



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

Production Department
Hobbs Division

July 22, 1986

JUL 30 1986

APPLICATION TO DOWNHOLE
COMMINGLE HARRY LEONARD (NCT-E)
WELL NO. 3 LOCATED IN UNIT B,
SECTION 16-T21S-R37E,
LEA COUNTY, NEW MEXICO

Richard L. Stamets
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 Blinebry is producing by means of a plunger lift system which requires considerable attention and maintenance. The Drinkard is flowing and requires frequent swabbing to maintain production. Attempts in the past to pump the Drinkard from below the packer were unsuccessful due to the high producing GOR.

In the interest of conservation and the prevention of waste, we propose to downhole commingle the Blinebry and the Drinkard in the subject well. Enclosed is pertinent data supporting this application as outlined in Rule No. 303-C. If additional information is necessary, please contact Mike Casey at area code 505-393-4121.

Yours very truly,

P. H. Bulley Jr.
for R. C. ANDERSON 7-23-86

MWC/jc

Attachments

cc: J. T. Sexton
District 1 Supervisor
Oil Conservation Division
P.O. Box 1980
Hobbs, N.M. 88240

Offset Operators List - List Attached

C. J. Fesmire
T. M. Mighton

Chevron U.S.A. Inc.
Harry Leonard (NCT-E) Well No. 3
Downhole Commingle Application
List of Offset Operators

Amoco
P.O. Box 68
Hobbs, N.M. 88240

Conoco
P.O. Box 460
Hobbs, N.M. 88240

Exxon
P.O. Box 2180
Houston, Tx. 77001

Texaco
P.O. Box 728
Hobbs, N.M. 88240

Cities Service
P.O. Box 1919
Midland, Tx. 79705

Shell
P.O. Box 2463
Houston, Tx. 77001

Amerada Hess
P.O. Box 840
Seminole, Tx. 79360

1. OPERATOR: Chevron U. S. A. Inc., P. O. Box 670, Hobbs, N. M. 88240
2. LEASE, WELL, AND LOCATION: Harry Leonard (NCT-E) Well No. 3, 660' FNL and 1980' FEL of Section 16-T21S-R37E, Lea County, N. M.
3. PRODUCING ZONES: Blinebry and Drinkard
4. DECLINE CURVE: The Blinebry is expected to decline at 15% per year after an IP of 10 BOPD and 210 MCFGPD. The Drinkard is expected to decline at 18% per year after an IP of 11 BOPD and 210 MCFGPD.
5. BOTTOM HOLE PRESSURE: Blinebry calculated BHP of 288 psi at a depth of 5888'. Drinkard BHP measured 419 psi at a depth of 6539'.
6. FLUID CHARACTERISTICS: The Blinebry and Drinkard are currently surface commingled at the battery under Commingling Order No. PC-391. To date there has been no evidence of fluid incompatibility.
7. WELL HISTORY: The subject well was drilled in 1948 to a total depth of 6710'. Thirteen and three-eighths inch surface casing was set at 304' and cement was circulated to the surface. Nine and five-eighths inch casing was set at 2800' and cement was circulated to the surface. Seven inch casing was set at 6649' and cemented with 700 sacks, temperature survey indicated top of cement at 3200'. The well was open hole completed in the Drinkard.

05/50: Perforated the Drinkard from 6625-6640'

06/61: Perforated the Blinebry from 5813-5963' and fraced with 1500 gals. 15% NEA w/ 24000 gals. oil and 72000 # sand.

12/74: Squeezed perfs from 6625-6640' w/ 75 sxs cmt. Perforated 6467-6611' and fraced with 5000 gals 15% NEA, 35000 gals gelled wtr., and 37500 # sand. Treated Blinebry with 4300 gals. 15% NEA.

07/79: Install pumping equipment on the Blinebry.

10/85: Install plunger lift on the Blinebry.

8. VALUE OF COMMINGLED FLUIDS: The subject pools are surface commingled, therefore downhole commingling will not effect the price.
9. CURRENT PRODUCTION: The Blinebry last tested on 5-1-86, 8 BOPD, 1 BHPD, AND 164 MCFGPD. The Drinkard last tested on 5-15-86, 3 BOPD, 1 BHPD, AND 154 MCFGPD.

10. RECOMMENDED OIL AND GAS ALLOCATIONS: Based on expected IP's

Blinebry

Drinkard

48%

OIL

52%

50%

GAS

50%

11. OWNERSHIP AND ROYALTY INTERESTS: Ownership of the two pools 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.



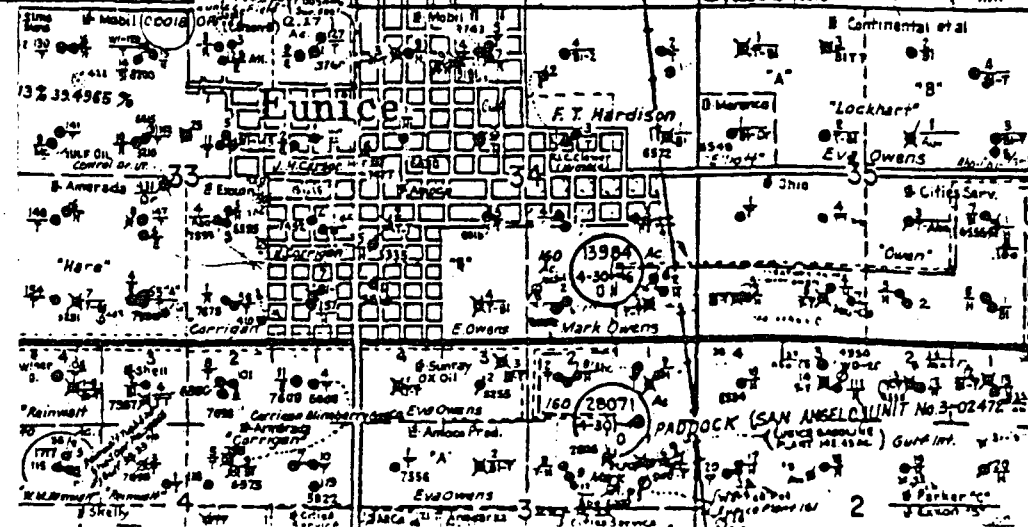
CHEVRON U.S.A. INC.

HARRY LEONARD (NCT-E)

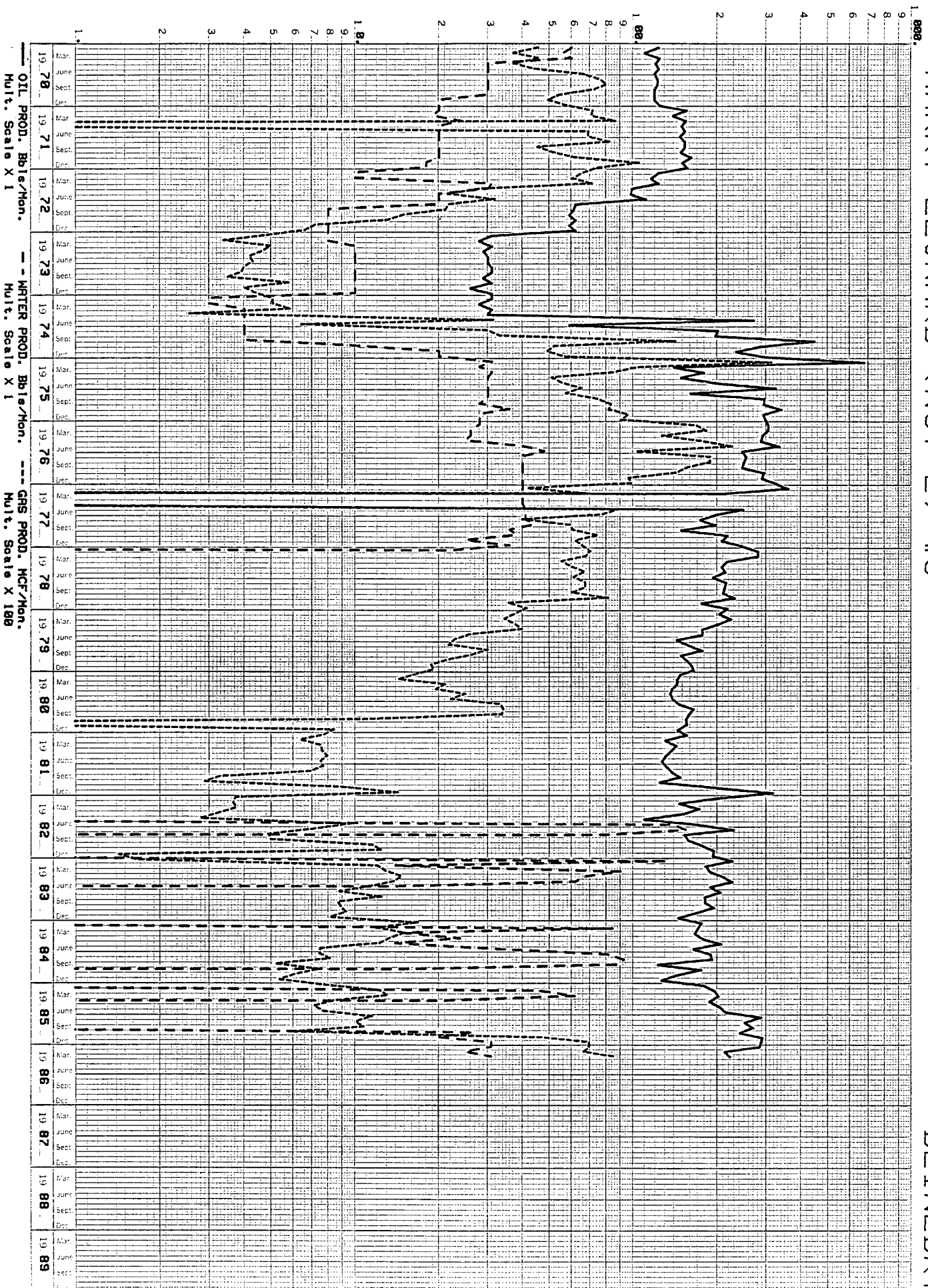
WELL No. 3

BLINERY / DRINKARD

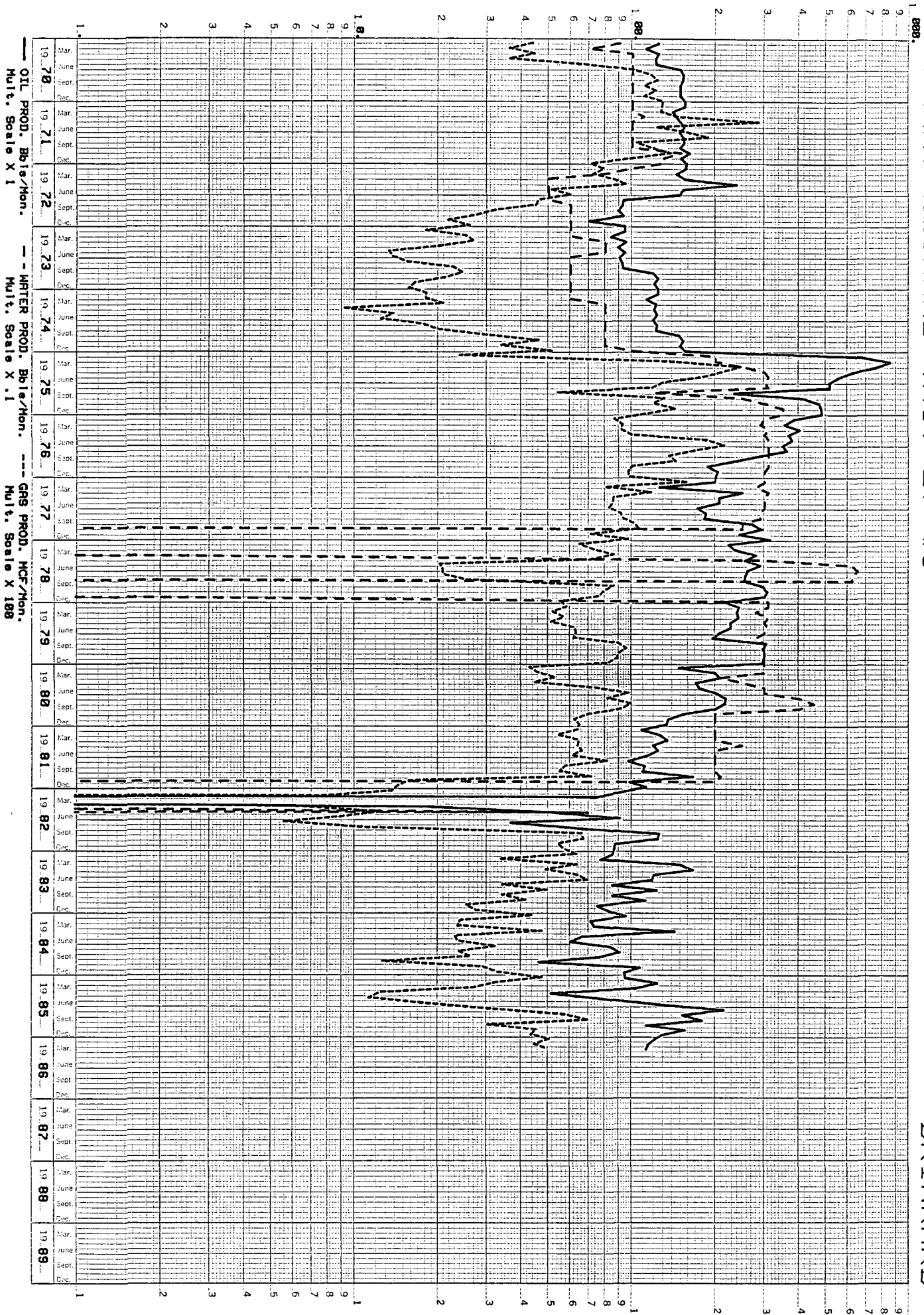
▲ - WELL No. 3



BLINEBRY



DRINKERD



[illegible]

OIL CONSERVATION DIVISION

STATE OF NEW MEXICO
ENERGY AND MINERALS DEPARTMENTP. O. BOX 2088
SANTA FE, NEW MEXICO 87501Form C-102
Revised 10-1-78

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

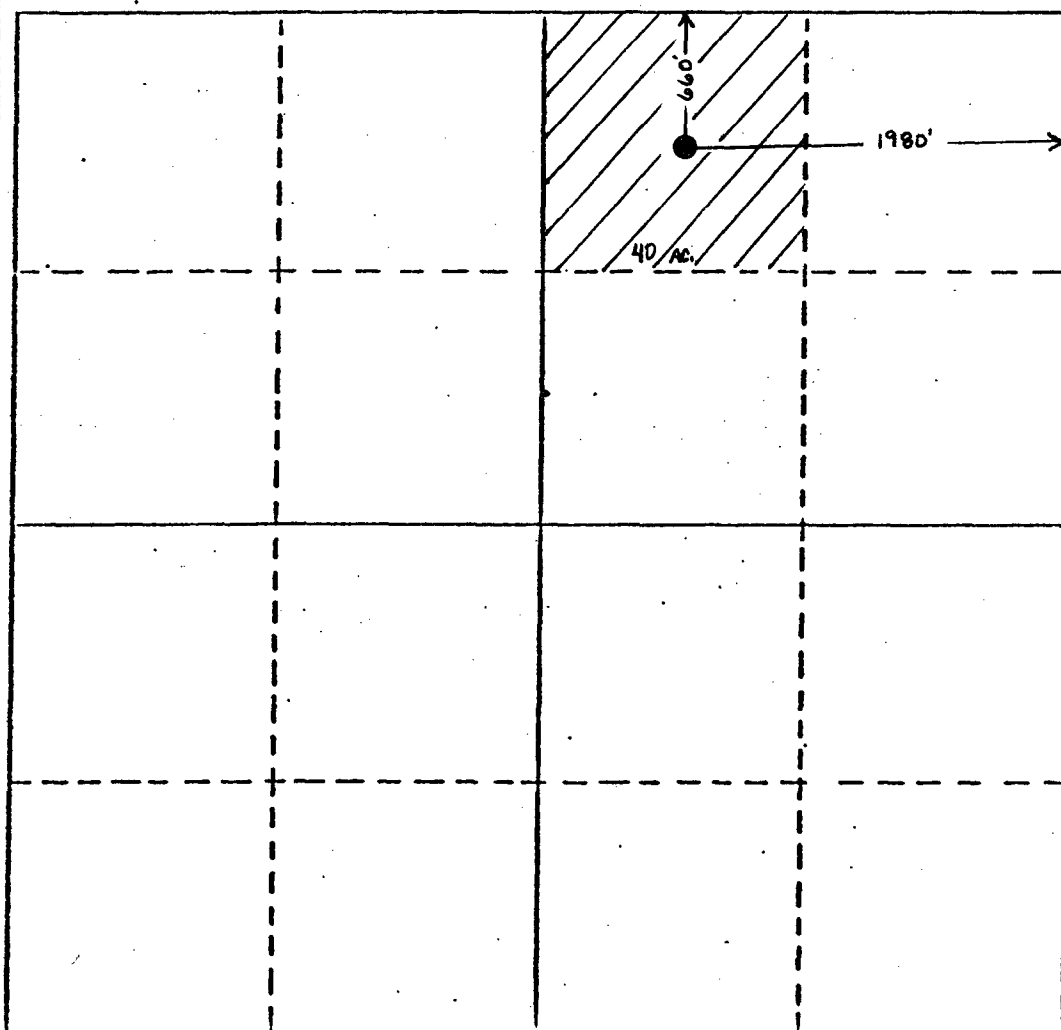
Operator CHEVRON U.S.A. INC.			Lease HARRY LEONARD (NCT-E)			Well No. 3		
Unit Letter B	Section 16	Township 21S	Range 37E	County LEA				
Actual Footage Location of Well: 660 feet from the NORTH line and 1980 feet from the EAST line								
Ground Level Elev. 3497'	Producing Formation BLINEBRY & DRINKARD			Pool BLINEBRY Oil & GAS & DRINKARD			Dedicated Acreage: 40 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 Division.



CERTIFICATION

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

M. W. Casey

Name

M. W. CASEY

Position

DIVISION PRODUCTION ENGR.

Company

CHEVRON U.S.A. Inc.

Date

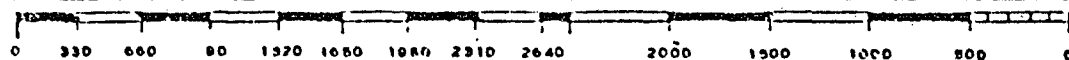
7-18-86

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

Registered Professional Engineer
and/or Land Surveyor

Certificate No.



HARRY LEONARD (NCT-E) WELL NO. 3
BLINEBRY BHP CALCULATIONS

P1 = static bottom hole pressure
P2 = casing pressure
P3 = gas column hydrostatic pressure
P4 = oil column hydrostatic pressure

Static fluid level = 5596' from surface

Mid-Perf depth = 5888'

$P1 = P2 + P3 + P4$

P2 = 178 psi (measured)

$P3 = (.0006 \text{ psi/ft}) * (5596 \text{ ft}) = 3.4 \text{ psi}$

$P4 = (.365 \text{ psi/ft}) * (5888 - 5596) \text{ ft} = 106.5 \text{ psi}$

$P1 = 178 \text{ psi} + 3.4 \text{ psi} + 106.5 \text{ psi} = 288 \text{ psi}$

STATIC BOTTOM HOLE PRESSURE AT 5888' = 288 PSI

JOHN W. WEST ENGINEERING COMPANY
412 NORTH DAL PASO, HOBBS, NEW MEXICO

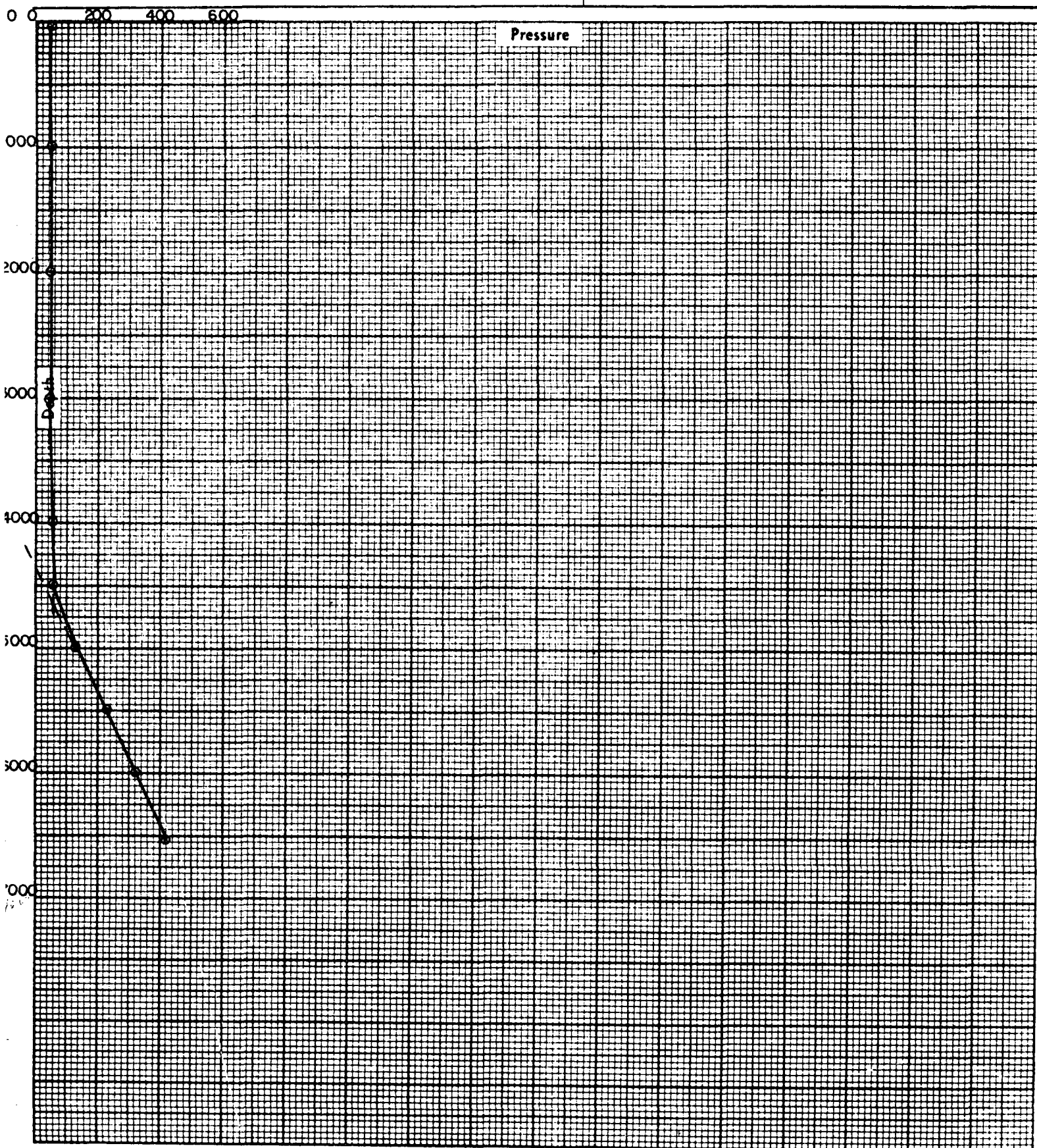
TELEPHONES 393-3942
393-3117

BOTTOM HOLE PRESSURE SURVEY REPORT

OPERATOR CHEVRON U.S.A., INC.
LEASE HARRY LEONARD "E" (Drinkard)
WELL NO. 3
FIELD _____
DATE 4-18-86 TIME 10:15 A.M.
STATUS _____ TEST DEPTH 6539'
TIME S.I. _____ LAST TEST DATE _____
CAS. PRES. _____ BHP LAST TEST _____
TUB. PRES. 52 PSI BHP CHANGE _____
ELEV. _____ FLUID TOP 4650'
DATUM _____ WATER TOP _____
TEMP _____ RUN BY B.T.
CLOCK NO. 24959 GAUGE NO. 16389
ELEMENT NO. 25549 (0-1500 PSI)

DEPTH	PRESSURE	GRADIENT
000	052	
1000	052	Neg.
2000	052	Neg.
3000	053	.001
4000	055	.002
4500	056	.002
5000	123	.134
5500	228	.205
6000	320	.184
6539	419	.184

a 1½ inch Sinker Bar was run to 6555'
The Sinker Bar was spudded several
times and would go no deeper.





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

TONEY ANAYA
GOVERNOR

JUL 25 1986
July 25, 1986

POST OFFICE BOX 1960
HOBBS, NEW MEXICO 86240
(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.	Harry Leonard NCT-E #3-B	16-21-37
Operator	Lease & Well No. Unit	S-T-R

and my recommendations are as follows:

OK -- Jerry Sexton

Yours very truly,

Jerry Sexton
Supervisor, District 1

/mc