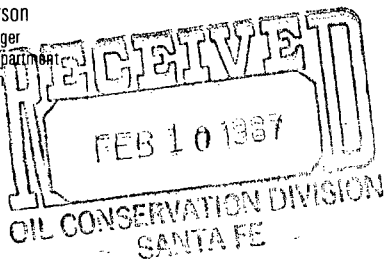




Chevron U.S.A. Inc.
P.O. Box 670, Hobbs, NM 88240

R. C. Anderson
Division Manager
Production Department
Hobbs Division



January 7, 1987

APPLICATION TO DOWN HOLE COMMINGLE
W. D. GRIMES (NCT-B) WELL NO. 7
LOCATED IN UNIT B, SECTION 33
T-18-S, R-38-E,
LEA COUNTY, NEW MEXICO

W. J. Lemay
Oil Conservation Division
P. O. Box 2088
Santa Fe, New Mexico 87501

Gentlemen:

Pursuant to the provision of Statewide Rule 303-C, Chevron respectfully requests administrative approval to commingle production within the subject wellbore from the Blinebry and Drinkard pools. The W. D. Grimes (NCT-B) Well No. 7 was drilled to the Drinkard in 1970. After testing in the Drinkard Formation the well was plugged back and tested in the Blinebry. The well has produced from the Blinebry Formation from 1970 to the present and is now a marginal producer. In the interest of conservation and prevention of waste, we propose to down hole commingle the Blinebry and Drinkard in this wellbore.

Enclosed is pertinent data supporting this application as outlined in Rule No. 303-C. If additional information is necessary, please contact William Pape at (505) 393-4121.

Yours very truly,

R. C. ANDERSON

WCP:bdw

Attachments

cc: OCD - Hobbs
Offset Operators
State Land Office

- 1) Operator: Chevron U. S. A. Inc., P. O. Box 670 Hobbs, New Mexico 88240
- 2) Lease, Well and Location: W. D. Grimes (NCT-B) Well No. 7, Unit B. 450 FNL, 2160 FEL, Section 33-T18S-R38E.
- 3) Producing Zones: Blinebry and Drinkard.
- 4) Decline Curve: The Drinkard is expected to decline at 12% per year after an IP of 7 BOPD with 80 MCFGPD. The Blinebry is expected to decline at 12% per year. Current production is 8 BOPD and 10 MCFGPD.
- 5) Bottom Hole Pressure: The Drinkard has a calculated BHP of 1581 psi at a depth of 6878'. The Blinebry has a calculated bottom hole pressure of 218 psi at a depth of 5918'.
- 6) Fluid Characteristics: The Blinebry and Drinkard are currently surface commingled at the battery under Commingling Order R-4079-C. To date there has been no evidence of fluid incompatibility.
- 7) Well History: The subject well was spudded 2-2-70 and drilled to a total depth of 7100'. 13 3/8" surface casing was set at 368' and cement circulated to surface. 9 5/8" intermediate casing was set at 3859' and cement circulated to surface. 7" casing was set at 7099' and cemented with 485 sacks of cement. Temperature survey indicated the top of cement to be at 3635'. The Drinkard Formation was perforated from 6748' to 7008' and acidized with 1300 gals 15% HCL and tested. 3-19-70 A CIBP was set at 6650' and capped with 1½ sacks cement. Blinebry Formation was perforated from 5848' to 5988' and acidized with 3000 gals 15% NEA HCL. The Blinebry IP'd for 105 BO, 20 BW for a 24 hr. test.
2- 9-72 Acidize 5848' to 5988' with 7500 gals Halliburton mod 202 acid.
- 8) Value of Commingled Fluids: The Blinebry and Drinkard are being surface commingled at the battery under Commingling Order R-4079-C. Therefore, downhole commingling will not effect the price.
- 9) Current Production: The Blinebry tested 6 BOPD, 11 BWPD and 10 MCFGPD on December 2, 1986. The Drinkard tested in March 1970 for 7 BO, 35 BW with no measurement on gas.
- 10) Recommended Oil and Gas Allotments:

	Blinebry	Drinkard
Oil:	47%	53%
Gas:	11%	89%
- 11) Ownership and Royalty Interests: Ownership of the two pools to be commingled is common and correlative rights will not be violated.
- 12) Future Secondary Operations: Commingling will not jeopardize the efficiency of future secondary recovery operations in either zone.
- 13) Production Methods: The commingled production will be pumped and the

fluid level monitored to maintain a pumped off condition and eliminate the possibility of cross flow between reservoirs.

- 14) Copies of this application have been furnished to all Offset Operators by certified mail.

OFFSET OPERATORS

SHELL
P. O. Box 2463
Houston, TX 77001

AMOCO
P. O. Box 68
Hobbs, NM 88240

PENROC OIL CORPORATION
P. O. Box 831
Midland, Texas 79702

CONOCO INC.
P. O. Box 460
Hobbs, NM 88240

Certified Mail - Return Receipt Requested.

W. D. Grimes (NCT-B) #7
Blinebry BHP Calculations

The well was closed-in and pressures and fluid level allowed to stabilize so that the following data could be obtained.

DATA

Casing pressure	= 128 psi
Fluid level from surface	= 5680'
Midpoint of Blinebry perforations	= 5918'
Oil Gravity	= 38° API

BHP = $P(\text{casing}) + P(\text{gas column}) + P(\text{fluid column})$

$P(\text{casing}) = 128 \text{ psi}$

$P(\text{gas column}) = (.0006 \text{ psi/ft})(5680') = 3.4 \text{ psi}$

$P(\text{fluid column}) = (.362 \text{ psi/ft})(5918-5680) = 86.2 \text{ psi}$

$BHP = 128 + 3.4 + 86.2 = 217.6 \text{ psi}$

Static Bottom Hole Pressure at a depth of 5918' = 218 psi

W. D. GRIMES (NCT-B) #7
Drinkard BHP Calculations

Calculations based on tests conducted when the Drinkard Formation was originally perforated in March 1970.

DATA

Close-in tubing pressure = 150 psi
Fluid level from surface = 3818'
Water Gravity = 1.10
Midpoint to Drinkard perforations = 6878'

$$\text{BHP} = \text{CITP} + P(\text{gas column}) + P(\text{fluid column})$$

$$\text{CITP} = 150 \text{ psi}$$

$$P(\text{gas column}) = (.006 \text{ psi/ft})(3878') = 2.3 \text{ psi}$$

$$P(\text{fluid column}) = (1.10)(.433 \text{ psi/ft})(6878' - 3878') = 1428.9 \text{ psi}$$

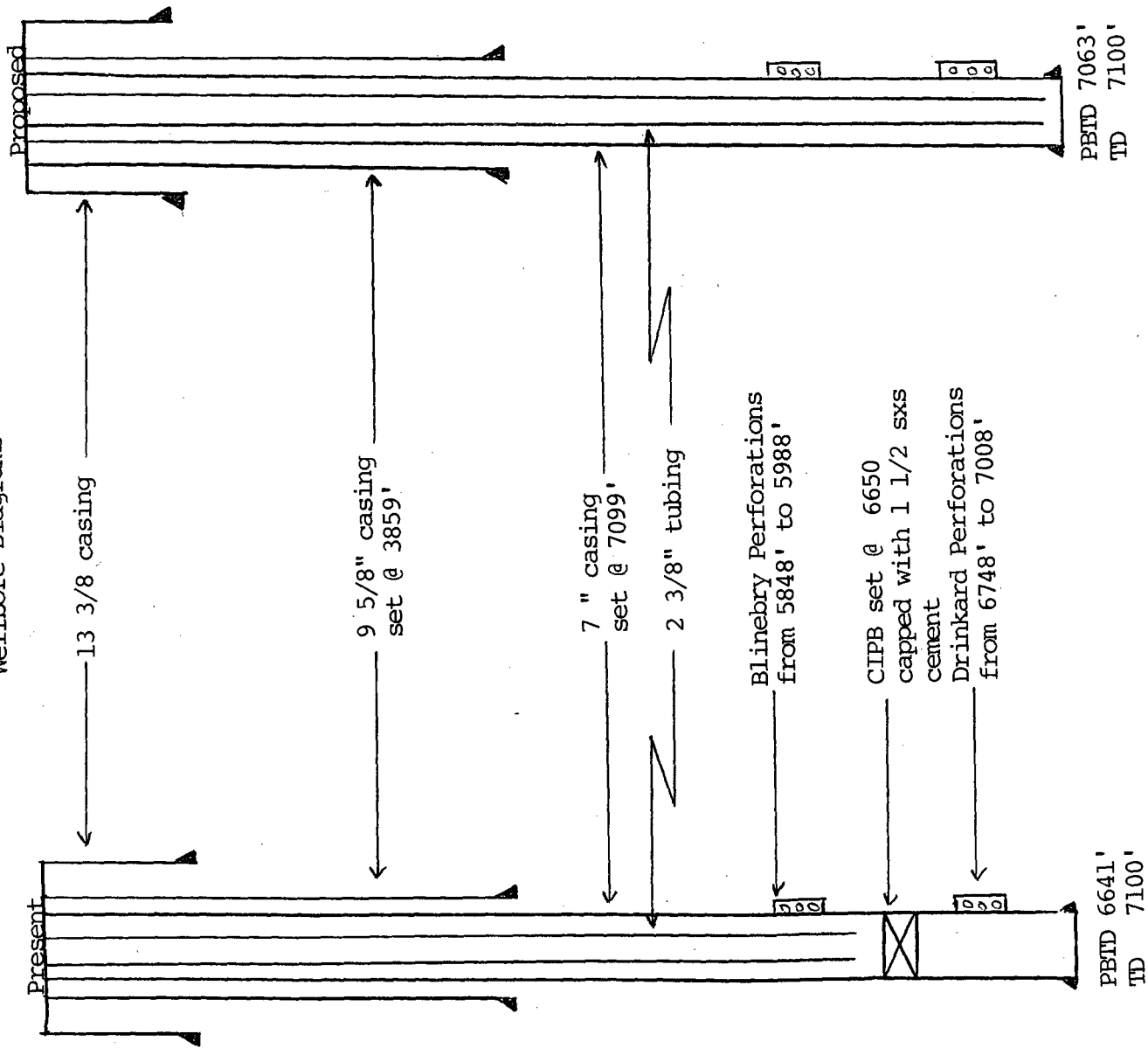
$$\text{BHP} = 150 + 2.3 + 1428.9 = 1581.2 \text{ psi}$$

Static Bottom Hole Pressure at a depth of 6878' = 1581 psi

CHEVRON U. S. A. INC.

W. D. GRIMES (NCT-B) WELL NO. 17

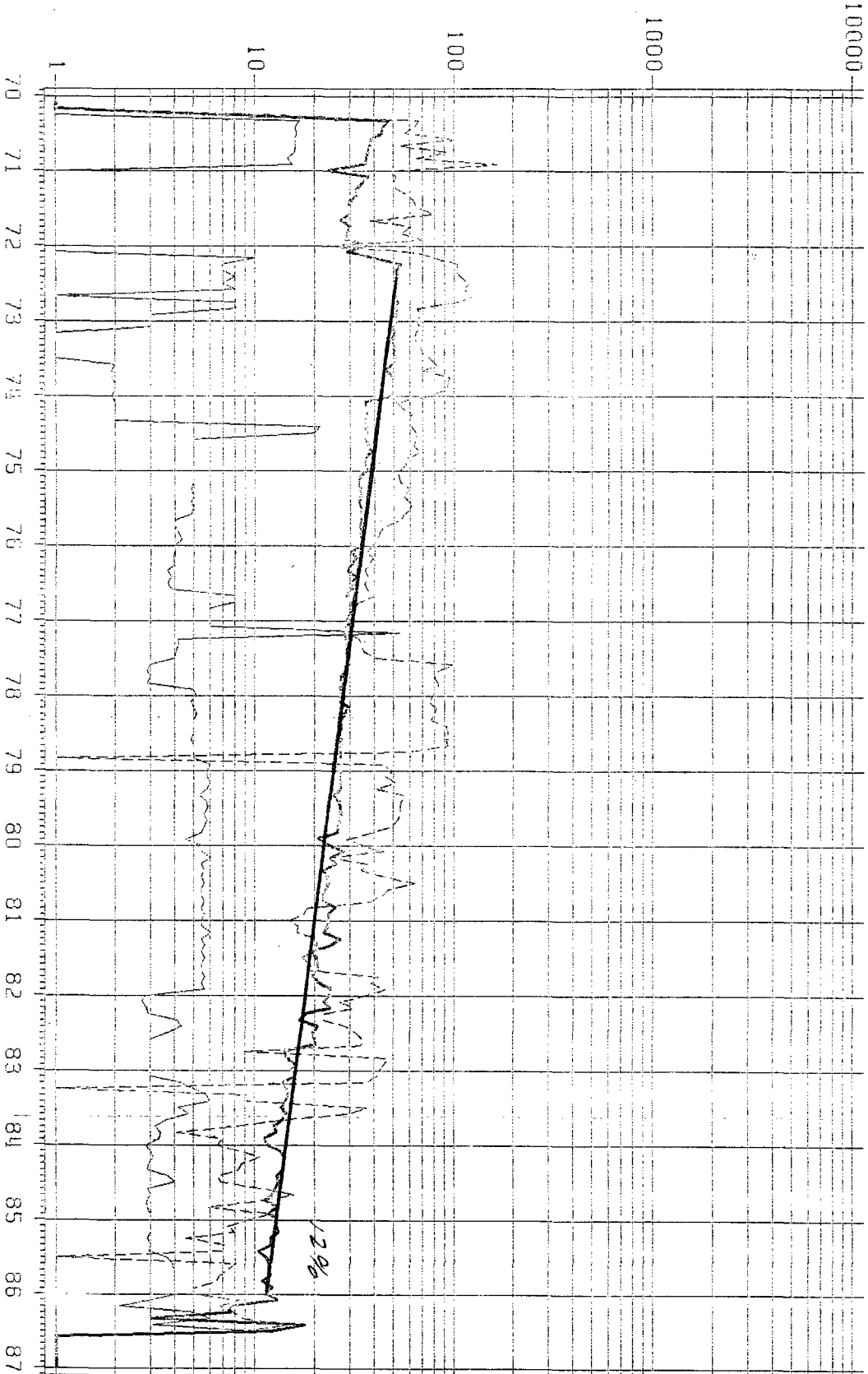
Wellbore Diagrams



PRODUCTION DATA PLOT

WELLNO=007 WELLNR=M D CRIMES NCT B PETROLEUM INFORMATION OPERNR=CHEVRON U.S.A. INC. FLDRESNR=HOBBS BLINDBRY

DATE

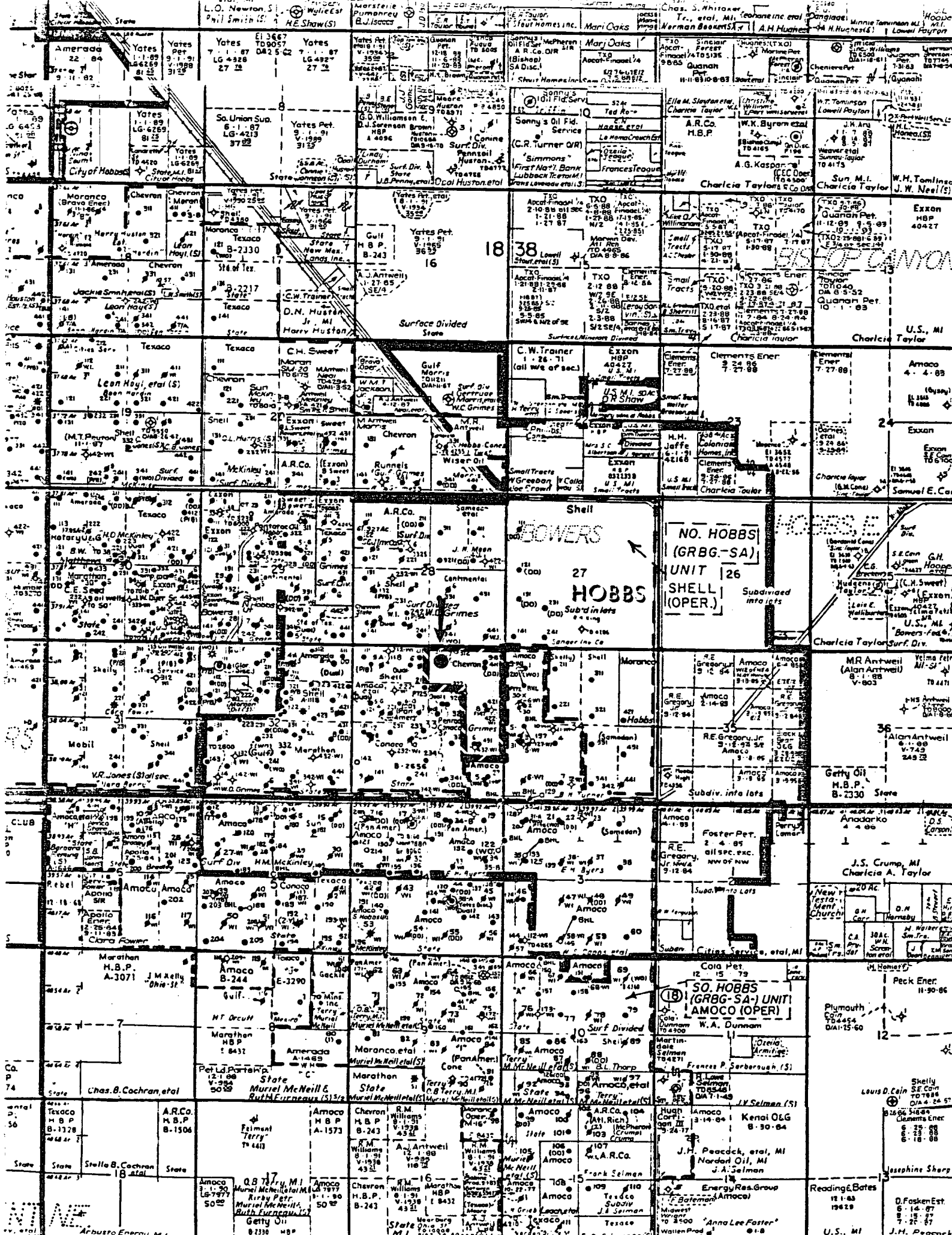


HEAVY SOLID LINE=BOPD

SOLID LINE=BWP

LIGHT DASHED LINE=MCPD

DATE



NTAE

Arbusto Energy, M.I.
WA Cochran (S) Dea Cochran

0.8 Terry, M.I.
Murphy McNeill et al.
Ruth Furman et al.
Getty Oil
B-2330 HBP

Amoco
M.I. Williams
B-243
A-1573

Amoco
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B-243
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M.I. Williams
B-243
A-1573

**NEW MEXICO OIL CONSERVATION COMMISSION
WELL LOCATION AND ACREAGE DEDICATION PLAT**

Form C-102
Supersedes C-128
Effective 1-1-65

All distances must be from the outer boundaries of the Section.

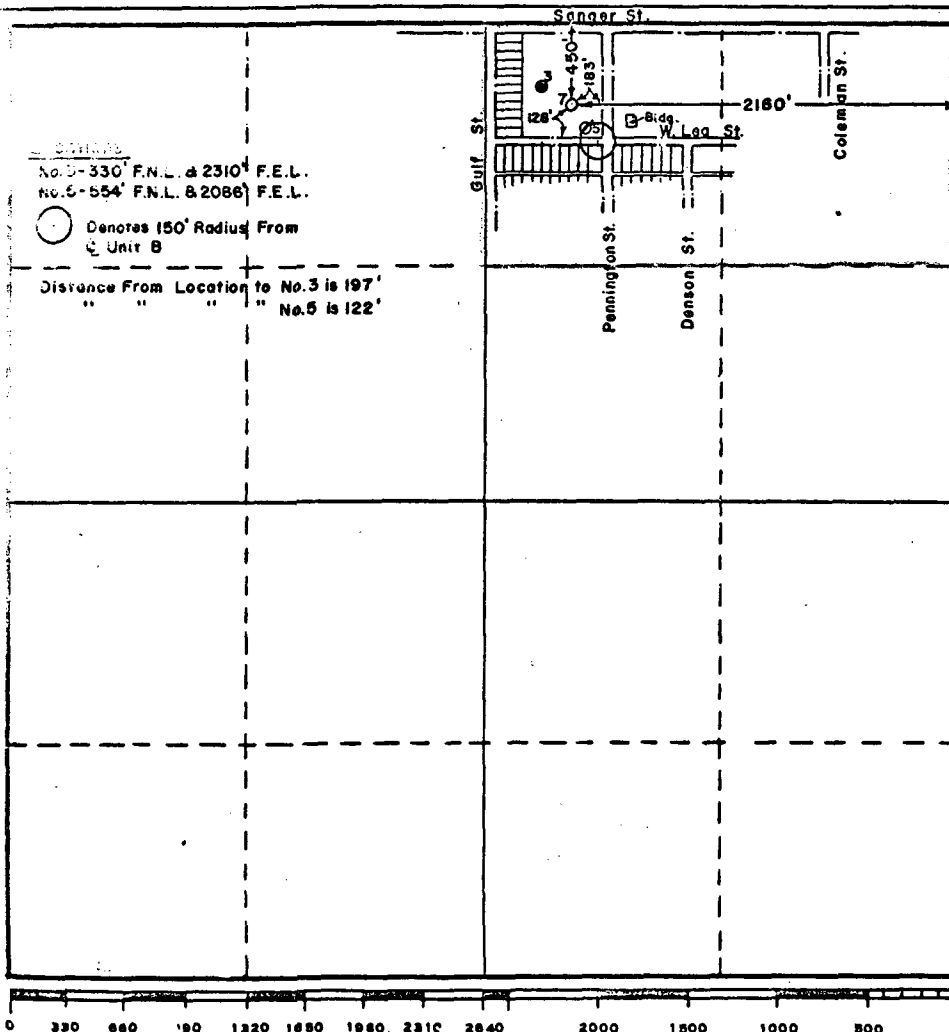
Operator GULF OIL CORPORATION			Lease W.D. GRIMES NCT-B		Well No. 7
Unit Letter B	Section 33	Township 18 SOUTH	Range 38 EAST	County LEA	
Actual Footage Location of Well: 450 feet from the NORTH line and 2160 feet from the EAST line					
Ground Level Elev. 3645'	Producing Formation Drinkard		Pool Under, Hobbs Drinkard	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 interests 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 interests, has been approved by the Commission.



CERTIFICATION

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

Name **ORIGINAL SIGNED BY
G. D. BORLAND**

Position
Area Production Manager

Company
Gulf Oil Corporation

Date
January 26, 1970

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
JANUARY 26, 1970

Registered Professional Engineer
and/or Land Surveyor

John W. West
Certificate No. **676**

* ISL has been applied for.

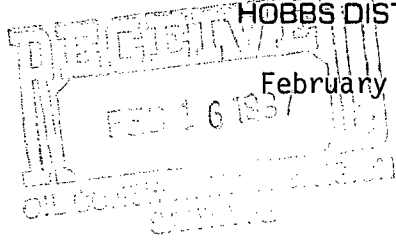


STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENT
OIL CONSERVATION DIVISION
HOBBS DISTRICT OFFICE

TONY ANAYA
GOVERNOR

February 13, 1987

POST OFFICE BOX 1980
HOBBS, NEW MEXICO 88240
(505) 393-6161



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

RE: Proposed:

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

Gentlemen:

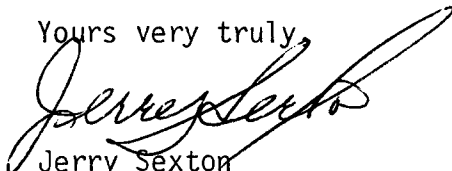
I have examined the application for the:

Chevron USA Inc.	W. D. Grimes #7-B	33-19-38	
Operator	Lease & Well No.	Unit	S-T-R

and my recommendations are as follows:

OK -- JS

Yours very truly,


Jerry Sexton
Supervisor, District 1

/mc