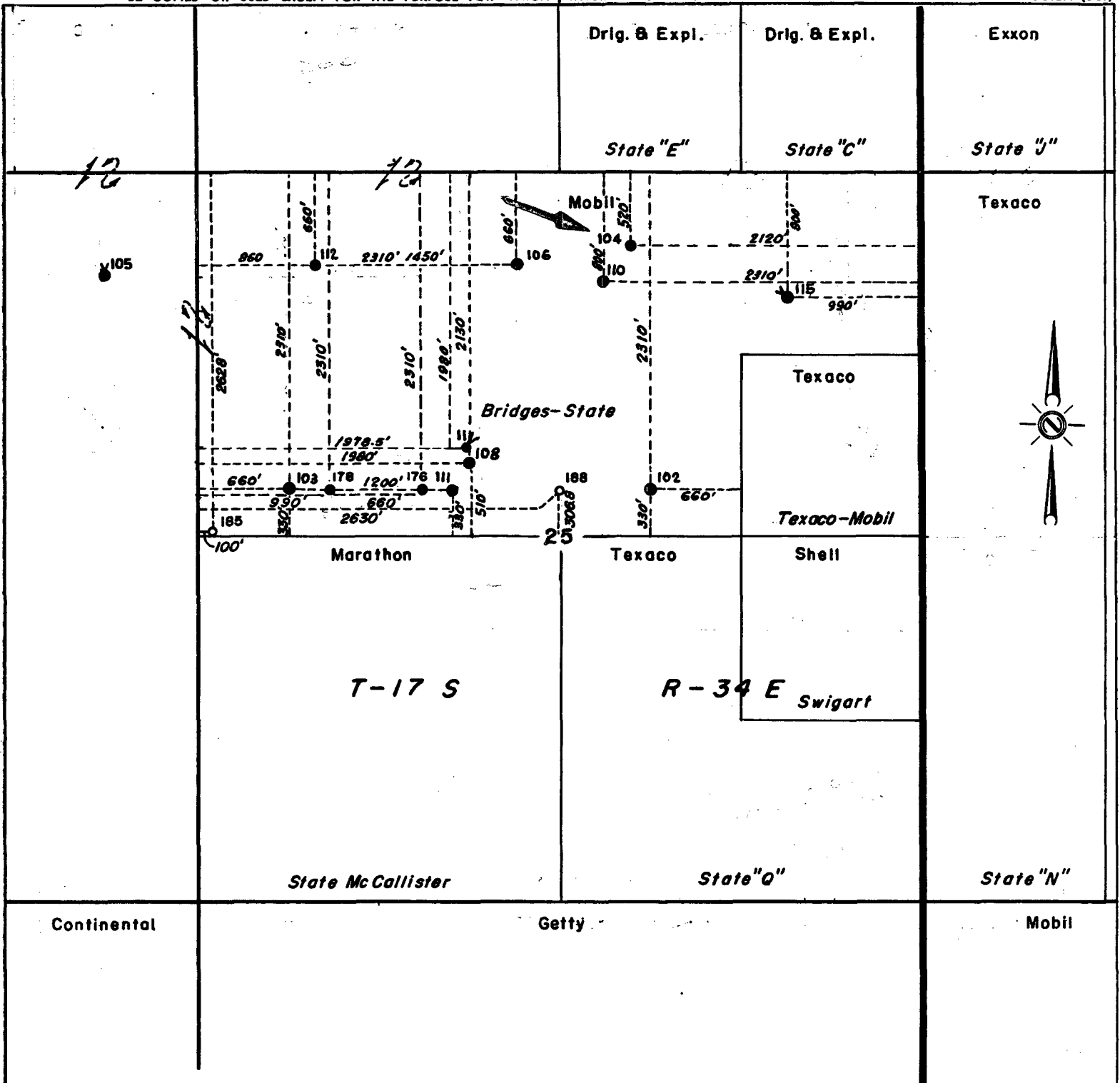
Certificate No.

0 330 660 990 1320 1650 1980 2310 2640 2000 1500 1000 500 0

THIS DRAWING AND ALL INFORMATION THEREON IS THE PROPERTY OF SOCONY MOBIL OIL CO., INC. AND SHALL NOT BE COPIED OR USED EXCEPT FOR THE PURPOSE FOR WHICH

IT IS EXPRESSLY FURNISHED. THE DRAWING AND ANY COPIES THEREOF (PARTIAL OR COMPLETE) SHALL BE RETURNED TO THE OWNER ON DEMAND.

CO7214 (8-61)



Reserve None Permit depth _____

Special Instructions _____

Date work is commenced _____ 19 _____ Supt. _____

Location approved by _____ Plat by _____ Surveyed by _____

THE STATE OF TEXAS
COUNTY OF ~~HARRIS~~ MIDLAND

I hereby certify that this plat truly represents conditions as they actually exist on this lease; that said plat which is drawn to the scale indicated hereon, is to the best of my knowledge true and correct; that it accurately shows said lease with all wells on same; that number and locations of said wells are as indicated hereon; and that this plat correctly reflects all pertinent and required data.

Mobil Producing Texas & New Mexico Inc. Houston, Texas

LEASE Bridges - State
WELL NO. 104 DATE 4/12/89 19 _____
DISTRICT Hobbs LEASE NO. NM-569
TOTAL ACRES IN LEASE 5281.38 ACRES COVERED BY PLAT _____
DESCRIPTION Lot 2, SW NE 1/4 Sec. 3; NE 1/4 Sec. 10; S 1/2 Sec. 11; E 1/2 & SW 1/4 Sec. 12; W 1/2 & NE 1/4 Sec. 13; Sec. 14; E 1/2 Sec. 15; N 1/2 & SE 1/4 Sec. 23; W 1/2 NW, SE NW, & SW 1/4 Sec. 24, NW 1/4, N 1/2 NE & SW 1/4 NE 1/4 Sec. 25; Sec. 26; E 1/2 Sec. 27; T. 17 S., R. 34 E.; E 1/2 Sec. 25; & E 1/2 Sec. 34; T. 16 S., R. 34 E.

Lea County, New Mexico

DRAWN A. D. Bond DATE 3-12-62 FIELD Vacuum
SCALE 1"=1,000' FILE NO. 45-3

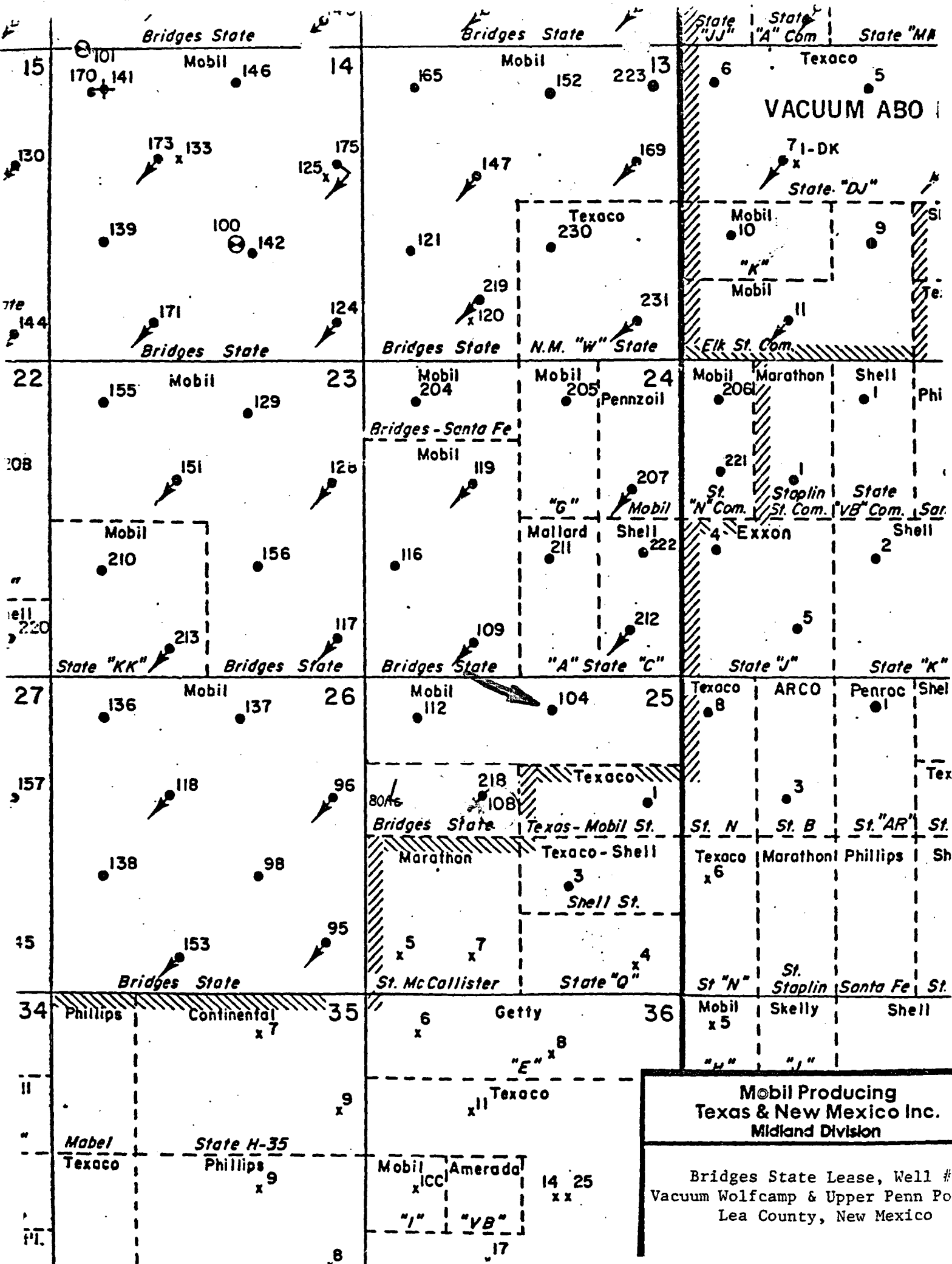


EXHIBIT "A"

DATA SHEET

Application for exception to Rule 303(a) New Mexico Oil Conservatoin Commission's Rules & Regulations allowing downhole commingling of dually completed oil wells by administrative procedure (Order No. R-3845)

1. Lease Name Bridges State
2. Well Number 104
3. Well Location Unit B, 520' FNL & 2120' FEL
Sec 25 Township 17S Range 34E
Lea County, New Mexico
4. Upper Zone Wolfcamp
5. Completion Interval 9552 - 9944'
6. Lower Zone Upper Pennsylvanian
7. Completion Interval 10,016 - 10,116'
8. Current Productivity Test Summary

	Upper Zone Wolfcamp (PROPOSED)	Lower Zone Upper Penn
Prod Method	Pump	Pump
BOPD	10	23
MCFPD	10	39
BWPD	25	25
GOR	1000	1696
GOR Limit	2000	2000

9. Bottom-hole pressure of Upper Zone Not Available
10. Bottom-hole pressure of Lower Zone Not Available
11. Fluid characteristics of Each Zone Both zones produce intermediate crude and expect no problems in producing the commingled waters.

EXHBIT "B"

COMPUTATION OF RELATIVE VALUES
OF THE HYDROCARBON PRODUCTION
BEFORE AND AFTER DOWNHOLE COMMINGLING
(STATEWIDE RULE 303-C-2-H)

Lease and Well No. Bridges State #104

	<u>UPPER POOL</u> <u>(PROPOSED)</u>	<u>LOWER POOL</u>	<u>COMMINGLED</u>
Pool Name	Vacuum Wolfcamp	Vacuum Upper Penn	
Gravity, API	38.7	39.1	38.9
Selling Price/BO	17.50	17.50	17.50
Daily Production/BO	10	23	33
Daily Income	\$175	\$402.50	\$577.50

TOTAL DAILY INCOME (POOLS SEPARATED) * \$402.50

Net difference from downhole commingling based upon current
well tests = \$175/day gain.

- * This well was, upon completion in 1965, a triple completion.
The Wolfcamp was abandoned due to frequent mechanical problems
in pumping through three tubing strings. The downhole
commingle permit would accelerate the recovery of the reserves
found in the Wolfcamp.

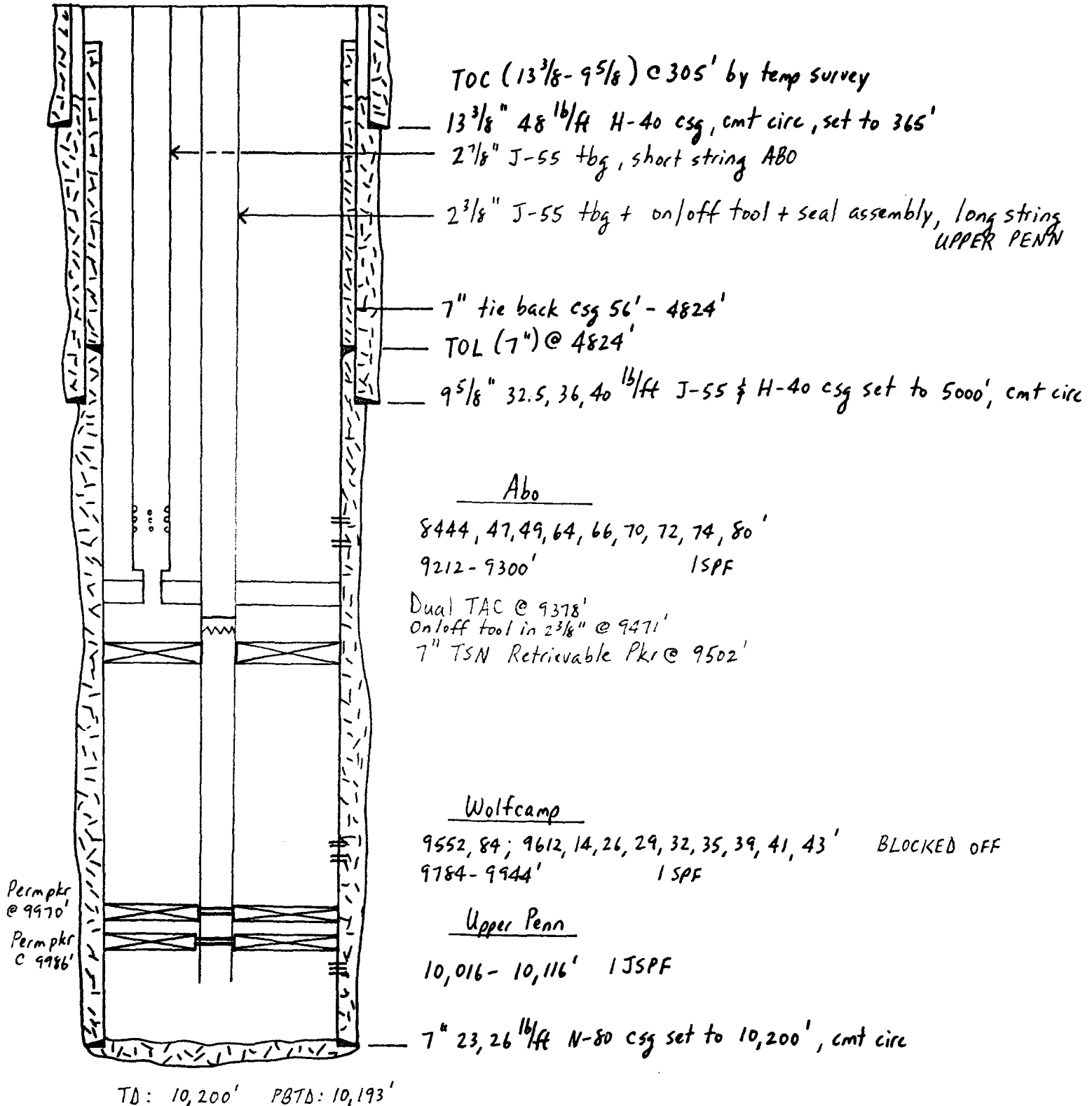
DATE 3-23-89 WELL NO. 104 LEASE Bridges State / North Vacuum Abo Un.
FIELD Vacuum Abo North
FIELD Vacuum Upper Penn LOCATION B Sec 25 T17S R34E 520' ENL & 2120' FEL

Lea County, New Mexico

SIGNED D. G. Elwood

GL 3998'
DF 4008'
KB 4009'
ZERO KB (11' AGL)

PRESENT WELLBORE DIAGRAM

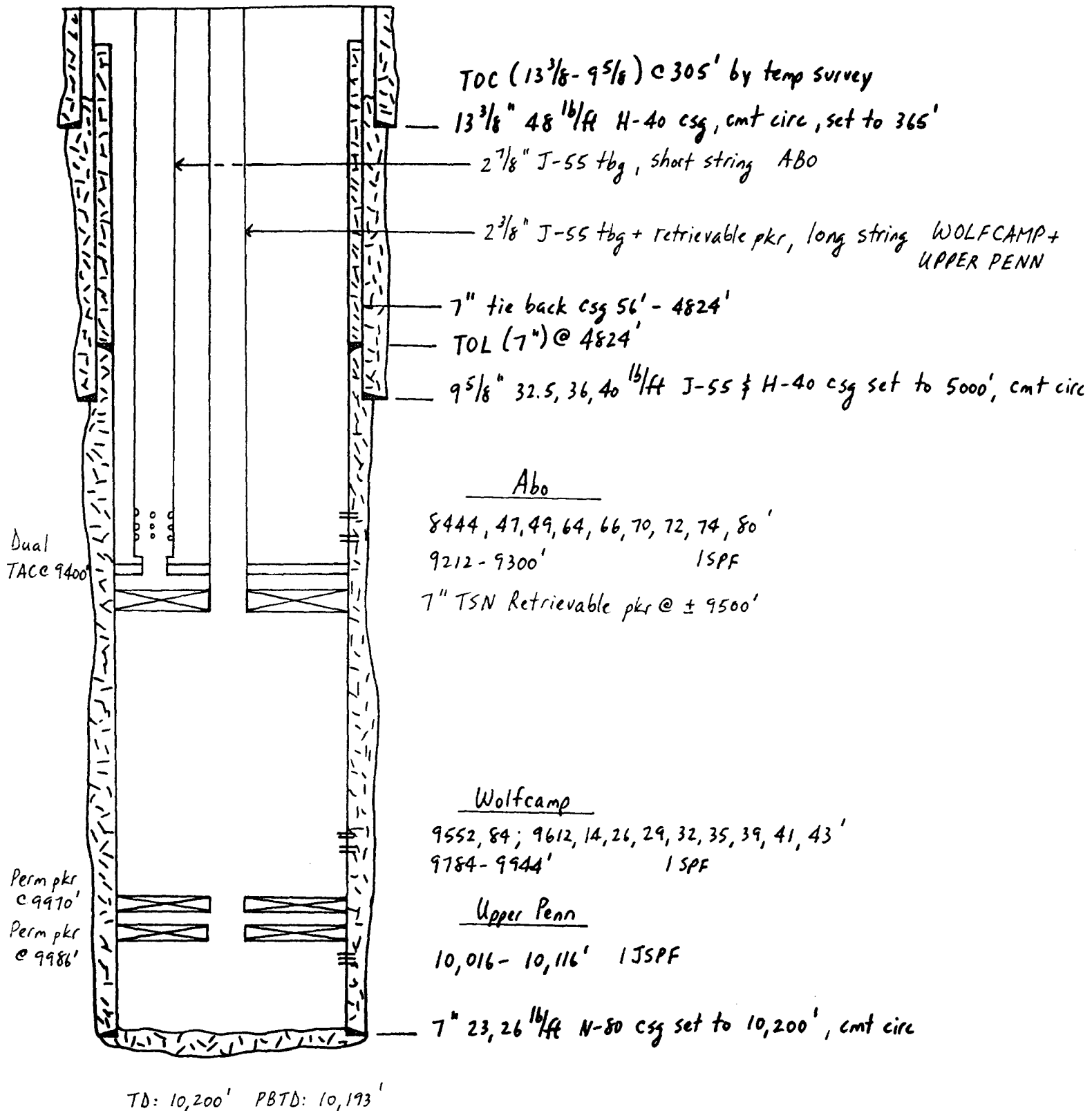


DATE 3-23-89 WELL NO. 104 LEASE Bridges State / North Vacuum Abo
 Vacuum Abo North
 FIELD Vacuum Upper Penn LOCATION B Sec 25 T17S R34E 520' FNL & 2120' FEL
 Vacuum Wolfcamp
 Lea County, New Mexico

SIGNED D. G. Elwood

GL 3998'
 DF 4008'
 KB 4009'
 ZERO KB (11' AGL)

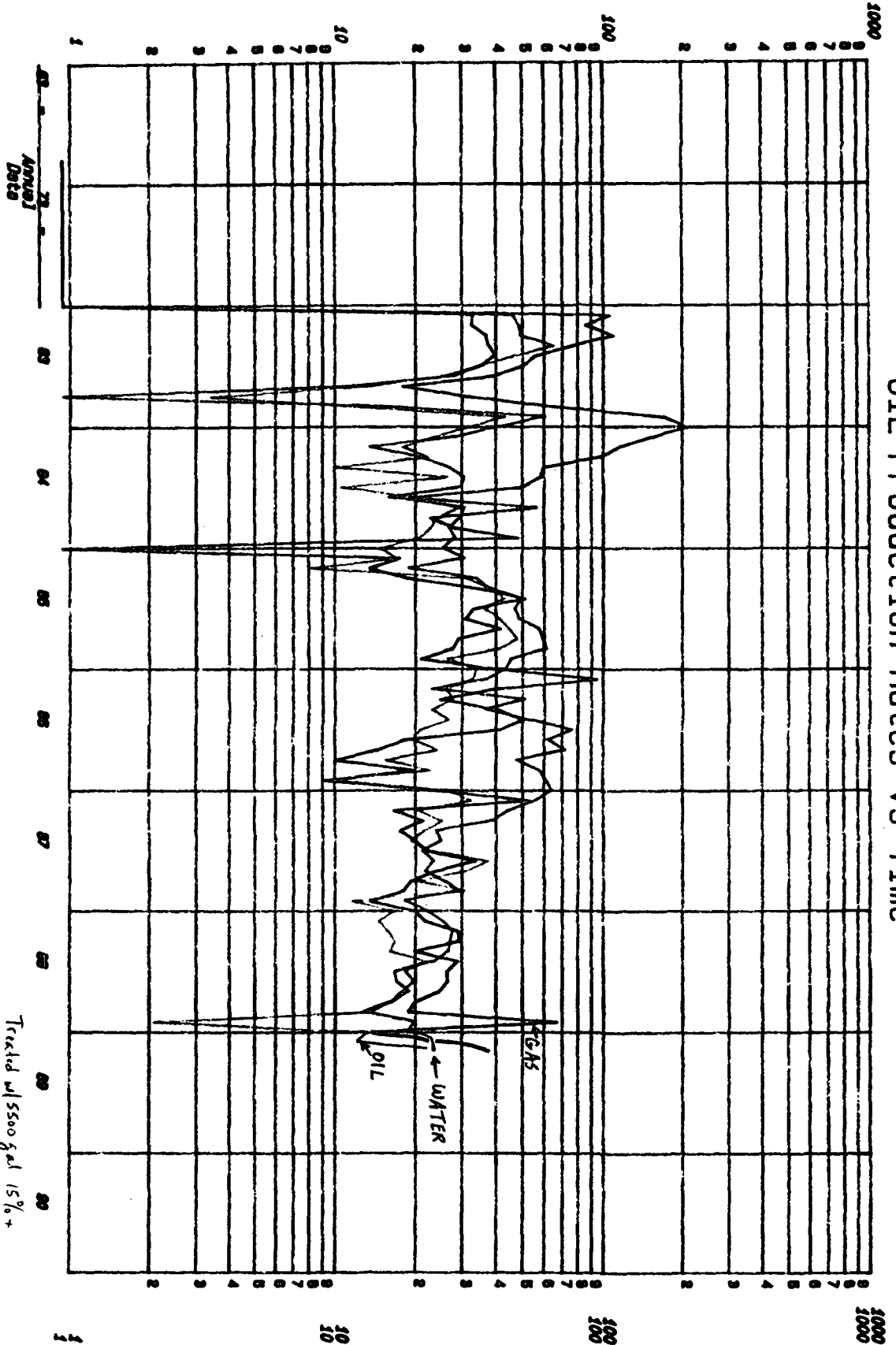
PROPOSED WELLBORE DIAGRAM



DAILY OIL PRODUCTION

(BBL/DAY)

OIL Production Rates vs Time



DAILY GAS PRODUCTION

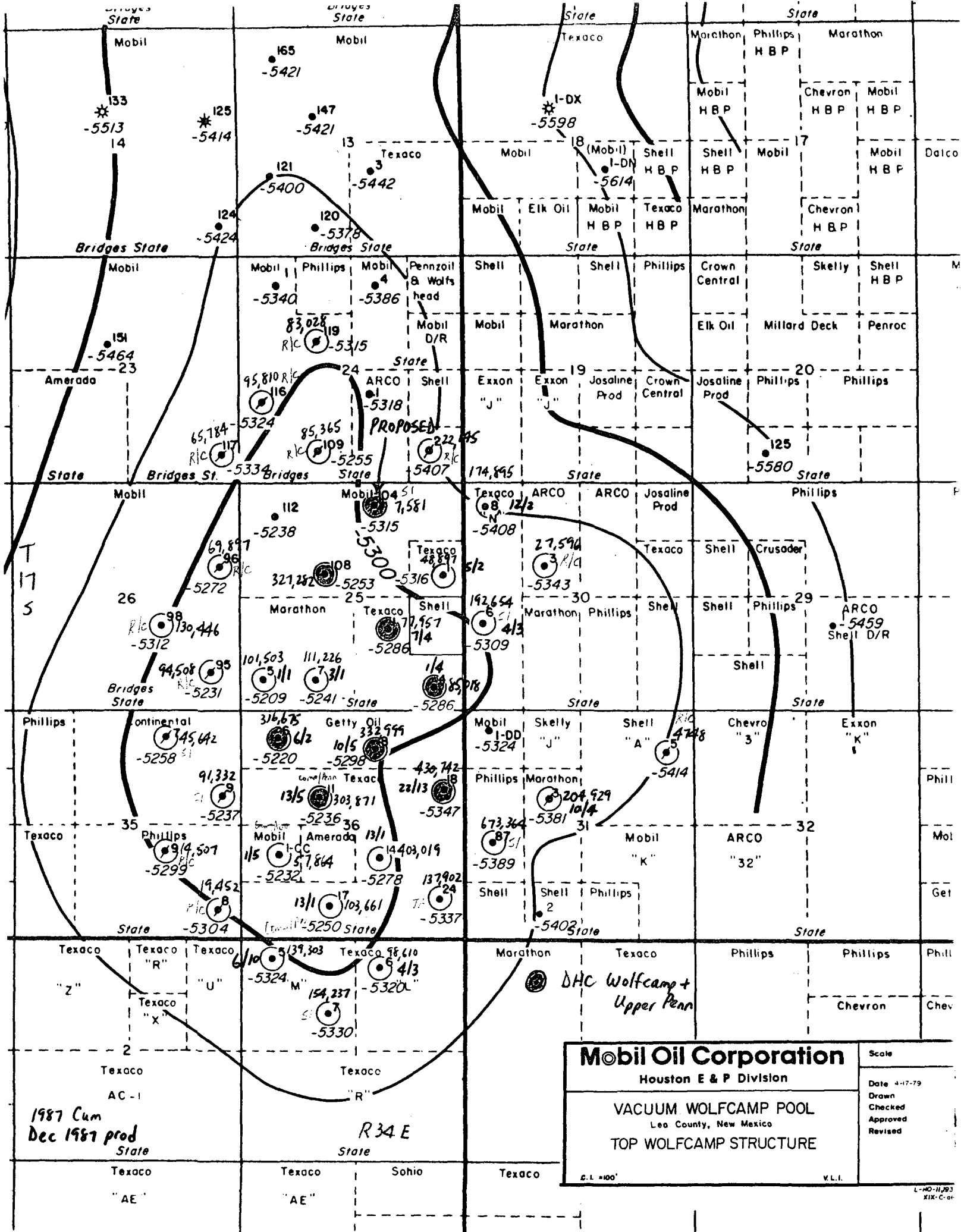
(MCF/DAY)

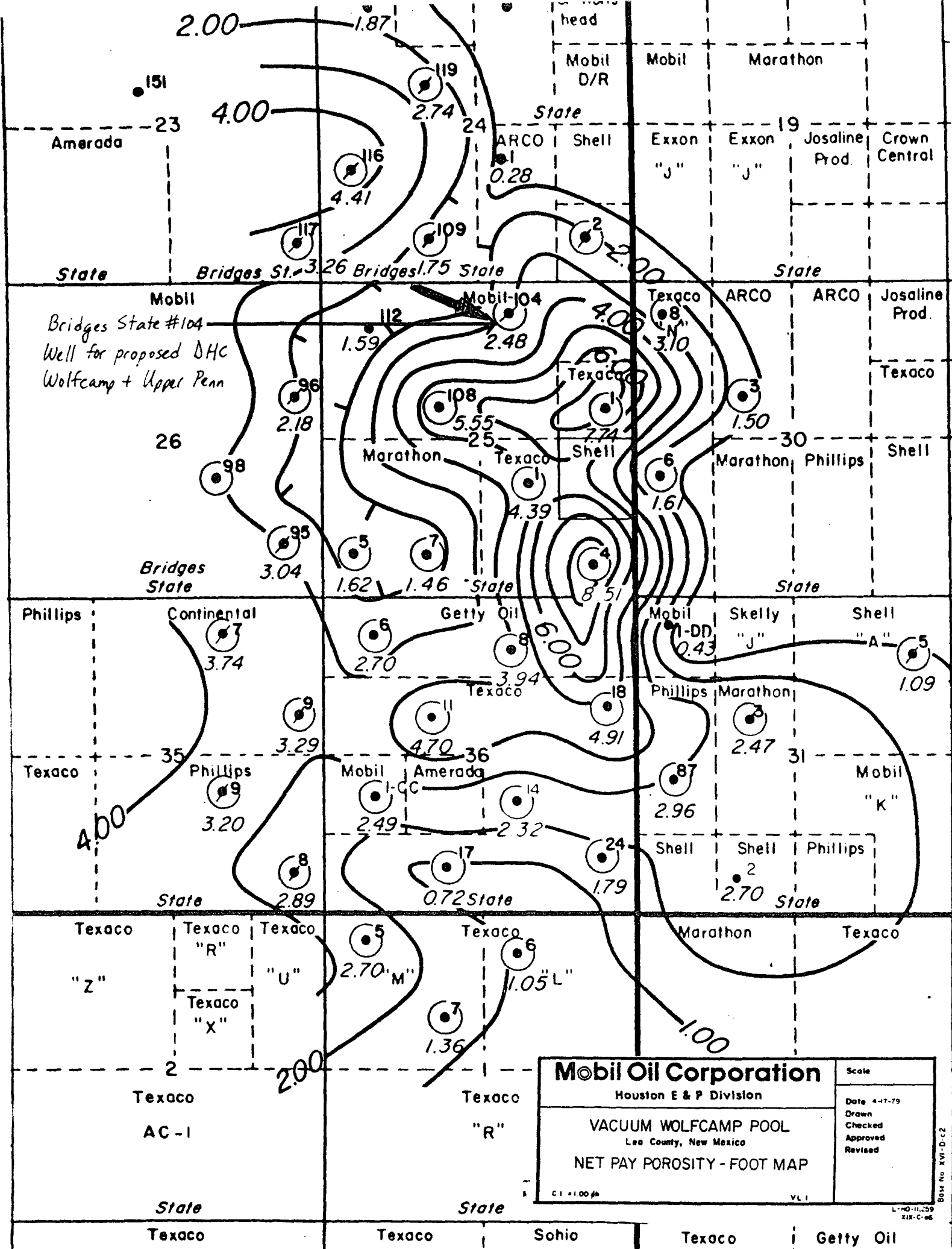
DAILY WATER PRODUCTION

(BBL/DAY)

MPTM	
MIDLAND DIVISION - HOBBS DISTRICT	
Field	VACUUM UPPER PENN
Lease	BRIDGES STATE
Operator	MOBIL PRODUCING TEXAS INC
County	LEA
State	TX
Current Date	02-17-89
Well	104

Treated w/ 5500 gal 15% +
PCBS 3-10-89





Submit 2 copies to Appropriate District Office.

DISTRICT I
P.O. Box 1980, Hobbs, NM 88240
DISTRICT II
P.O. Drawer DD, Artesia, NM 88210
DISTRICT III
1000 Rio Brazos Rd., Aztec, NM 87410

State of New Mexico
Energy, Minerals and Natural Resources Department

Form C-116
Revised 1/1/89

P.O. Box 2088
Santa Fe, New Mexico 87504-2088

OIL CONSERVATION DIVISION

GAS - OIL RATIO TEST

Operator **Producing TX & NM, Inc.** Pool **Vacuum Upper Penn** County **Lea**

~~Address~~ **e/o Mobei Exploration & Producing U.S. Inc.**
~~P.O. Box 633, Midland, Tx 79702~~

LEASE NAME	WELL NO.	LOCATION				DATE OF TEST	STATUS	CHOKE SIZE	TBG. PRESS.	DAILY ALLOW-ABLE	LENGTH OF TEST HOURS	PROD. DURING TEST				GAS - OIL RATIO CU.FT/BBL.
		U	S	T	R							WATER BBL.S.	GRAV. OIL	OIL BBL.S.	GAS M.C.F.	
Bridges State	104	B	25	17S	34E	3-6-89					24	32	58.8	26	50	1923

Instructions:

During gas-oil ratio test, each well shall be produced at a rate not exceeding the top unit allowable for the pool in which well is located by more than 25 percent. Operator is encouraged to take advantage of this 25 percent tolerance in order that well can be assigned increased allowables when authorized by the Division.

Gas volumes must be reported in MCF measured at a pressure base of 15.025 psia and a temperature of 60° F. Specific gravity base will be 0.60.

Report casing pressure in lieu of tubing pressure for any well producing through casing.

(See Rule 301, Rule 1116 & appropriate pool rules.)

I hereby certify that the above information is true and complete to the best of my knowledge and belief.

Signature Shirley Todd

Printed name and title
Shirley Todd

Date 4-7-89

(915) 688-2585

Telephone No. _____

WELL HISTORY
NVAU #104 & Bridges State #104

- 8-12-65 Well completed. DST Abo, Wolfcamp, Upper Penn.
Perfed Upper Penn 10016-116' 1 JSPF.
NMOCD Pot Upper Penn: F 264/0
Perfed Wolfcamp 9784-9944' 1 JSPF, acidized
w/4000 gal 15%.
NMOCD Pot Wolfcamp: F 188/41
Perfed Abo 9212-9300' 1 JSPF, acidized
w/4000 gal 15%.
NMOCD Pot Abo: P 74/23
Triple completion.
- 3-3-67 Attempt SWF Wolfcamp, comm. Fracced Wolfcamp
w/12,000 gal gelled brine + 2000 lbs 20/40 sd +
5300 lbs glass beads. Added Wolf perfs 9552,
84; 9612, 14, 26, 29, 32, 35, 39, 41, 43'
1 JSPF 11 holes. Acidized 9552-9643' w/6000
gal 28% + 4000 gal 5% NE acid. Acidized Abo
9212-9300' w/6000 gal 28% NE + 4000 gal 5% NE
acid. Added Upper Abo perfs 8444, 47, 49, 64,
66, 70, 72, 74, 80' 1 JSPF 9 holes. Acidized
w/6000 gal 28% + 4000 gal 5%. Fished junk out
of well. Pumped 50 bbls 9.4 ppg mud into
Wolfcamp (Why???)
Test: Penn: F 317 BO/ 0 BW
Abo: P 150 BO/0 BW
Wolfcamp: TA'd
- 12-13-72 Fished stuck tbg. Swedged csg 2372-2402'. Ran
7" 23 lb/ft N-80 csg 56'-4823', cmt circ.
Acidized Abo w/10000 gal 15% acid. Ran dual
equipment.
Test: Abo: P 80/1 (before 48/6)
Upper Penn: P 102/23
- 10-6-83 Fished tbg + pkr. Test: Abo: P 121/23
Upper Penn: P41/67
- 11-11-86 Repaired tbg leak.
Abo: P 80/20 (before P 80/20)
Upper Penn: P 26/47 (before P 20/50)
- 3-8-89 Tbg leak across Wolfcamp perfs.

MOBIL PRODUCING TEXAS & NEW MEXICO INC.
BRIDGES STATE #104
VACUUM WOLFCAMP AND UPPER PENN FIELDS
LEA COUNTY, NEW MEXICO

OFFSET OPERATORS

Marathon Oil Company
P.O. Box 552
Midland, Texas 79702

Texaco Producing, Inc.
P.O. Box 3109
Midland, Texas 79702

Notice of Application for Downhole Commingle

APPLICANT: Mobil Exploration & Producing U.S. Inc.
P. O. Box 633
Midland, Texas 79702
Telephone: 915-688-2452
Contact: J. W. Dixon

PURPOSE: Downhole commingle Wolfcamp and Upper Penn
zones in Bridges State #104 wellbore
Location B Sec 25 - T17S - R34E

OPERATIONAL CHARACTERISTICS:

Produce through one tubing string and using one
rod pump. Formation fluids are commingled at the
downhole pump.

Interested parties may file objections or request a hearing
with the Oil Conservation Division, P. O. Box 2088, Santa Fe,
New Mexico 87503, within 15 days of this notice.

RECEIVED

APR 08 1989

ENW 8 8 8



STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

4-17-89

GARREY CARRUTHERS
GOVERNOR

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88241-1980
(505) 393-6161

OIL CONSERVATION DIVISION
P. O. BOX 2088
SANTA FE, NEW MEXICO 87501

RE: Proposed:

MC _____
DHC X _____
NSL _____
NSP _____
SWD _____
WFX _____
PMX _____

RECEIVED

APR 20 1989

OIL CONSERVATION DIV.
SANTA FE

Gentlemen:

I have examined the application for the:

Mobil Prod TX + NM Inc. Budger St #104 - B 25-17-34
Operator Lease & Well No. Unit S-T-R

and my recommendations are as follows:

OK

Yours very truly,

Jerry Sexton
Jerry Sexton
Supervisor, District 1

/ed